From: Craig, Bill
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Thursday, April 21, 2016 8:07:36 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Thursday, April 21, 2016 7:57 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment

-----Original Message-----
From: steve.gabrielsen [mailto:steve.gabrielsen@yahoo.com]
Sent: Wednesday, April 20, 2016 9:57 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To Whom it May Concern,

SVE 1 I would like to express my support for the approval of the Donlin Gold Project EIS. This project will bring much needed revenue jobs to the state of Alaska during the current financial downturn of oil. As a current mining engineering student attending the University of Alaska Fairbanks it has special importance to me for future employment. I am confident that this mine can be operated in a safe and environmentally sound manner with no net loss to environmental stability in the region beyond the the life of the mine.

Once again I would like to express my support for the approval of this project and the prosperity that it will bring to Interior Alaska.

Sincerely,
Steve Gabrielsen

Smith, Neal

From: Scott Gagne <sgagne@stgincorporated.com>
Sent: Sunday, April 24, 2016 4:21 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] support for Donlin

NSB 1

Please be advised that I am if favor of the Donlin Creek project. This project will benefit all Alaskans. The people around the mine site will benefit the most with jobs that will create a flow of money into the surrounding villages.

Thanks
Scott R Gagne
907-444-0929

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''22 CFR Part 125.4 (b) (9) applicable.''

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: Donlin Gold Draft EIS comment
Date: Monday, March 21, 2016 1:22:27 PM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, March 21, 2016 12:52 PM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: Rochelle Gall [mailto:RochelleG@bilista.net]
Sent: Wednesday, March 16, 2016 8:44 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Donlin Gold is a good project that will benefit the Calista Region. I am a shareholder of NANA which owns the land that the Red Dog Mine is on. I worked at Red Dog during startup from 1989-1996 full time as an Assayer. I experienced firsthand the opportunities it brought to my region of Alaska, to my family, and to my ANC NANA. Mining provided a steady paycheck for me for 16 years. I would like the shareholders of the Calista region to experience the same economic benefits that NANA Shareholders have received for the past 30 years. NANA has to revenue share thru 7(i) revenue sharing and so will Calista. Not only will Calista benefit, but other ANC's in Alaska will also benefit from Donlin. Donlin will
SER 2 provide jobs to Calista Shareholders, which is one of the most economically depressed regions of Alaska. Calista supports the project. Mining techniques have improved over time. Mining can be done safely with minimum controlled impact on the environment. Mining in the United States should be supported as the US shouldn't be dependent on other countries to provide needed metals in the US. Thank-you for taking my comments.

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"22 CFR Part 125.4 (b) (9) applicable."

From: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Sent: Thursday, February 25, 2016 7:02 AM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment
Attachments: image001.png; image002.png; image003.png

-----Original Message-----
From: Charlie Gallavan [mailto:cgallavan@tclcon.com]
Sent: Sunday, February 21, 2016 10:25 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

SVE 1 My assessment of this project is that it is a fully responsible development of natural resources with redundant environmental controls that will provide needed economic development to the Region and the Country. This is what the United States has been doing and has been improving upon, over time, since its inception. Unfounded environmental filibuster and do-nothing attitudes are not the principles on which this country was built and defended. Respectively submitted as a personal opinion on this day 21 Feb 2016,

CHARLES.GALLAVAN

Project Manager
TUNISTA.CONSTRUCTION.LLC
C: 573.855.5239 / O: 253.517.9988x145

<https://www.facebook.com/Tunista-Construction-LLC-148712315328254/timeline/> | <https://www.linkedin.com/company/tunista-construction-llc> | <https://twitter.com/tunista1>

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"22 CFR Part125.4 (b) (9) applicable."

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U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

May 17, 2016

Public Comment Letter IN SUPPORT OF THE DONLIN GOLD MINE AS PROPOSED IN ALTERNATIVE 2

My name is Susan Gamache and I am a Calista Corporation and Kuskokwim Corporation shareholder, a Crooked Creek Tribal member and 60 year resident of Alaska. I worked at Calista Corporation in 1982-2010 and for Donlin Gold in 2011-2016. I observed the Donlin project from the very beginning when the Calista land department started doing some field camp work in the area to gather information to attract a mineral exploration company to develop the area into an economic mining project.

LAND 1

PUB 6

In my job in the Shareholder Services Department of Calista; and later in the Community Relations Department of Donlin, I have attended many shareholder and community meetings where various aspects of the Donlin Project were discussed. I have written and taken photos for shareholder publications helping to communicate information to shareholders and the public. Nearly all of the topics that are being brought up during the public scoping and DEIS process are ones that have been heard and looked in to by Donlin. Power generation from diesel, wind, peat, coal fired plant have all been studied. The concern about barging lead to Donlin adding a natural gas pipeline to the project to reduce the amount of diesel needed via river barging. The environmental concerns are addressed in detail in the Draft EIS and in the design of the project. Since 1996 there has been an ongoing base line study program that included air quality, cultural resources, fish and aquatic resources, geochemistry, hydrology, ground and surface water quality and quantity, land use, marine and river use, mercury, noise, public health, recreation, snow surveys, socioeconomic surveys, stream and sediment , subsistence surveys, vegetation, visual aesthetics, wetlands and wildlife studies. Information from these studies were used in the planning and design of the mine and to establish environmental conditions that existed previously.

In my village of Crooked Creek only a few people can afford to buy nets, boats, motors, guns and ammunition, snow machines and other gear to do subsistence, let alone buy the gas and oil to run equipment and heat their homes. Subsistence fishing in the middle and upper Kuskokwim has been drastically reduced as it is, by commercial and subsistence fishing downriver, and when they get openings upriver the fish are few.

The village has a sawmill purchased through a grant, but the sawmill requires gas and oil to operate. Logs the size for milling are harvested up river so a boat and motor are required to get those too. People

are cutting more wood for firewood too as a way to heat their homes since fuel is so expensive. Chainsaws cost money and the fuel to operate them.

GAS 1 There is also potential that a regional energy company could tap in to the natural gas pipeline that will be built in support of the Donlin Gold Mine which could potentially create a cleaner, more cost efficient energy source over diesel and wood stoves.

SER 12 On another subject, I was disgusted to hear that the Yukon-Kuskokwim Health Corporation stated job creation is bad for the region because of out-migration. Why is YKHC opposing a project that will create jobs in rural Alaska which will give young families a reason to stay in the village. I would rather have that happen the continue the increasing out- migration to the village grave yard because people are feeling hopeless and depressed. Doesn't YKHC think that more jobs will keep more people in the villages, and clinics will grow to provide more medical services and hire more medical staff. There will be many in-direct jobs in the medical field if a mine is built including clinics that might provide some of the drug and alcohol testing needed for employee hire. The Indian Health Service/ANTHC here in Anchorage wants people with paid medical insurance to come to ANTHC and Southcentral Foundation for medical so they can bill insurance companies which helps to offset people that do not pay. I would think the medical field would be overjoyed to have 3,000 people with medical insurance in the region and state.

Employees will not only have paid medical insurance, they will earn vacation and sick leave and be able to pay in to retirement programs. I think this will go a long way in raising people's self-confidence and peace of mind knowing they don't have to depend on welfare and other government handouts. That's another aspect of health YKHC should be thinking about too.

SER 5 While I was tending a Donlin booth at a recent trade show I had a group of youth summarize their support of natural resources development. They talked about their parent and grandparent's generation working on the Trans Alaska Pipeline and the North Slope to establish a financial start in life; and these youth are looking to a project like the Donlin Mine and Natural Gas Pipeline Projects to provide jobs so they could get the financial start and raise their family in Alaska. That is what economic development should be focused on---kids going to school in Alaska, going to college and trade schools in Alaska and going to work on projects in Alaska.

Some of the people raising environmental concerns about the project are young people, which I encourage to go to school and study environmental science, fisheries, engineering, and go to work on the Donlin Project directly or with some of the numerous contractors that will be involved in the construction and mine operations. Put yourself in the position to be employed making sure all the environmental issues are managed.

SVE 1 I read the executive summary and parts of the DEIS. Many people comment at our meetings why is it taking so long to get this project going, you have been talking about jobs for almost 20 years. My response is because the Donlin Gold team is committed to building an environmentally responsible project that takes in to consideration all aspects of the development with input from local, regional and

state residents, and incorporates the best technology available in the design, construction and operations. Many feasibility studies were completed and refined over the years before the permit documents were submitted.

Recently I was told by a stakeholder, you work for Donlin Gold and it is understandable that you promote the project and speak in favor of it. My response to that is--because I believe in this project and see it as a catalyst for creating a stable economy in the region and state; and because our middle Kuskokwim region is dying; and because I have participated in the project for the 20 years it has been in development and seen for myself the efforts to design an environmentally responsible project—that is why I chose to work at Donlin. If I didn't believe in the project I wouldn't be here.

SVE 1

I have had elders tell me," I hope I see it in my lifetime". They want to see young people will jobs and hope for the future. They want to see healthy communities with schools and clinics and safe runways, efficient affordable utilities, housing for young families to have a home of their own.

This is a critical time in the rural areas and the state. The Donlin project is an important opportunity to diversify the local and urban economy. In addition to partnerships with Calista and the Kuskokwim Corporation, there will be many businesses in many sectors that will supply mining operations with goods and services.

For these reasons I believe the time to develop the Donlin Gold mine is now. I support the Donlin project as proposed in Alternative 2.

Susan M Gamache
8300 Wellsley Court
Anchorage, AK 99507

From:	Rajive Ganguli
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin comments
Date:	Monday, April 25, 2016 10:11:59 AM

Dear Mr. Gordon.

I would like to express my support for the Donlin Gold project. I have followed the project closely over the years. These are some of my reasons for supporting the project:

SER 4

- Donlin will be huge economically for the state, not just for the region. We need more responsibly developed projects like this in the state. The partnership with the native corporations will bring benefits to natives throughout the state.

- For a state that lacks infrastructure, the natural gas line and the air strip are a boon.

- They have looked at broad set of mitigating solutions based on feedback received in stake holder information sessions. I especially like mercury control measures, and water treatment plants. The use of LNG trucks to reduce barging is a good idea as well.

- Donlin has been a strong supporter of academic programs and understand the need for developing talent in the state of Alaska.

In closing, I hope your agency to conduct a thorough technical review to up hold our environmental and safety standards. I also expect Donlin to meet them.

Thank you,

Rajive Ganguli
Fairbanks, AK 99709

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Monday, April 04, 2016 12:56:41 PM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, April 04, 2016 12:05 PM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment

-----Original Message-----
From: bruce Garlock [mailto:brucegarlock7@gmail.com]
Sent: Sunday, April 03, 2016 4:23 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

SVE 1 I have worked in Alaska most of my life I know first hand mining has provided many of Alaskans with a great job that supports there family's as well as there communities and benefits the state having 10 years of mining experience all here in Alaska I have complete confidence Donlin Gold will competently operate this project safely and environmentally responsible. I am a shareholder of Calista corporation and truly look forward to being employed during production. I personally take great pride in safety and in protecting our environment as we'll as production I know Donlin Gold is going to be a model operation we can all be very proud of it's my and my family's prayer Donlin Gold will be permitted the permits so we can improve our community's and our state and make this a model mine for future mining thank you . Sincerely Bruce Garlock

Sent from my iPhone

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

NSB 1

First the 27+ years without a enviromental mishap is a priority example of a clean gold mine operation. In 1977 I informed BP drilling oil in Produe Bay, Alaska, to keep the land clean. It has kept it's responsibility. Only a unified, dedicated people of western Alaska can accomplish difficult tasks like a gas pipeline from Cook-Inlet. There are numerous rivers that unite with the Kuskokwim River. A enormous hydro powered generators that can be provided to all villages in the TKC and Calista region. With the low salmon returns, working to rebuild the once salmon spawning locations can be maintained for our younger generations. TKC and Calista region has always been side by side as far as I can remember. If by a chance, gas is found along with the oil in any area inside western Alaska it will build new hospitals, educational, universities, doctors, nurses, how can you lack when you have found the knowledge that the elders have taught for many generations. Thank you

Moses T. George
Palmer Correctional

Moses T. George 12378
Palmer Correctional Center
PO Box 919
Palmer, Alaska 99645

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P.O. Box 6898
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From: Bellion, Tara
To: Evans, Jessica
Subject: FW: Donlin Gold Draft EIS comment
Date: Tuesday, March 08, 2016 9:57:17 AM

-----Original Message-----
From: Michael C. Geraghty [mailto:Geraghty@OLES.com]
Sent: Tuesday, March 01, 2016 1:34 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Dear Reviewer:

I write on my own behalf and not on behalf of this law firm. However I daresay this is an important issue to any entity or firm that cares about the economic future of Alaska. I also write as a former attorney general for the state of Alaska from 2012 – 2014. Donlin Gold has acted responsibly in thoroughly studying the impact of this proposed mine and utilizing a number of state-of-the-art measures to mitigate the risks inherent in this type of operation. They are to be commended.

SER 5

I also can't emphasize enough the economic benefits that will flow from the mine to an area of the state that desperately needs good paying, year round employment. While I was AG I became painfully aware of the challenges that afflict our remote rural communities. Lack of gainful employment and youth w/ too much time on their hands is a recipe for community malaise. I'm sure this motivates in no small part the positive response from the local communities, village corporations and Calista. Their shareholders can only benefit from responsible resource development, and Donlin Creek has gone the last mile in demonstrating its commitment to ethically and responsibly develop this site.

Now it is time for the USACE to step forward and permit the next stage of development. Thank you for your attention.

Michael C Geraghty | Partner

Oles Morrison Rinker & Baker, LLP
601 West Fifth Ave., Suite 900 | Anchorage, AK 99501
O: 907.258.0712 | F: 907.258.5519
geraghty@oles.com <mailto:geraghty@oles.com> | Blockedwww.oles.com
<Blockedhttp://www.oles.com/>

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From: Bellion, Tara
To: Evans, Jessica
Subject: FW: Donlin Gold Draft EIS comment
Date: Tuesday, March 08, 2016 9:57:37 AM

-----Original Message-----
From: Chad Gerondale [mailto:chad.gerondale@cmiak.com]
Sent: Monday, February 29, 2016 9:24 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

I am in support of the Donlin project.

The EIS has been developed with science based research, and strong community input.

SER 5

This project will provide solid and stable jobs for a region of Alaska that could use the economic diversification, helping to provide 365 day a year employment. These benefits to the local communities, and the additional benefit of a corporate support organization will help to make rural Alaska a better, healthier, and safer place for those choosing to live there.

Please help move this project along to fruition.

Thank you for your time and this opportunity.

Chad D. Gerondale

Sales Manager

Construction Machinery Industrial, LLC

5400 Homer Drive

Anchorage, Alaska 99518

907-250-8141 Cell

907-261-0109 Direct

chad.gerondale@cmiak.com

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment
Date: Thursday, February 25, 2016 6:51:01 AM

-----Original Message-----
From: Ken Gerondale [mailto:k.gerondale@cmiak.com]
Sent: Monday, February 15, 2016 7:58 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Dear Sirs

As a lifelong Alaskan for 66 years and the owner of Construction Machinery Ind., LLC we are in full support of developing the Donlin Gold Mine. My family going back to my Grandfather have been involved in many gold mining projects around the State of Alaska and the Donlin Project is one of the best thought out projects that the State of Alaska has seen. In addition to being well thought out and engineered, this project is needed for this area of Alaska to help bring economic opportunity to our people both Native Alaskans and those of us like my Grandfather who came to Alaska in the last 100 years seeking what Alaska has given us all economic opportunity and the most outrageous and beautiful place to live!! ..... Thank you, Kenny Gerondale

SER 5

Ken Gerondale

C: 907-351-0287

DD: 907-261-0138

k.gerondale@cmiak.com

SENATOR CATHY GIESSEL
State Capitol Building
Juneau, Alaska 99801-1182

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ALASKA STATE LEGISLATURE
SENATE RESOURCES COMMITTEE

SEN. CATHY GIESSEL
Chair
State Capitol, Room 427
Juneau, AK 99801-1182
(907) 465-4843 Fax 465-3871

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January 27, 2016

U.S. Army Corps of Engineers
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P.O. BOX 6898
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Honorable Sir or Madam:

As Chair of the Alaska Senate's Resources Committee, I have a vested interest in the development of our land's wealth on behalf of all Alaskans. Donlin Gold is proposing a mining operation in the Yukon Kuskokwim region, an area with some of the highest rates of unemployment in the United States. The proposed area for the project also is near traditional settlements, hunting and fishing grounds. Any industrial operation needs to prove that the landscape, and the residents, will not be negatively impacted by those changes.

Based upon everything Donlin Gold has done to date, I wholeheartedly support the project. Specifically, my support is for Alternative 2. The plan that Donlin Gold has presented through the Environmental Impact Statement (EIS) process demonstrates that this is a company that is committed to the success of all the stakeholders involved.

Alaska's Native Peoples' were transferred lands under the Alaska Native Claims Settlement Act (ANCSA) in 1970. Newly created village and regional corporations took those lands and subsurface claims into possession for the accomplishment of two goals: to economically build their communities, especially in remote areas, by promoting self-sufficiency; and by utilizing the proceeds of that economic activity to preserve and promote their indigenous cultures.

LAND 1 The owners of the land and subsurface rights are The Kuskokwim Corporation (TKC) and Calista Corporation (Calista) respectively. Those lands were expressly selected by the corporations because of their potential to improve the lives of their Alaska Native Shareholders.

The Donlin Gold project site is on lands leased by TKC and Calista. To date, the local hire on the project has at times exceeded 90% at the Donlin Gold Camp. In addition, the turnover rate for staff during the exploration phase has been reduced from 300% to 5%. The projections for jobs during construction are for up to 3,000 pairs of hands. During operations of the mine, which is forecast to last decades, up to 1,400 permanent jobs will be needed.

SER 5

Given the current trend for local hire to date, there is every reason to believe Donlin Gold would be a massive source of long-term, high wage employment to residents of the Yukon-Kuskokwim region. I have personally visited villages elsewhere in Alaska where just one person being gainfully employed massively impacts the entire community for the better. Donlin Gold provides this opportunity to the many villages in the region.

SER 2

In addition to the occupational benefits and the standards of living that accompany them, ANCSA law requires that Donlin Gold's royalty payments to the landowners be shared with other Alaska Native Corporations. This revenue sharing provision means that Alaska Native Corporation shareholders from all corners of Alaska benefit from this project.

SER 4

To date, Donlin Gold has expended $480 million on the project, most of which has been spent in the past decade. If allowed to continue, Donlin Gold will continue a process of substantial investment (cash outlays), a large portion of which is in the region. As federal dollars diminish in Alaska, and Alaska's own state budget force constriction in the public sector, the investment from private industry will be an important means of filling that regional economic gap.

The economics of this project cannot outweigh the environmental impacts. Donlin Gold has shown to date that it will utilize best practices and cutting edge technologies to mitigate any harms associated with the extraction of minerals from the site.

For instance, rather than barging diesel, Donlin Gold is proposing the construction of a natural gas pipeline from the Cook Inlet region. This alternative, part of Alternative 2, would significantly reduce emissions and provide long term energy supplies to the project.

PUB 6

Transporting energy sources, be it crude oil or another source, via pipeline is undoubtedly a safer, more efficient method of conveyance. A natural gas pipeline was proposed after discussion with stakeholders in the region, who were concerned with the number of diesel barges on the Kuskokwim River. This proposed method is the result of Donlin Gold doing exactly what it should: consult and take into account the needs and concerns of local stakeholders.

Donlin Gold will also be the first mine site in Alaska to utilize a synthetic liner underneath the entirety of its tailings impoundment. In keeping with best practices, the tailing storage facility will be a dried closure. The tailings dam itself will be constructed taking into account the seismic activity in the area. The dam will be built to withstand earthquakes, making it the most stable of all dam types.

Water quality standards will be met with the construction of an active water treatment plant. In addition, mercury levels are going to be well below the emissions threshold thanks to the innovative technologies Donlin Gold will employ on this project.

The Donlin Gold project, specifically Alternative 2, is a continuation of historical activity in the region. The area surrounding the project has seen mining operations dating back to over a century ago. Alaska was built on the exploration of precious metals. With the new technologies and standards in place today, Donlin Gold can literally operate in a sustainable manner for potentially several generations.

Mining is an integral part of our state's culture and economy. As someone born in a former gold town when Alaska was a territory, I personally witnessed the resilience of spirit that surrounded the culture of mining. The patience, diligence and work ethic required to be successful in that field has only increased with the implementation of our current federal and state standards.

Donlin Gold has worked to date for roughly two decades to finalize an EIS. There are several years after that before operations could begin, and several years after that to potentially turn a profit. In my estimation, all the actions of Donlin Gold speak to those values we honor in Alaska. It is for all those reasons I respectfully urge your support of Alternative 2.

Sincerely,

Cathy Giessel

Senator Cathy Giessel
Senate District N

COMMENT FORM

Donlin Gold Mine EIS

ANILCA 810 Subsistence Hearing

Give form to BLM or mail to:
BLM Anchorage Field Office
Attn: ANILCA 810 Subsistence Hearing
4700 BLM Road
Anchorage, AK 99507

You may also fax this form to 907-267-1267 or email to bseppi@blm.gov

OPTIONAL: Your name and contact information

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

David Gilila Sr
765-2082
P.O. Bx 53, Akiak, Ak 99552

Your comments regarding subsistence impacts from the proposed Donlin Gold Mine:

WILD 1 My main concern is especially on the proposed pipeline corridor, where it will have detrimental impact on human life as well as some endangered species or other coming back animals. There are more accidents with vehicles.

BARG 8 At present barges are enrolling sand on the narrow rivers and are changing some channels, it has some effect on subsistence to a point presently!

(Continue on reverse if needed)

From: John Gillam
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold project
Date: Sunday, May 01, 2016 9:59:27 AM

To whom it may concern,

I had the opportunity to work at the Donlin Gold project from 2005 to 2015. I made many friends in the region, as well as saw the benefits of what, (even in the exploratory) phase this project has had on the people who live and work in SW. We had many who worked and made good money to be able to provide for their families, got off the government welfare rolls, and had the money to continue their lifestyle. Gas, ammo, transportation (boat, snow machines) are not cheap. The jobs provided good income for the many, many people who worked there.

I am now working in Kotzebue, at the Maniilaq Health center as the Manager of foodservice. When I got here to Kotzebue, I noticed right away the benefits of the Red Dog mine has had on the community. Most of the roads are paved, they have a fantastic waterfront. all the streets have good lighting. Wide sidewalks to keep kids safe and off the roadways. Many nice boats, automobiles/trucks, snow machines and ATV's. Every evening I see families taking walks on the sidewalks, off the roadways, and not sucking dust from dirt roads. The mining industry has undoubtedly had a very positive impact on this community.

Yes all resource development has its challenges and risks. However from what I see and have learned from all the information offered by Donlin Gold, they are going above and beyond to protect the environment, the Yupik way of life, water, wildlife. and all the people of the region and Alaska.

SER 5

This project will offer good high paying jobs for many people of the region, and Alaska with the ripple effect of support services throughout the state. Financial stability for the region, and money to the state.

Thank you
John Gillam

PAUL S. GLAVINOVICH
MINERALS CONSULTANT

P.O. Box 112816
Anchorage, Alaska 99511

Telephone
(907) 345-3646

January 28, 2016

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
CEPOA-RD-Gordon, P.O. Box 6898
JBER, AK 99506-0898

RE: Donlin Gold Project, Draft EIS

Dear Mr. Gordon:

I wish to record my support for the Donlin Gold Project as proposed in Alternative 2 in the November 2015 DRAFT EIS for this project.

SVE 1 The Donlin Gold Project has the potential to make a signature impact on the socio-economics of the Kuskokwim region of Alaska the benefits of which far exceed any potential impact and/or threat to the extant natural environment of this region or proposed transportation corridors.

The Project is located within a geographic region of Alaska that may be characterized as one of few opportunities for employment, particularly for well-paying jobs, high energy costs and very limited to no tax base to support education and local infrastructure. Alternative 2 in the DEIS identifies the positive economic impact of the proposed project and these metrics are greatly reinforced with a comparison to those real numbers from the Red Dog Mine in northwest Alaska.

Like the Donlin Project, Red Dog is located in a remote area of Alaska where the pre-mine economy of the region was very similar to that of the Kuskokwim Region. The Red Dog Mine is owned by NANA Regional Corporation, an ANCSA Corporation, and operated by Teck Alaska. NANA receives a production royalty, payments for use of the surface and a priority in contracting opportunities. Production commenced in 1990 and since that time NANA has received >$1 billion in production royalty payments of which approximately 70% has been shared with the other ANCSA corporations and their shareholders. The mine provides approximately 600 year-round jobs at an average annual wage in excess of $100,000. NANA shareholders make up 57% of the mines total workforce. Payments to the Northwest Arctic Borough in support of education and

general revenues exceed $11M per year. The mine has greatly transformed the economics of the NANA region and one should conclude that the Donlin Project will have a similar if not greater positive economic impact upon the Calista Region.

I strongly recommend that the Corps advance Alternative 2 as the preferred alternative for the final EIS.

Sincerely,

, CPG, PG-AK

From:	Bellion, Tara
To:	Evans, Jessica
Subject:	FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date:	Tuesday, March 08, 2016 9:57:54 AM

-----Original Message-----
From: Karl I. Gohlke [mailto:mcafbks@gci.net]
Sent: Thursday, February 25, 2016 4:05 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To whom it may concern at the Corps of Engineers office:

I support the Donlin Gold Project for the following reasons:

Environmentally Responsible Development

* Donlin Gold has conducted extensive studies to develop an environmentally and socially responsible gold mine project.

* The Donlin Gold project was designed to reduce the overall footprint of the mine and allow for safe management of water over the mine life and post closure.

* The natural gas pipeline proposal is a result of conversations with the region about reducing the amount of diesel barges on the Kuskokwim River. The use of natural gas for power generation, instead of diesel, will also reduce air emissions.

* Donlin Gold will be the first large mine in Alaska to use a synthetic liner underneath it's entire tailings impoundment. Additionally, dry closure of the tailings storage facility at the end of the mine's life is a "best practice" Donlin Gold is proposing to ensure an environmentally responsible mining project.

* The tailings dam will be constructed of engineered rock fill and use a downstream construction method that is the most stable of all tailings dam types, designed for water storage and to withstand earthquakes.

* Donlin Gold will employ state of the art mercury emissions controls. To ensure the mercury emissions are well below air quality standards.

* Donlin Gold will construct an active water treatment plant to ensure that water that is discharged from the site is treated to meet water quality standards.

Job Opportunities and Economic Stimulant

* Improved transportation and communications infrastructure to support the mine, including port and pipeline facilities, can provide better services and lower cost of energy, goods and services to local residents.

* More than $480 million has been spent on exploration of the property, engineering and environmental studies, camp support, flight services, fuel and other supplies, with most of that expended in the last 10 years

* The job skills and training received while working at the mine will prepare the workforce for future work opportunities, creating a value that extends beyond the life of the mine.

* Donlin Gold will support organizations that offer job skill training for a prepared workforce.

* 3,000 construction jobs for 4 years and between 600 and 1,200 jobs for the 27.5 estimated life of the mine, will have a significant and positive impact on the economy of the region and the state.

* In addition to direct employment and contracting opportunities associated with Donlin Gold, many indirect business opportunities are anticipated in areas such as logistics, transportation, training, education and health care.

Rights and Goals of Calista and TKC Native Corporations

* The land and resources belong to the shareholders of TKC and Calista. It is TKC's and Calista's right and duty to support development of their natural resources for the benefit of the people of the region.

* Calista selected the mineral rights at Donlin Gold, and TKC selected the surface estate during the Alaska Natives Claims Settlement Act (ANCSA), so their shareholders would benefit from the development and production of the mine. This economic opportunity for shareholders and descendants is precisely the purpose behind Congress' grant of entitlement of these lands to Calista and TKC.

* As ANCSA corporations, Calista and TKC have two primary goals: generate profit for the corporation and its shareholders and provide other socio-economic opportunities and benefits to shareholders and their descendants. The Donlin Gold project will assist Calista and TKC in meeting these goals.

* The ANCSA corporations recognize the importance of subsistence lifestyle and the possibility of achieving unity and managing the land for both modern and traditional uses.

Benefits to the Region and Alaska Natives

* Through the ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations and their shareholders.

SER 11

* The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the YK region and fund traditional subsistence activities.

* Rural Alaska is being impacted most by the reduction of state and federal dollars. Alternative 1 (the no project alternative) would have a negative impact on the YK region.

* New, high-paying jobs will allow more residents to remain in the YK region and finance the purchase of supplies needed to maintain their traditional way of life for generations to come.

* With a local hire record of up to 90% at their camp during exploration, Donlin Gold has proven their commitment to hiring local residents.

* By reducing turnover rate from over 300% to 5% during the exploration phase, Donlin Gold has demonstrated their commitment to retaining qualified employees.

* The proposed natural gas pipeline will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YKI region.

* Donlin Gold's continued presence in the region over the past two decades, and the partnerships developed between the company and Alaska Native Corporations and with local communities, represent tremendous opportunities for shareholders and the broader YK community.

Transparent Operations

* Donlin Gold has a proven record of discussing the project's plans with the people of the region and listening to what they have to say about the region and the proposed project, including meetings and materials in the Yup'ik language.

* Donlin Gold is committed to developing a project consistent with the values of the Yup'ik and Athabascan cultures of the region.

Respectfully,

Karl

Karl I Gohlke

Executive Director

Mechanical Contractors of Fairbanks

Office 907-456-8347

Cell 907-378-5615

mcafbks@gci.net <mailto:mcafbks@gci.net>

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Wednesday, April 20, 2016 1:06:27 PM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Wednesday, April 20, 2016 10:29 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment

-----Original Message-----
From: Karl I. Gohlke [mailto:mcafbks@gci.net]
Sent: Tuesday, April 19, 2016 11:08 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Good Day,

NSB 1

I am in support of the Donlin Gold Project as it will just increase Alaska's resources and put us at the top of world's mineral producing state.

This project will require 100 permits or more to operate in a safe and environmental manner. It will pay into the state more taxes than all of Alaska is paying now. It shows, at two grams per ton, a fine that will put this project as a leader in gold producing minerals and again put Alaska at the for front of a leader.

It's 27.5 years of mine life will employ 600 - 1200 employees throughout the mine life and make a huge impact on Alaska's economy.

In building the Donlin Gold Mine it will draw on Alaska's labor, supply industry and transportation industry; requiring up to 3,000 jobs just in the construction workforce and more on the other mentioned and not mentioned industries.

A very important aspect of the this project is the plan to use "Clean Energy" to operate the mine. This pipeline will reduce the risk of hazardous spills and other type of impacts. In completing the 315 natural gas pipeline it will again present itself as a leader in the industry in Alaska.

I look forward to the "Record of Decision" of approval to build Donlin Gold Mine in late 2017.

Respectfully,

Karl

Karl I Gohlke

From: Karl I. Gohlke
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Friday, May 27, 2016 9:13:52 AM

Good Day,

I am supporting the Donlin Gold Project for several reason:

SER 8

The social and economic benefits of this project to the region, state, and to the nation. Job opportunities which will lead to reduced out-migration, helping to maintain rural schools and culture, including traditional ways of life. The potential for lower cost energy options to the region such as the proposed natural gas pipeline which will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YK region. These are some things the outside environmentalist have no concept about the social and economic impact for the villages which will improve their quality of life.

The project is designed to reduce the overall footprint of the mine and allow for safe management of water over the mine life and post closure. The natural gas pipeline proposal will reduce the amount of diesel barges on the Kuskokwim River. The use of natural gas for power generation, instead of diesel, will also reduce air emissions. Donlin Gold project will be the first large mine in Alaska to use a synthetic liner underneath it's entire tailings impoundment and the tailings pond will be constructed of engineered rock fill and use a downstream construction method that is the most stable of all tailings dam types, designed for water storage and to withstand earthquakes. Most interesting is the project will employ state of the art mercury emissions controls ensuring the emissions well fall below air quality standards.

The job skills and training received while working at the mine will prepare the workforce for future work opportunities, creating a value that extends beyond the life of the mine. This project will have 3,000 construction jobs for 4 years and between 600 and 1,200 jobs for the 27.5 estimated years of mine life resulting in a significant and positive impact on the economy of the region and the state. In addition to direct employment and contacting opportunities associated with Donlin Gold, many indirect business opportunities are anticipated in areas such as logistics, transportation, training, education and health care.

SER 2

As ANCSA corporations, Calista and TKC have two primary goals: generate profit for the corporation and its shareholders and provide other socio-economic opportunities and benefits to shareholders and their descendants. The Donlin Gold project will assist Calista and TKC in meeting these goals. The important part of the ANCSA is through the ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations and their shareholders; another significant fact the environmentalist doesn't concern themselves with because they don't live in the villages or reap the benefits from.

The Donlin Gold Project continued presence in the region over the past two decades, and the partnerships developed between the company and Alaska Native

Corporations and with local communities, represent tremendous opportunities for shareholders and the broader YK community.

Karl

Karl I Gohlke
Executive Director
Mechanical Contractors of Fairbanks
Office 907-456-8347
Cell 907-378-5615
mcafbks@gci.net

From:	donlingoldeis, POA
To:	Craig, Bill
Subject:	FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date:	Thursday, February 25, 2016 6:49:20 AM

-----Original Message-----
From: Golden Alaska Excavating [mailto:rlryser@gci.net]
Sent: Monday, February 15, 2016 11:41 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Hello To Whom This May Concern,

We are writing in support of this project and encourage the Army Corp of Engineers to approve this project and allow for it to move forward. Donlin Gold has a proven track record and we believe this project would benefit the State of Alaska residents and businesses. Here are a number of Donlin Gold work ethic topics to consider while making your decision.

Environmentally Responsible Development

*Donlin Gold has conducted extensive studies to develop an environmentally and socially responsible gold mine project.

*The Donlin Gold project was designed to reduce the overall footprint of the mine and allow for safe management of water over the mine life and post closure.

*The natural gas pipeline proposal is a result of conversations with the region about reducing the amount of diesel barges on the Kuskokwim River. The use of natural gas for power generation, instead of diesel, will also reduce air emissions.

*Donlin Gold will be the first large mine in Alaska to use a synthetic liner underneath it's entire tailings impoundment. Additionally, dry closure of the tailings storage facility at the end of the mine's life is a "best practice" Donlin Gold is proposing to ensure an environmentally responsible mining project.

*The tailings dam will be constructed of engineered rock fill and use a downstream construction method that is the most stable of all tailings dam types, designed for water storage and to withstand earthquakes.

*Donlin Gold will employ state of the art mercury emissions controls. To ensure the mercury emissions are well below air quality standards.

*Donlin Gold will construct an active water treatment plant to ensure that water that is discharged from the site is treated to meet water quality standards.

Job Opportunities and Economic Stimulant

*Improved transportation and communications infrastructure to support the mine, including port and pipeline facilities, can provide better services and lower cost of energy, goods and services to local residents.

*More than $480 million has been spent on exploration of the property, engineering and environmental studies, camp support, flight services, fuel and other supplies, with most of that expended in the last 10 years

*The job skills and training received while working at the mine will prepare the workforce for future work opportunities, creating a value that extends beyond the life of the mine.

*Donlin Gold will support organizations that offer job skill training for a prepared workforce.

SER 5 *3,000 construction jobs for 4 years and between 600 and 1,200 jobs for the 27.5 estimated life of the mine, will have a significant and positive impact on the economy of the region and the state.

SER 12 *In addition to direct employment and contracting opportunities associated with Donlin Gold, many indirect business opportunities are anticipated in areas such as logistics, transportation, training, education and health care.

Rights and Goals of Calista and TKC

*The land and resources belong to the shareholders of TKC and Calista. It is TKC's and Calista's right and duty to support development of their natural resources for the benefit of the people of the region.

*Calista selected the mineral rights at Donlin Gold, and TKC selected the surface estate during the Alaska Natives Claims Settlement Act (ANCSA), so their shareholders would benefit from the development and production of the mine. This economic opportunity for shareholders and descendants is precisely the purpose behind Congress' grant of entitlement of these lands to Calista and TKC.

*As ANCSA corporations, Calista and TKC have two primary goals: generate profit for the corporation and its shareholders and provide other socio-economic opportunities and benefits to shareholders and their descendants. The Donlin Gold project will assist Calista and TKC in meeting these goals.

*The ANCSA corporations recognize the importance of subsistence lifestyle and the possibility of achieving unity and managing the land for both modern and traditional uses.

Benefits to the Region and Alaska Natives

*Through the ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations and their shareholders.

SER 1 *The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the YK region and fund traditional subsistence activities.

*Rural Alaska is being impacted most by the reduction of state and federal dollars. Alternative 1 (the no project alternative) would have a negative impact on the YK region.

*New, high-paying jobs will allow more residents to remain in the YK region and finance the purchase of supplies needed to maintain their traditional way of life for generations to come.

*With a local hire record of up to 90% at their camp during exploration, Donlin Gold has proven their commitment to hiring local residents.

*By reducing turnover rate from over 300% to 5% during the exploration phase, Donlin Gold has demonstrated their commitment to retaining qualified employees.

*The proposed natural gas pipeline will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YKI region.

*Donlin Gold's continued presence in the region over the past two decades, and the partnerships developed between the company and Alaska Native Corporations and with local communities, represent tremendous opportunities for shareholders and the broader YK community.

Transparent Operations

*Donlin Gold has a proven record of discussing the project's plans with the people of the region and listening to what they have to say about the region and the proposed project, including meetings and materials in the Yup'ik language.

*Donlin Gold is committed to developing a project consistent with the values of the Yup'ik and Athabascan cultures of the region.

Thank you for your time!

Best Regards,

Rick and Lori Ryser

Golden Alaska Excavating, LLC

PO Box 8908

Kodiak, AK 99615

Office: 2011 Mill Bay Rd #2

907.942.2747 Rick Cell

907.539.6490 Lori Cell

907.486.5490 Office

888.848.2913 Fax

Blockedwww.goldenalaska.biz

Blockedwww.facebook.com/goldenakexcavating

"We Dig Kodiak"

Smith, Neal

From: Stephen Grabacki <graystarpacific@gmail.com>
Sent: Tuesday, April 26, 2016 7:57 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold -- support Alternative 2

We support alternative 2 of Donlin's proposed mine development, because of --

- The social and economic benefits of this project to the region, state, and to the nation;
  - Through ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations.
  - The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the YK region and fund traditional subsistence activities.
  - Rural Alaska is being impacted most by the reduction of state and federal dollars. Alternative 1 (the no project alternative) will likely have a negative impact on the YK region.
- The potential for lower cost energy options to the region such as the proposed natural gas pipeline which will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YK region.
- Job opportunities which will likely lead to reduced out-migration, helping to maintain rural schools and culture, including traditional ways of life.

SER 2
SER 11
SER 1
GAS 1
SER 8

Donlin Gold's project description demonstrates an understanding of environmental concerns, and features vigorous environmental management principles.

Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources, and Donlin will be the same.

We support alternative 2 of Donlin's proposed mine development.

Thank you for your attention. Regards,

Stephen T. (Steve) Grabacki, FP-C
President, and Certified Fisheries Professional
GRAYSTAR Pacific Seafood, Ltd.
P.O.Box 100506
Anchorage, Alaska
99510-0506 USA
+1-907-272-5600
graystarpacific@gmail.com

From:	Craig, Bill
To:	Bellion, Tara; Evans, Jessica; Smith, Neal
Subject:	FW: Comment of Support for Alternative 2 of the Donlin Gold Project
Date:	Thursday, April 21, 2016 8:16:26 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Thursday, April 21, 2016 7:58 AM
To: Craig, Bill
Subject: FW: Comment of Support for Alternative 2 of the Donlin Gold Project

-----Original Message-----
From: Kimberley Gray [mailto:Kimberley@agcak.org]
Sent: Wednesday, April 20, 2016 11:37 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Comment of Support for Alternative 2 of the Donlin Gold Project

Good morning.

I wanted to get off a quick note to show my support on Alternative 2 of the Donlin Gold Project.

I know some groups (I believe most of them are from outside Alaska) aren't aware of how Alaska is about its protection of the land and so are probably unaware that the State of Alaska Department of Natural Resources enforces stringent regulations overseeing mining activities statewide that effectively protect the environment, wildlife, and human health. The companies who now choose to develop projects in Alaska (such as Donlin Gold) have already demonstrated an understanding of environmental concerns, and features vigorous environmental management principles. Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources. The project will be scrutinized under a rigorous permitting process that reviews and analyzes all potential impacts, and should include the positive economic ones

The project is on surface land owned by The Kuskokwim Corporation (TKC), and Calista Corporation subsurface estate. These lands were selected under the Alaska Native Claims Settlement Act (ANCSA) specifically for their mineral development potential. Royalties paid to Calista will in part be redistributed to other regional and village corporations, pursuant to the 7(i) and 7(j) provisions of ANCSA. Donlin Gold is proposing to develop this land in partnership with Calista Corporation and TKC who both support the project.

Some of the benefits include:

SER 2

* Through ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations.

SUB 18

* The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the YK region and fund traditional subsistence activities.

* The potential for lower cost energy options to the region such as the proposed natural gas pipeline which will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YK region.

* An estimated 3,000 jobs will be created during the approximate four-year construction phase, and between 600 to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the economy of the region and the state.

I'm sure it's been said before that mining (as ALL industries) are not what they were a hundred years ago. Companies have very high standards for safety and environmental concerns. Donlin has met numerous times with the local communities to share information, ask questions, hear comments and provide answers. Some might say they've gone above and beyond, but they probably wouldn't. I believe they know the importance of each step they are taking to make sure everything is done correct and of the highest standards possible. Standards they could live with at the end of the day.

Please don't let some groups or individuals that have no bearing on Alaska's future or are only looking out for their own self-interests tell us how and what we should do with our own land. We are such a very large state and so much of the land will remind untouched, but let's not cut out all options for growth and resource development.

Kimberley Gray

Events & Communications Coordinator

Associated General Contractors of Alaska

8005 Schoon Street

Anchorage, AK 99518

907-561-5354

cell 907-229-2824

Smith, Neal

From: Lisa Herbert <Lisa@fairbankschamber.org>
Sent: Wednesday, April 27, 2016 4:53 AM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Attachments: Fairbanks Chamber Donlin Gold EIS Public Comment Letter Supporting Alternative 2.pdf

Mr. Gordon,

Please find attached the Greater Fairbanks Chamber of Commerce's public comment on the Donlin Gold EIS.

Regards,
Lisa Herbert

Lisa Herbert | President & CEO | **Greater Fairbanks Chamber of Commerce**
100 Cushman Street, Suite 102, Fairbanks, AK 99701 | O: (907) 452-1105 | D: (907) 374-6706 | C: (907) 347-8006
E: Lisa@Fairbanks Chamber.org | www.FairbanksChamber.org

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GREATER FAIRBANKS CHAMBER OF COMMERCE

April 20, 2016

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
ATTN: CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

POA.donlingoldeis@usace.army.mil

Dear Mr. Gordon:

On behalf of the Greater Fairbanks Chamber of Commerce, we want to express our full support of Alternative 2 for the proposed Donlin Gold Project. The Fairbanks Chamber represents more than 750 businesses throughout Interior Alaska. The success of our members is directly linked to their ability to do business in an environment that promotes and supports economic development opportunities – this includes the development of Alaska's natural resources.

The Fairbanks Chamber has long supported responsible development and devotes a standing committee towards that purpose (Energy, Environment & Natural Resources). The Alaska constitution established "the policy of the State to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with the public interest. The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people." The Chamber believes this development proposal upholds the constitutional policy and that it will benefit the people in the Yukon-Kuskokwim (Y-K) region and across Alaska.

SER 5

The Donlin Gold Project will generate wealth and provide socioeconomic opportunities and benefits to all Alaskans for many years. With an expected total payroll of $100 million a year for a projected mine life of at least 27 years, the Donlin Project would be a reliable source of income for Alaskans. The Project is situated in an economically depressed region with average income approximately $46,000 - less than two-thirds the state average. The Project estimates employing 1,600-1,900 workers from the Yukon Kuskokwim communities during construction at an average wage of $125,000 per year. Employment in the region during operations from the will reach between 500-600 workers. The average worker in the mining industry earns over $100,000 year. The supply of services, equipment, and materials associated with Donlin infrastructure are additional opportunities for local business and employment.

Donlin Gold and their owner companies, Barrick Gold and Nova Gold, are committed to developing a safe and environmentally responsible project while providing jobs for families in the Y-K region and the State. They are providing transparent communication about the project, respecting environmental, subsistence, and cultural values, and creating needed business opportunities. Donlin's local hire practices have been strong, achieving 90% local hire at the Donlin Gold camp during its exploration and baseline data collection phases. Prior the EIS process, Donlin's robust stakeholder engagement program included dozens of community meetings, communicated information in the native Yup'ik dialect, and involved significant philanthropic activities promoting the region's cultural values.

EXECUTIVE PARTNERS

DIAMOND
- Alaska Airlines
- ExxonMobil
- Fairbanks Daily News-Miner
- Fairbanks Memorial Hospital & Denali Center
- Flint Hills Resources Alaska
- Mt. McKinley Bank
- Ravn Alaska
- Vivlamore Companies

PLATINUM
- Alyeska Pipeline Service Co.
- BP Exploration
- ConocoPhillips
- Doyon, Limited
- Fred Meyer Stores
- Golden Heart Utilities
- Kinross Fort Knox Mine
- Sumitomo Metal Mining Pogo LLC
- Wells Fargo Bank Alaska

GOLD
- Carlson Center
- Denali State Bank
- Design Alaska
- Doyon Utilities LLC
- First National Bank Alaska
- GCI
- Gene's Chrysler, Jeep & Dodge
- MAC Federal Credit Union
- NAPA Business Development Group
- Tote Maritime
- Usibelli Coal Mine
- WAL-MART Stores, Inc.
- Westmark Fairbanks Hotel & Fairbanks Princess Riverside Lodge

SILVER
- Alaska Communications
- Alaska Railroad
- Alaska USA
- Everts Air Cargo, Everts Air AK
- Exclusive Paving/University Redi-Mix
- Fairbanks Natural Gas
- Flowline Alaska
- Golden Valley Electric Association
- Hale & Associates, Inc.
- Henry Orthodontics
- Hilcorp Alaska, LLC
- JL Properties, Inc.
- Key Bank
- Lynden
- Northrim Bank
- PDC Inc. Engineers
- Personnel Plus
- Sam's Club
- Seekins Ford Lincoln
- Sourdough Fuel
- Spirit of Alaska Federal Credit Union
- State Farm Insurance
  - Tammy Randolph, Agent
  - Ed Randolph, Agent
- Tanana Valley Clinic
- TDL Staffing
- Teamsters Local 959
- Tower Hill Mines-Livengood Gold Project
- UA College Savings Plan
- University of Alaska Fairbanks
- Verizon Wireless
- Yukon Title Company

Congress, through the Native Claims Settlement Act (ANCSA), intended to create opportunities for shareholders and descendants of native peoples; this Project fulfills that intent. The Kuskokwim Corporation (TKC) and Calista will receive royalties from the Donlin Gold Project and a portion of the Project revenues will flow to other native corporations under the 7(i) and 7(j) provisions of ANCSA.

Nearly half a billion dollars have been spent by Donlin Gold, LLC on this project, the most on any mine project in the last ten years. Donlin Gold has demonstrated success by working safely and responsibly with the local people and protecting the environment. This commitment is reflected in the project designs, such as a synthetic liner in its tailings storage facility – the first Alaska mine to use this concept. Donlin has also conducted fishing activity and river use surveys on the Kuskokwim River to ensure that mining operations do not disturb subsistence use. We believe their infrastructure and supply plan is safe, efficient, and environmentally sound. At significant capital expense, Donlin has also proposed a buried natural gas pipeline to reduce the barge traffic on the Kuskokwim. The resulting opportunity for energy relief to the region is significant. In short, Donlin's science-based plans for transportation and energy facilities, including barging and pipeline operations, are environmentally sound and culturally sensitive.

It is worth noting the long duration and depth of comment that the Donlin Gold Project has received since its inception. The EIS has included more than 60 public meetings in the region and Anchorage. These hearings have given real opportunity for broad understanding on the proposed Project. Donlin Gold has also provided dozens of presentations to organizations, like our Chamber, around the State. The outreach effort by the Project proponents is significant, commendable, and further underscores their commitment to responsible development and economic growth.

Thank you for the opportunity to support Alternative 2 of the Donlin Gold Project's proposed development plan.

Respectfully,

GREATER FAIRBANKS CHAMBER OF COMMERCE

Lisa Herbert
President and CEO

Smith, Neal

From: Howard Grey <h_l_grey@hotmail.com>
Sent: Sunday, April 24, 2016 7:18 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Comment on Donlin Draft EIS
Attachments: Image (60).jpg; Image (61).jpg

Attached for your review are my comments on the Donlin Draft EIS. The original signed document has been mailed to your office via USPS.
Please let me know if you have any questions regarding my response.
Regards,
Howard J. Grey

Howard J. Grey
1927 W. 13th Avenue
Anchorage, Alaska 99501

April 22, 2016

Mr. Keith Gordon
US Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

Subject: Donlin Gold Draft Environmental Impact Statement

Dear Mr. Gordon,

NSB 1

Thank you for the opportunity to comment on the Donlin Gold proposed project. I have had an opportunity to review information developed by your agency and the applicant, Donlin Gold, and am in favor of seeing the project go forward.

The applicant has been working on the project well over two decades. During this time they have developed an extensive array of environmental, engineering and economic data, preparatory to mining. This has shown that the development of a mine is viable and can meet the strict environmental standards required by the Corps and the other state and federal regulatory agencies.

The company, Donlin Gold, has addressed key environmental issues such as the design of safe and stable mining procedures and tailings storage facilities that take into consideration predicted seismic events. The designs also anticipate the end of mine scenario providing for restoration that will return the area to a scenic condition. Throughout the permitting phase the company has spent considerable time informing the local residents of their plans and inviting comments or concerns that could be used to improve the project.

Support, supply and transportation are more often than not a major challenge in Alaska where infrastructure is lacking. Where aircraft access can sometimes be used to support exploration this form of transport is not conducive to major mine development and continued operations. The applicant after extensive studies has determined that the existing navigable Kuskokwim River coupled with a short mine road offers the best and most environmentally sensitive mode of access. Here again comments from local residents was obtained and used to address concerns of others using the river system.

Providing for heating and power fuel requirements are also a major challenge for an operation such as this. After investigating several alternatives Donlin focused on using natural gas from Cook Inlet supplies as the preferable fuel source. This will assure a dependable long term supply for the mine life. Again they looked at methods to minimize the environmental effects of the proposed pipeline needed to transport the gas.

The area surrounding the proposed mine has a number of small and generally isolated communities. Many in these communities depend on subsistence. However as times change this is becoming harder to do. Utilities, fuel and food staples are expensive due to transportation and added logistics cost. This can make it more difficult for those enjoying their lifestyle to remain at home. One of the major obstacles is a general lack of good paying, long term employment close to home. Projects such as Donlin fill this need. From the start the Company has promoted local hire and incorporated it into exploration and other pre development activities. Recipients of this program will tell you of its many benefits and that they are ready, willing and eager to participate in the next phase of development. I think if behooves all of us, including the permitting agencies, to help with this effort.

In closing I wish to again express my support for this project and hope that all parties will do their best to expedite the review and approval process. In the meantime if you have any questions please don't hesitate to contact me.

Sincerely,

Howard J. Grey

[redacted]

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

NSB 1

As an elder from Russian Mission Native Corporation, Thanks for all you do for the villages on Yukon witch I come from. I myself don't live there. Haven't for since I myself left for High School. Thanking for all you do for the Villages job well done.

sincerely,
Sophia Grzenkowicz

also giving job for shareholder's,
Thank again

MICHIGAN 480
31 MAY 2016 PM 5 L

Sophie Grzenkowicz
14640 Shirley Ave.
Warren, MI 48089

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

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The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

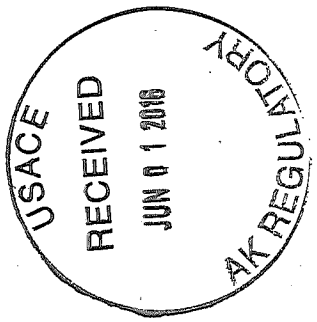
SER 5

The Donlin Gold Project should be allowed to move forward. It will be a good project in a region where there are few other jobs. It will be good for Alaskans. As a lifelong Alaskan, I support Alternative 2 - the proposed project.

Alex Hall
Anchorage, Ak

ANCHORAGE AK 995
25 MAY 2016 PM 1 T

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898



From: Ken Hall
To: donlingoldeis, POA
Cc: Ken Hall
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Friday, May 27, 2016 10:28:53 AM

May 27, 2016

U.S. Army Corp of Engineers

Box 6898

JBER,

Alaska 99506

RE: Donlin Gold Project

Thank you for the opportunity to comment on the proposed Donlin Gold Project. Alaska was granted Statehood on the premise that it would be allowed to develop its natural resources to the best benefit of its citizens and to be able to provide a stable economy for its citizens. The Donlin project has demonstrated it follows the practice of utilizing the highest and best use of a resource.

SER 5

The proposed Donlin project as presented has the potential to provide a stable economy to an otherwise economically depressed region of Alaska. The mine when in production has the potential to employ up to 1200 people with mine activities. The effect of having 1200 people employed with stable employment will help enable an otherwise depressed region to prosper. With a means of earning a living in a rural region either with direct employment to the mine or through a support industry it will enable those Alaska citizens that enjoy a rural life style the opportunity to live and prosper where they otherwise would not. The Mine when in operation would have the ability to provide much need support for many of sorely need services in the region such rural schools and improved roads and services to its citizens.

With current rigorous permitting regulations Alaska is a showcase for responsible resource development. Although there are no guarantees with any development Alaska has demonstrated that through responsible development large scale developments can be developed in a safe and harmonious regard to the environment.

PUB 6

Public involvement in any project is imperative. Through the EIS process Donlin, the Corp of Engineers and other stake holders in the project have been proactive in getting those interested parties informed and engaged as the project moves forward. Through the process many suggestions have come forward that have been considered and if feasible have been written in to the project. Through the process there have been considerations and changes on numbers of barges that would be on the Kuskokwim River, demonstrating that through the process there is consideration to the environment and the people of the region.

I feel as if the Donlin project deserves our support and priority to move the project forward in a responsible and timely manner for the benefit of all the people of Alaska.

Respectfully

Ken Hall

2506 Kuskokwim Ave

Fairbanks, Alaska

99709

Smith, Neal

From: Jim Halloran <augeojim@gmail.com>
Sent: Friday, April 22, 2016 1:42 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Mine

SVE 1

I stand in favor of the Donlin Mine. The economic advantages far outweigh the negative impacts. So lets do this one.
Jim Halloran

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: Donlin Gold Draft EIS comment
Date: Monday, April 04, 2016 12:56:24 PM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, April 04, 2016 12:06 PM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: Sieglinda Hamilton [mailto:sieglinda52@hotmail.com]
Sent: Saturday, April 02, 2016 5:01 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

NSB 1 I feel it is wrong to allow the Donlin Gold mine and natural gas pipeline to rape the natural beauty and security of Alaska. We have seen in previous disasters that damage caused by such operations is definite and cannot be 'fixed.'

Thank you,
Sieglinda Hamilton

Sent from my iPad

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HANSON

HANSON INDUSTRIES, INC.

April 27, 2016

US Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

RE: Donlin Gold EIS

Dear Sirs:

We support the project for a number of reasons but I list in summary fashion a few:

SER 19

1. Economic Benefit. We are a neighbor with the Calista Corporation and this project will have good, long term benefits for its members. The Calista's have worked for years to improve the quality of rural Alaska and such a major project will help it succeed in the future.
2. Mineral Rights. The Calista's are entitled to reap the benefits of the mineral rights it has from its ANCSA selection. Benefits from these mineral rights will flow to its members and other regional and village corporations.
3. Progressive, Modern Company. The two companies that compose the project are very transparent and successful.
4. Environmentally Diligent. The plan will use state of the art methods to reduce and minimize impacts to the area.
5. Pipeline. Alternative 2 is the best way to go.

Sincerely,

Robert J. Boyle

Robert J. Boyle
President

15807 E. Indiana Ave., Spokane, WA 99216 • Phone (509) 922-5252 • Fax (509) 922-5757 • E-mail: admin@hansonind.com

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: [EXTERNAL] Public Comment
Date: Monday, March 21, 2016 1:21:37 PM
Attachments: Donlin EIS.pdf

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, March 21, 2016 12:52 PM
To: Craig, Bill
Subject: FW: [EXTERNAL] Public Comment

-----Original Message-----
From: kathy hanson [mailto:kathyhanson49@gmail.com]
Sent: Thursday, March 17, 2016 3:41 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Public Comment

Attached in PDF form are my comments. Please consider this project very carefully as our future depends on you.

Kathy Hanson

March 17, 2016

To: US Army Corps of Engineers

From: Kathy Hanson
PO Box 22 Bethel, AK 99559
(907)545-0909
kathyhanson49@gmail.com

Re: Donlin Gold Project EIS

Two pages of my comments follow. I have been hopeful, but still somewhat dubious, about this potential project since the beginning. I had the opportunity to visit the site during one summer and was favorably impressed with the operation at that stage. I met a couple of Donlin employees whom I have known since they were children, and they had good reports about their employment there. The potential for new employment for our people would be a very good thing.

However, at the EIS hearing that was held in Bethel we had an opportunity to hear more details about the project, and what I heard chilled me. What I heard about potential damage to the whole environment—animals, plants, river, air—very much concerned me. I have read a lot of the Draft EIS statement from a disk that was distributed at the meeting, and I don't like what I have read. This project is not good for our region.

Thank you for taking the time to read my comments.

Donlin Gold EIS Project—Public Comments
From Kathy Hanson

Cumulative Effects-The People

In the executive summary, Chapter 4, the report states several times that "the direct and indirect impacts for minority and low-income communities in the Y-K region would be minor to moderate adverse effects to human health and subsistence." It goes on to say that the "adverse impacts would disproportionately impact minority and low-income populations."

The majority of the people living in the Y-K region are minority and low-income, leading one to ask how one could expect them to support such a venture in the first place. The referenced "major beneficial effects from increased employment and income" are widely expected to NOT be available to the regional population and the region itself. There are two reasons for this:

SER 16

1. The long term jobs at the proposed Donlin Gold mine will require skills that very few local people have, so most of the employees will most likely be imported from elsewhere.

SER 7

2. Using the Red Dog Mine as an example, many of the local people who secured long-term employment at that mine moved out of the NANA region to live in other parts of the state, taking their income with them. This was also the result of Donlin's hiring during its beginning stages. Many of the locally hired employees who remained employed moved out of the area to parts of the state where there is a lower cost of living.

The positive economic effects of the early stage of Donlin's work (the exploratory stage?) did not bring an economic "bounce" to the region, and few people think the full project development would, either.

Cumulative Effects-Subsistence

There is great concern about the potential effects of Donlin on subsistence, the comments in the Executive Summary, section 4.3.3.8.1 HUMAN HEALTH, notwithstanding. What the writers of this report deem to be "moderate" potential impacts, would be far more important than moderate to the people who are actually being considered in this report. Subsistence is a very fragile way of life already without any further pressures placed on it, so even "moderate" impacts become critical.

There needs to be more attention paid, and research done, to measure the effects on subsistence by the following:

1. PHL 18 Dust—Dust from the miles of gravel roads and the heavy truck traffic on those roads will spread out over the tundra making the surrounding areas unfit for subsistence activities such as harvesting berries and greens for food. The numerous airstrips that are planned will have a similar effect.

PHL 18 Dust from the mine itself grinding the mercury and arsenic rich rocks will end up on our tundra, plants, in the animals and fish, and in our food chain. That same dust, considering the prevailing wind direction in the Crooked Creek area, will likely end up floating over the village itself.

2. FISH 6 Fish—All of the alternatives, and especially Alternative 2, are expected to have a negative effect on four already challenged fish populations and harvest. There is great concern that the fish populations will be reduced due to the effects of vastly increased barge traffic, no matter which alternative might be used. Increased barge traffic will also increase the turbidity of the water, further stressing the fish. Has that been measured in some real way, or has someone just "modeled" it?

With climate change, we are already seeing a drop in the water table on the Kuskokwim River, with the result that all barges are going to be interfering with fish migration more and more. Has the dropping water table been measured and taken into account in your alternatives? As the water table drops, the

FISH 6

river will become narrower in some places pushing the fish into new currents for passage. Adding all the extra barges will exacerbate the problem.

We are already experiencing a reduced run of our mighty salmon on the Kuskokwim River, for reasons that no one has been able to explain, but most people believe are caused by humans. Those of us who live on the river and on those fish are being required to do whatever we can to mitigate the shrinking fish returns, although no one believes that overfishing on our part is the reason for the low returns. Now, there is the possibility that yet another man-made project will impact our fish negatively, and the results could be catastrophic.

3.
SUB 16

Barge traffic—Although Donlin Gold's plan has changed over the years in a effort to reduce the amount of barge traffic on the Kuskokwim River, the number of barges during the season that local people use the river will still be very, very disruptive. Subsistence fishermen will have to accommodate the barges by pulling in their nets and waiting until the barges go by. So they can safely use the river, boaters will have to prepare for and accommodate the very large wakes of the multiple-barge configuration that is shown in the EIS posters. It will be difficult for boaters to either travel behind the barges or be able to pass the flotilla. The river is our highway, from break up in mid-May to freeze up in early October, and with a warming climate, it is getting smaller and shallower and less likely to be able to handle all the traffic. Has anyone looked into this potential problem?

Potential for Toxic Spills

BER 6

While we can assume that Donlin Gold has no intention of harming the environment, there is no open-pit gold mine in the world that has not had problems with environmental damage. Some of those incidents have been small, but even relatively small mistakes can cause widespread devastation. Donlin Gold will not be able to prevent

mistakes, nor is it reasonable to think that the company will be here in perpetuity to mitigate those mistakes.

It is not morally right for a business to be able to risk the environment, the culture, and the livelihoods of the people in this region just so it can make money. The dangers are not worth the enormous risks. The Donlin Gold Mine could ruin things forever.

From:	Isaacs, Jon
To:	DonlinEISAR
Cc:	Bellion, Tara
Subject:	FW: [EXTERNAL] Does the Draft Environmental Impact Statement consider the very real risks of a tailings dam failure, which would be catastrophic for the area?Please ensure Multinational Mining Corporations DO NO Harm to: Fisheries, Health, and Communities
Date:	Friday, May 27, 2016 9:44:15 AM
Attachments:	image1.PNG ATT00001.txt

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, May 27, 2016 8:22 AM
To: Isaacs, Jon
Cc: logs4mom@yahoo.com
Subject: FW: [EXTERNAL] Does the Draft Environmental Impact Statement consider the very real risks of a tailings dam failure, which would be catastrophic for the area?Please ensure Multinational Mining Corporations DO NO Harm to: Fisheries, Health, and Communities

Jon,

Please see MS. Hartshorn-Anderson's attached DEIS comment.

Ms. Hartshorn-Anderson,

You can review the document at: http://donlingoldeis.com/

It's under the EIS documents tab.

-----Original Message-----
From: Ruth Hartshorn-Anderson [mailto:logs4mom@yahoo.com]
Sent: Friday, May 27, 2016 1:37 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Does the Draft Environmental Impact Statement consider the very real risks of a tailings dam failure, which would be catastrophic for the area?Please ensure Multinational Mining Corporations DO NO Harm to: Fisheries, Health, and Communities ...

Is it possible to review a copy of the draft eis document?
27May2016
Thx, Ruth Anderson
Retired DODAC

Blockedhttp://salsa4.salsalabs.com/o/51290/p/dia/action3/common/public/?action_KEY=18835
Article on web:

Back to Settings 01:19
salsa4.salsalabs.com

Say No to Donlin Gold! Don't Let Multinational Mining Corporations Harm Fisheries, Health, and Communities of the Kuskokwim River

If developed, Donlin Gold Mine would be one of the largest gold mines in the world, and it would have extensive and permanent effects on the environment and communities along the Kuskokwim River. These are just a few of the environmental and social concerns about the proposed Donlin Mine:

HZM 8
- The potentially devastating impacts of mercury and arsenic contamination in the Kuskokwim River as well as acid mine drainage.

WAQ 8
- The mine pit would eventually be filled with water and would require water treatment in perpetuity.
- The threat to subsistence food sources, commercial salmon fisheries, wildlife, and people

AIQ 1
- Even with protective measures in place, it is estimated that the mine would emit hundreds of pounds of mercury per year into the atmosphere and watershed during the processing of the ore.

DAM 2
- The proposed 464-foot high tailings dam for the Donlin mine would be the highest tailings dam in the state. A dam failure would release large quantities of harmful contaminants into the Kuskokwim River, which supports the largest Chinook salmon subsistence fishery in the state.

As one community member testified: **"Our subsistence way of life is our culture. That is the pulse of the people of the Kuskokwim...That is so invaluable you can't put a number on it... It's a short-term gratification with a significant long-term risk."**

DAM 3

The impacts of a potential tailings dam failure have not been considered by the Draft Environmental Impact Statement, while the catastrophic Mount Polley tailings dam failure and the Bento Rodrigues dam disaster in Brazil last year demonstrate the very real dangers facing the region. To not consider the impacts of these worst-case scenarios is irresponsible and could have catastrophic impacts.

Please take action today to protect the health of our communities and future generations!

Thank you for your support!

Donlin Gold will have harmful, potentially devastating long-term impacts to the people of the Kuskokwim region. Development of the Donlin Gold Mine Project is not worth the risk to subsistence uses, health, and safety of people and communities. Furthermore, the Draft Environmental Impact Statement does not consider the very real risks of a tailings dam failure, which would be catastrophic for the area. Consequently, I oppose the Donlin Gold Mine Project.

First Name*

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Urgent and Timely Comment re Donlin Gold Project EIS
Date: Thursday, February 25, 2016 6:43:50 AM

-----Original Message-----
From: Ted Hawley [mailto:ted.hawley.ak@gmail.com]
Sent: Friday, January 29, 2016 10:00 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Urgent and Timely Comment re Donlin Gold Project EIS

Dear USACE Representatives

I attended the January 28, 2016 Public Meeting in Anchorage.

The USACE part of the meeting was well run, believable, and appropriate for the project.

ANIL 3 The BLM ANILCA Section 810 Analysis of Subsistence Impacts presentation was not well done, and unbelievable and inappropriate for the project. The BLM presentation seemed to be based on environmental hype, and highly biased towards the opinions of the presenter. It was very telling that many of the local Alaskan Natives who spoke indicated that the BLM presentation did not represent the true subsistence way of life that they have lived for centuries. The written BLM Section 810 Preliminary Analysis of Subsistence Impacts may be less biased than the presentation, but it still seems to be lacking in facts and substance. I question whether the analysis is in conformance with the Department of Interior policy on Scientific Integrity as presented in the DOI Departmental Manual, 305 DM 3, Integrity of Scientific and Scholarly Activities. I suggest that the USACE should require that BLM produce appropriate scientific data and evidence of peer review for their analysis, that USACE should thoroughly review the BLM's work products, and that BLM use a non-biased employee for future presentations.

Be advised that I will submit further comments on the Draft EIS at a later date.

Thank you for your consideration,

William T. Hawley

From:	Ted Hawley
To:	donlingoldeis, POA
Subject:	[EXTERNAL] DONLIN GOLD EIS
Date:	Monday, May 30, 2016 5:38:25 PM

Dear Mr. Gordon and EIS Reviewers

I am in support of the Donlin Gold Project, Alternative 2 as proposed by Donlin Gold, for the following reasons:

1. The State of Alaska is in dire economic straits, in particular because the primary basis of the economy is oil development, and the price of oil is down. Alaska must diversify its economy to survive, and this project could be one of the starter projects that provides some long term stable revenue to the State. If this project were shut down by the permitting process, the message that will be sent to the world is that Alaska and the United States are not open for business, and business will go elsewhere.

SER 4

2. The Alaskan Native communities in proximity to the proposed project are some of the poorest in the United States, and really need reasons to continue to exist. Long term employment and taxes coming into the communities will make a difference in their ability to continue to live their traditional lifestyles to the greatest extent possible.

TWL 4

3. With proper permitting, the environmental impacts associated with the project will be controlled and mitigated. The face of mining has changed in the United States, and the primary emphases at any large scale modern day american mine are safety, community, and environmental responsibility. Mining companies realize that they can potentially lose millions of dollars if they don't do these things right.

SVE 1

Please proceed with the NEPA process, and strive to get to a favorable record of decision as soon as possible!

Respectfully,

William T. Hawley

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April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15

Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

IDIT 1

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

LAND 1

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Signature

Aaron Heath

Print Name

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4/19/16

To Whom it May Concern:

I'm am writing this letter in the hopes that the Donlin gold project becomes a reality.

SER 5

Alaska is at a critical juncture. Low oil prices and low reserves are devastating economies around the state. Our villages, already hurting due to a lack of jobs, will be the most negatively affected. Anyone who has spent time in rural Alaska can attest to the rampant unemployment and sky high prices our villagers face.

It is critical that new sources of jobs and revenues be created and the Donlin project will do both. Tens of millions of dollars have already been invested in the local communities and Donlin has gone above and beyond to make sure local people are involved in the planning process.

Alaskans should look at the successes of other large mines in the state. From Fort Knox, Greens Creek, Red Dog, Pogo, Valdez Creek, etc., Alaska mines have gainfully employed thousands of people and have been stewards of the environment.

The Donlin project will employ as many as 3,000 people during construction and another 1,000 during operations. Money generated will not only fuel the local economies but help all native corporations thru revenue sharing. This money will be wisely invested and grown to take care of future generations.

A major solution to our economic woes lies literally right under our feet. Please let Alaskans responsibly develop their own natural resources and let the Donlin project move forward.

Thank you,

Charles Wm. Heath

13001 Back Road

Anchorage, Alaska 99515

Charles Wm. Heath
13001 Back Road
Anchorage AK 99515

ANCHORAGE AK 995
20 APR 2016 PM 1 L

US Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

99506$0898

From:	Craig, Bill
To:	Bellion, Tara; Evans, Jessica; Smith, Neal
Subject:	FW: donlin gold project
Date:	Wednesday, April 20, 2016 1:06:59 PM
Attachments:	Scanned from a Xerox Multifunction Printer (005).pdf

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-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Wednesday, April 20, 2016 10:28 AM
To: Craig, Bill
Subject: FW: donlin gold project

-----Original Message-----
From: Chuck.Heath@ch2m.com [mailto:Chuck.Heath@ch2m.com]
Sent: Wednesday, April 20, 2016 8:23 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] donlin gold project

Please see attached testimony.

4/19/16

To Whom it May Concern:

I'm am writing this letter in the hopes that the Donlin gold project becomes a reality.

SER 5

Alaska is at a critical juncture. Low oil prices and low reserves are devastating economies around the state. Our villages, already hurting due to a lack of jobs, will be the most negatively affected. Anyone who has spent time in rural Alaska can attest to the rampant unemployment and sky high prices our villagers face.

It is critical that new sources of jobs and revenues be created and the Donlin project will do both. Tens of millions of dollars have already been invested in the local communities and Donlin has gone above and beyond to make sure local people are involved in the planning process.

Alaskans should look at the successes of other large mines in the state. From Fort Knox, Greens Creek, Red Dog, Pogo, Valdez Creek, etc., Alaska mines have gainfully employed thousands of people and have been stewards of the environment.

The Donlin project will employ as many as 3,000 people during construction and another 1,000 during operations. Money generated will not only fuel the local economies but help all native corporations thru revenue sharing. This money will be wisely invested and grown to take care of future generations.

A major solution to our economic woes lies literally right under our feet. Please let Alaskans responsibly develop their own natural resources and let the Donlin project move forward.

Thank you,

Charles Wm. Heath

13001 Back Road

Anchorage, Alaska 99515

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

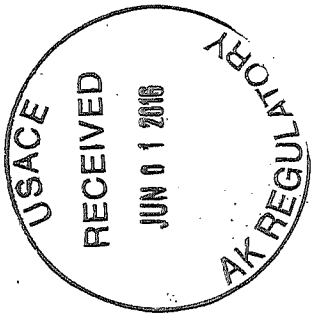
Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

I am highly against the Donlin Gold project. Leaching mercury and buried Cyanide solution, flattening a mountain. Not progress, but destruction, let alone mercury leaching into the Kuskokwim River will cause more people to get cancer and the possibility of cyanide spills, poisoning the water ways where the majority of the people get there food. Birth defects will soon be rise down river from this mine. Barrick Gold Co. does not have a good history.

HSM 2

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Walter Heckman
607 Keck Rd
Haw River, NC
27258



From:	Mike Satre
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Comments on Donlin Gold DEIS
Date:	Tuesday, May 31, 2016 9:41:43 AM
Attachments:	HGCMC_Donlin_Comments.pdf

Please accept the attached comments on behalf of Hecla Greens Creek Mining Company in regard to the DEIS for the Donlin Gold Project.

Thanks,

Mike Satre
Manager of Government and Community Relations
Hecla Greens Creek Mining Co.
PO Box 32199 Juneau, AK 99803
T: 907.523.1410
C: 907.957.2149
E-Mail: msatre@hecla-mining.com
Blockedwww.hecla-mining.com

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Hecla Greens Creek Mining Company
P.O. Box 32199
Juneau, AK 99803-2199

Date: May 31, 2016

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SER 5

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Smith, Neal

From: Craig, Bill
Sent: Friday, April 22, 2016 1:13 PM
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: [EXTERNAL] Donlin Gold EIS

Follow Up Flag: Follow up
Flag Status: Flagged

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, April 22, 2016 12:45 PM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold EIS

-----Original Message-----
From: David A. Hedderly-Smith [mailto:hedderly@msn.com]
Sent: Friday, April 22, 2016 11:25 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold EIS

Sirs -

I support Alternative 2 for this project.

SER 2

The Donlin Gold Mine can continue the promise of the Alaska Native Claims Settlement Act through sharing of revenues with all Alaskan native corporations. It a major project and will provide significant needed employment in Alaska's Kuskokwim region. It should be supported, subject to all environmental laws.

Thank you,

Davie Hedderly-Smith

David A. Hedderly-Smith

7533 Pinebrook Road

Park City, UT 84098

435-649-8326 (h/w)

435-901-1486 (c)

From: Kelley Hegarty
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Sunday, May 29, 2016 4:56:26 PM

Please accept the following as my public comment on the Donlin Gold EIS and the proposed project.

I am a community planning consultant that has worked on many federal EIS projects (EPA and Corps) in Alaska. Having worked closely with both of these agencies and all of the applicable cooperating agencies, I trust them to take their stewardship of Alaska's land, waters, wildlife and peoples very seriously and not to let any project be permitted unless potential significant impacts have been mitigated.

For this reason, and because I have reviewed the Socioeconomic and Cultural elements (my areas of expertise) of the Donlin Gold EIS, I fully support a positive permitting outcome for the Donlin Gold Project as proposed, analyzed and mitigated in the EIS.

I have been working in the Yukon-Kuskokwim region of Alaska for more than 30 years. Many of the people in this region have become dear friends of mine over the years. I believe that the Yup'ik, Cup'ik and Koyukon-Athabaskan cultures in this area are some of the most precious cultural resources in our Nation. But without an economic engine of some kind, these unique cultures are at risk of extinction.

We have seen the beginning of this when heating oil and gas prices escalate, fishing declines, State funding is cut, etc. This is what triggers out-migration and attrition to urban areas where assimilation, or more commonly failure to thrive, occur for the displaced people of our State's rural cultures.

SER 5

I have witnessed firsthand the positive effects of employment at Donlin during the mine's 15-plus year exploration phase especially in the Middle Kuskokwim villages. If and when the mine is permitted to develop, the number of jobs available will increase exponentially, creating a situation where anyone from the region who wants a job will get one. The EIS documents this.

Donlin's commitment to local hire – with a record 90+ percent workforce from the region's villages – has yielded happier, healthier families in nearby villages. My observation as a social scientist working in the region, is that residents that have well-paying jobs nearby choose much more often to remain with family and friends in the villages that they love.

For these reasons, I believe that the proposed Donlin gold mine is a godsend for the YK region. I encourage the Corps to permit it to begin construction and operation as described in the EIS.

Thank you for this opportunity to comment.

Kelley Hegarty Lammers
501 Prospectors Trail
Fairbanks, Alaska 99712

planners@gci.net

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: Iditarod National Trail
Date: Wednesday, March 16, 2016 8:02:57 AM

Bill Craig
Environmental Department Manager
D 1-907-261-6703 C 1-907-441-7207
bill.m.craig@aecom.com

AECOM
700 G Street, Anchorage, Alaska 99501
T 1-907-562-3366 F 1-907-562-1297
www.aecom.com

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, March 14, 2016 12:32 PM
To: Craig, Bill
Subject: FW: Iditarod National Trail

-----Original Message-----
From: Heisler, Jean [mailto:JHeisler@siouxfalls.org]
Sent: Friday, March 11, 2016 8:34 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Iditarod National Trail

PAA 39 Please consider energy other than the proposed natural gas pipeline being considered to power the gold mine proximate to the Iditarod Trail in Alaska. If other energy is not environmentally feasible either, then consider abandoning the gold mine project altogether. Keeping "wildness" in our country is of the utmost importance for all of us- whether we ever see that "wildness" or not. Teddy Roosevelt got it right. Thanks for your time. Jean Heisler, Garretson, SD

From: Isaacs, Jon
To: DonlinEISAR
Cc: Bellion, Tara; Evans, Jessica
Subject: FW: DEIS Comment FW: [EXTERNAL] Donlin Gold
Date: Monday, May 23, 2016 10:00:09 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, May 20, 2016 5:18 PM
To: Isaacs, Jon; Bellion, Tara
Subject: DEIS Comment FW: [EXTERNAL] Donlin Gold

-----Original Message-----
From: Cindi Herman [mailto:cindiherman2007@gmail.com]
Sent: Thursday, May 19, 2016 1:38 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold

May 15, 2016

To whom it may concern;

This is to inform the US Army Corps of Engineers that we are happy to support the Donlin Gold project in full.

We feel that the project & managers of said project have been more forthcoming and more transparent than any other project in recent past.

In all we have witnessed- Donlin Gold has been and will continue to be safe to our environment – I spent 20 plus years in construction all over this state – I worked hard then to protect our environment & I feel that Donlin Gold has been planning the project in a most environmentally safe method with as little negative impact to any area along its corridor – in fact I have never seen a company take such pains in protecting our environment or the people in its path.

Donlin Gold has provided several $$ in providing significant jobs and schooling for the local Yukon Region and are sticklers for Alaska/Local hire. I believe the project will span 30 plus years and besides helping the interiors economy with long-term good paying jobs, I am sure this will also help to boost our States economic decline.

SER 4

Donlin Gold has kept all of the communities including ours on board on a regular basis – we feel their efforts are worthy of our support in this project. We are lifelong Alaskans – we are pro construction we need more projects done in this manner.

IDIT 2

The fact that Donlin Gold will be doing the majority of the construction during the winter - We feel this project would have minimal impact on the pipeline corridor in our area and or the Historic Iditarod Trail. We have heard nothing negative in our community.

We have seen time after time Donlin Gold helping and being supportive , to the communities all along

the corridor not just YK Region.

I believe that Donlin Gold has gone the extra mile & will keep our Lands pristine before, during and after construction.

As Always

Cindi Herman /Mark Torkelson 907-733-2726 / cindiherman2007@gmail.com
<mailto:cindiherman2007@gmail.com>

USACE
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MAY 1 1 2016
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April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15

Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

IDIT 1

LAND 1

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Jason Herman
Signature

Jason Herman
Print Name

Wasilla AK.
City & State of Residence

Comments are in regards to Subsistence impacts

Beverly Hoffman, Calista Shareholder, BNC Shareholder, ONC Tribal Member, Partner in Kuskokwim Wilderness Adventures, Co-Chair KRSMWG, Advisory Seat to Pacific States Marine Advisory Commission

My comments to the EIS on Donlin Gold February 1, 16

The late Governor Jay Hammond would ask three questions when considering supporting or funding large scale projects.

Is it environmentally sound?
Can it pay for itself?
Do the majority of the people want it?

If he couldn't say yes to all three he was inclined to voice opposition.

Using that same approach, just based on the first question I agree.

SUB 1

One of Hammond's last interviews was in the Tundra Drums January 10, 2008. He was questioned on what impact of the Pebble Open Pit mine on subsistence. His comment is true for Donlin Gold.

He said. "I think the presence of a enormous mine with a thousand people cluttering about, is going to change the subsistence life experience and alter it in such a manner as to be something that we will lose forever. I tend to agree.

TRAN 1

The impact this open pit mine will change our lives forever.
Imagine 3 barge trains going up the river everyday in the summer. That is in addition to already existing traffic.

FISH 6

Imagine the massive movement of soil , destruction of habit near salmon spawning streams and the Kuskokwim River. If it goes through all this becomes our reality.

Chapter 4 of the EIS document is one of the most important Chapters to read in this massive report. It is titled Impacts

4.1 Geology

Potential impacts to geology and geomorphology are associated primarily with physical changes to the mine area as a result of exploration, construction, mining, and reclamation activities, and changes to the pipeline corridor as a result of clearing, trenching, backfilling, and reclamation activities. Potential impacts to the geology and geologic resources at the Donlin Gold, LLC (Donlin Gold) mine site include impacts from direct mining activities, impacts from ground movement

during pit development and/or ongoing mining processes, impacts from erosion as a result of mining activities, and impacts from fugitive dust.

4.2 Water Resources

Water resources—surface water and groundwater, and the quality of both—are inextricably linked. Changes in groundwater volumes or levels as a result of the proposed Donlin Gold project's activities would potentially impact surface water flows and water quality; these changes in surface water volumes or flow patterns may impact groundwater levels. Impacts to water resources were cumulatively assessed with two models, including a site-wide water balance model and a numerical groundwater model (BGC Engineering, Inc. 2013).

5

The Open Pit itself is 2.2 miles long and 1 mile wide and is 1800 feet deep, That is just the pit. The project is massive. We are talking 25 square miles of destruction of habitat to get to the gold.

Short term benefits are jobs, 3,000 jobs for 3 years sounds good but is that worth it. 1700 jobs for 21 years. Is worth it. The value of our fresh. what is it. just for Kenego its 72 million
It is the long term impact to the quality of our lives on the Kuskokwim River that concern me. I wish I could be sure about all the safety mechanisms being put in place as stated in this report. I admit most of it is over my head. This is what I do know. We already have a very fragile ecosystem that our fish, our birds and other life depend on. I might not understand your full report but I know our way of life and the resources we depend on will be affected. That was scares me.

TWL 1

While I commend Donlin Gold's efforts and their support of lots of events and activities in our region in addition to the efforts to provide information, I continue to go on record saying I oppose this mine. It's too big, There are just too many negatives. The tailing dam breach of Mount Polley Mine in British Columbia is a reality. I don't want it to be our reality on the Kuskokwim but it's a possibility and Kuskokwim Region People will live with that fear for generations to come.

SVE 3

I submit these comments along with comments from a article in Alaska Dispatch from August 23, 2014. Thank you.

From: Michelle Holland
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Project
Date: Thursday, April 21, 2016 11:40:42 AM

Dear Keith Gordon,

NSB 1 With the ever increasing layoffs in Alaska I feel that this Donlin Gold Project is extremely beneficial to Alaska.

My understanding is that this will create 3,000 construction jobs for 4 years and between 600 and 1,200 jobs for the 27.5 estimated life of the mine, will have a significant and positive impact on the economy of the region and the Alaska.

The desire for good employment opportunities and training for Alaskans is only one of the many reasons my friends and family support this Alternative 2, Donlin Gold Project.

Thank you,
Michelle Holland
Holland Roofing Co., Inc

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Comments on proposed mine
Date: Thursday, February 25, 2016 7:01:27 AM

-----Original Message-----
From: Russell Hood [mailto:rhood72@hotmail.com]
Sent: Thursday, February 18, 2016 8:08 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Comments on proposed mine

To Whom it May Concern :

IDIT 6 I would like to add my voice to the subject of the proposed Donlin Gold Mine. The destruction and permanent defacing of large sections of the Iditarod National Historic Trail to accommodate a several hundred mile gas pipeline is not acceptable to me. While there are reclamation plans for portions of the construction right of way, this is not enough. Too many permanent structures and scars will mar a largely pristine landscape along the proposed pipeline corridor.

VIS 1 In addition, large open pit mines themselves are huge blights upon the land. Please show me an example of a similarly sized open pit mine that has been fully reclaimed in similar sub-arctic terrain. I feel the damage the proposed mine would inflict upon the land would be long lasting, and (at least in a single human lifespan) irreversible. The jobs created are not worth the environmental damage this mine would create.

It is my hope that this mine will never come to fruition. The plan as currently proposed is far too damaging to a historically important trail as well as hundreds of miles of fragile ecosystems.

I appreciate the consideration given to my opinion.

Sincerely,

Russell Hood

January 28, 2016

Testimony by Larry Houle larryhoule@gmail.com

Re: Donlin Gold Project
US Army Corps of Engineers Draft EIS
Supporting Alternative #2

My name is Larry Houle and I live in Anchorage. I am a 47-year resident of Alaska. After attending College in the Lower 48 my wife and I returned to Anchorage to live, work, and raise our family where my wife and I live to this day.

My testimony today is in support of the Donlin Gold Project; **Alternative #2.**

It is my belief that I offer a rather unique perspective on projects such as the Donlin Gold Project; in my early 20's while still a college student I was hired by the Late Senator Ted Stevens to work on Capitol Hill and specifically work on the Alaska Native Claims Settlement Act legislation known as ANCSA.

I am here today to state that the Donlin Gold Project is exactly what was envisioned by ANCSA.

As a young Senate staffer I was present on Capitol Hill when the testimony was given.

I remember Alaska's Leaders both Native and non-Native espousing a VISION for projects like Red Dog Mine, Ambler Access and pipeline projects in addition to future Trans Alaska Pipeline systems.

I also recall that Alaska's Native peoples; through the land settlement act of ANCSA were to be allowed to responsibly develop their resources.

Responsible development and *maintenance of subsistence* values were primary tenants of the ANCSA.

SVE 1

Based on my study and knowledge of the development plan and careful attention to the Donlin Public Outreach campaign; I am confident that Donlin Gold will respect the subsistence and cultural values in the Region.

SER 11

The employment opportunities and economic benefits provided by Donlin Gold will sustain the communities in the Y-K Delta region and fund traditional subsistence activities for decades.

In my review of the project it is clear that Donlin Gold has conducted very extensive studies to develop an environmentally and socially responsible gold mine project.

SVE 1

The overall footprint of the mine has been reduced to allow for safe management of water over the life of the mine and beyond mine reclamation.

MIT 9

The proposal to use the synthetic liner under the tailings impoundment is a prime example of a "best practice" of an environmentally responsible mine project.

WAQ 8

Additionally, their proposed water treatment plant will ensure that water discharged from the site will meet or exceed water quality standards.

In summary I urge the Corps to support Alternative 2 for the Donlin Gold Project.

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: [EXTERNAL] Extend EIS Comment Period
Date: Wednesday, March 30, 2016 10:22:01 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Wednesday, March 30, 2016 6:24 AM
To: Craig, Bill; Newman, Sheila M POA
Subject: FW: [EXTERNAL] Extend EIS Comment Period

-----Original Message-----
From: susanhubbard [mailto:shubbardslq@gmail.com]
Sent: Monday, March 28, 2016 11:05 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Extend EIS Comment Period

NEP 1

On behalf of the 2016 Iditarod mushers, I feel we must extend the EIS comment period to allow them to participate in the EIS process. With Donlin Gold on the Iditarod Trail Committee, they were able to pass a resolution that silences all Iditarod participants from voicing any comments about the race or its sponsors for 45 days after the last team has reached the finish line. The timing of this gag order takes away mushers rights to have their opinions heard before the EIS period is closed. Therefore I feel the comment period must be extended so all Alaskans can participate.

Mark & Kim Huffington
207 Snowy Owl Lane
Fairbanks, Alaska 99712
907.374.3252

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April 29, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

Re: Donlin Gold EIS Comments

Dear US Army Corps of Engineers:

I am providing the following comments in support of the Alaskan Donlin Gold project located in the Yukon Kuskokwim region.

SER 4

- As an economic stimulant to the current economic situation that the State of Alaska is facing, the Donlin Gold project will provide a much needed boost to the State's economic crisis. The project will provide a reliable source of income for years to come, which allow employees to stimulate and provide money into the Alaskan economy.

SER 18

- With the plans that Donlin Gold have provided, the mine and its infrastructure will provide Alaskan businesses to provide services, equipment, supplies, and manpower that will again provide the economic stimulus and money that the State of Alaska and the Yukon Kuskokwim region needs.

- The mine project will provide financial stability to the state and region for decades.

- The project will provide approximately 3,000 jobs during its construction and between 600 and 1,200 permanent jobs at the mine. Not only will direct jobs will be added to the Alaska economy, indirect jobs and business opportunities will be added to the state and region. Alaska needs these jobs with the economic downturn that is being felt with the collapse of the Alaskan oil industry.

- Through the Alaska Native Claims Settlement Act 7(i) and 7(j) revenue sharing, the Donlin Gold project will provide dividends to all Alaska Native shareholders.

- As with large mine projects in Alaska, Donlin Gold is committed to Alaska hires with priority given to TKC and Calista shareholders that are qualified to work in the mining industry. Donlin's local hire record of at least 90% demonstrates commitment to hiring residents of the Yukon Kuskokwim region.

- Donlin Gold is committed to being an environmentally responsible mine. This is particularly the case with the tailings storage facility being fully lined and ultimately to be a dry-stack facility.

- The project is designed to reduce the overall footprint of the mine and allow for safe management of water over the life and post closure of the mine.

- The project's mining activities will not disturb the region's residents/ subsistence way of life and practices as determined by Donlin Gold's surveys of the Kuskokwim River. This is further evident with the proposed buried natural gas pipeline as the primary source of fuel for the mine's power generation.

- Donlin Gold is further committed to the environment with environmental studies dating back to the mid-1990s.

Email: huffingtonmk@aol.com

Mark & Kim Huffington
207 Snowy Owl Lane
Fairbanks, Alaska 99712
907.374.3252

- The mine's air emissions will be controlled with emission control systems for the various equipment and processes. The mine will also have the necessary State of Alaska permit(s) in hand to construct and operate their equipment to comply with strict standards of the Clean Air Act.

- All water will be managed in accordance with the State of Alaska discharge permits to comply with the Clean Water Act.

- The Donlin Gold project will also manage wetlands in accordance with the requirements set forth in any 404 Army Corps of Engineers wetlands permits.

In summary, the Donlin Gold project is a project that Alaska needs and should move forward for the permitting process. I strongly support this project and look forward to all the benefits that the mine will provide to Alaskan residents for decades to come.

Sincerely,

Mark Huffington
Alaskan Resident

Email: huffingtonmk@aol.com

From: Bellion, Tara
To: Evans, Jessica
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Tuesday, March 08, 2016 9:55:19 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Tuesday, March 08, 2016 8:30 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment

-----Original Message-----
From: Richard Hughes [mailto:rahughes@gci.net]
Sent: Thursday, March 03, 2016 2:47 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Dear Sir/Madam:

This is go on record as supporting the responsible development of the Donlin Gold mine.

SER 4 This project is a significant economic opportunity in all economic times in Alaska, accentuated by a serious current downturn in economic conditions in Alaska. Good paying job opportunities will be created in a region where jobs are very limited. ANCSA 7(i) provisions will provide dividends to all Alaska shareholders. Good engineering of the facility to minimize impact through innovative applications/developments will minimize negative impacts to the extent possible. And Donlin Gold is committed to transparency in their operation.

SER 18 The economic opportunity created by this project is very significant. Annual payroll is forecast to be in the order of $100 million annually. Infrastructure plans will benefit villages in the region and include power generation, water treatment, access roads, housing, river ports, a gas pipeline to the area, an airstrip, local business opportunities, etc. This project will grow Alaska's economy. It will be the biggest economic development project in the YK region and provide economic stability for the area. More than $480 million has been spent during exploration of the project.

SER 5
SER 13 The project will create employment opportunities for the region. The Donlin Gold project will create 3,000 jobs during construction and between 600 and 1,200 during operations. Business opportunities will be created in providing logistics, transportation, training, education, health care, and so forth. New high paying jobs will be created and provide and allow residents to remain in the YK region to preserve their subsistence way of life. Skills obtained at Donlin will prepare the workforce for future occupations in other similar ventures.

ANCSA 7(i) revenue sharing will assure that all Alaska Native shareholders benefit from the venture. Donlin Gold is committed to Alaska hire with priority to TKC and Calista shareholders and residents of the YK region. Local hire history by the project indicates over 90% are locals.

Good environmental monitoring and engineering will assure a responsibly developed and operated project. Environmental studies have been in progress since 1990. Barge traffic reduction has been accomplished through construction of a 14-inch gas pipeline for power generation. A synthetic liner will be used under the tailings storage facility. The company has studied ways of avoiding disturbances to fishing activities on the Kuskokwim River. The project has been designed to reduce the overall footprint of the mine and allow for safe management of water over the mine life and post closure. Engineered rock will be used to build the tailings storage facility. A discharge water treatment facility will assure that effluent meets water quality standards.

Transparency will be a condition of the operations. Informational materials will be translated to Yupik upon request to inform the residents about the proposed mine. Donlin Gold will host village meetings throughout the YK region with updated information on the project.

Yours truly,

Richard A. Hughes, PE

H2T Mine Engineering Services, LLP

318 Juneau Ave.

Fairbanks, AK 99701-3768

(907) 347-1521, Fax: 451-6537

Blockedhttp://www.h2tmes.com

NSB 1

My NAME is Leslie Hunter Sr, Born in Bethel on March 16th 1942, Lived in Marshall on the Yukon River and Am a Shareholder of both Masergulic & Calista Corps.

USACE RECEIVED APR 19 2016 REGULATORY

I AM Also A recently elected (2015) board Member of Calista. I'd like to THANK both Donlon Gold & Calista for the years of work they have done To get the proper permitting to open up the Mine.

I believe The opening up of the Donlon Gold Mine will help The Calista region & Wade Hampton district that is PART of the Calista Region & ~~is~~ ~~The~~ As you probably know, is the ~~#~~ lowest INCOME Area of the STATE of Alaska. Donlon Gold will NOT only help ~~Our~~ Our Shareholders, ~~but~~ The whole STATE Too. with the recent Conditions of our STATE CUTTING The budgets of Everybody & Everything, this will help YOU & ME AND

- Donlin Gold will be the first gold mine in Alaska to use an industry recommended synthetic liner in its tailings dam.

- Donlin Gold has conducted fishing activity and river use surveys on the Kuskokwim River, so mining operations do not disturb residents' subsistence way of life and practices.

Transparent Operations

- Donlin Gold provides informational materials translated in Yup'ik, upon request, to inform residents about the proposed gold mine.

- Donlin Gold hosts village meetings throughout the YK region with updated information on the project.

Development of the Donlin Gold mine will serve as an economic stimulant, enriching the lives of YK region residents and strengthening the sustainability of villages. The Donlin Gold project offers the opportunity to reverse the downward economic trend the YK region faces. Without development of the project, the YK region could experience negative social and economic impacts.

Donlin Gold is commited to:

Developing a safe and environmentally responsible project.

•

Providing jobs for families in the Yukon Kuskokwim region and the state.

•

Transparent communications about the project.

•

Respecting subsistence and cultural values.

•

Creating business opportunities that benefit the Alaska economy.

Your comments are important; make sure you are heard.

Comments can be submitted at a meeting, through the website, by fax or by mail at:

Meeting: **DonlinGoldEIS.com/GetInvolved.aspx**

Website: **DonlinGoldEIS.com/Comment.aspx**

Fax: 907.753.5567

Mail: U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Meetings are scheduled as follows:

St. Mary's
March 1, 2016

Emmonak
March 2, 2016

Toksook Bay
March 15, 2016

Hooper Bay
March 16, 2016

Tyonek
March 25, 2016

Holy Cross
March 30, 2016

Lower Kalskag
March 31, 2016

An additional meeting will be scheduled in Chuathbaluk.
Visit www.DonlinGoldEIS.com/GetInvolved.aspx to verify dates, locations and times.

And The The whole STATE
Get BACK ON TRACK.
Please CONSIDER these REASOIN
+ All The other letters of reasons
To get PERMITTING done So we CAN
help the state get back to NORMAL.
THANKS for your CONCIDERATION ON
This MATTER.

Leslie R. Hunter Sr.
Leslie R. Hunter

YOUR VOICE MATTERS.

Now more than ever your voice is a crucial factor in determining the future of the Donlin Gold mining project and the future of the Yukon Kuskokwim region. Speak with the U.S. Army Corps of Engineers during the public comment period for the Donlin Gold project as they gather input from Alaskans during this critical and exciting time.

Rights and Goals of TKC and Calista

- The land and resources belong to the shareholders of TKC and Calista. It is TKC's and Calista's right and duty to support responsible projects that benefit the region.

- Calista selected the mineral rights at Donlin Gold, and TKC selected the surface estate during the Alaska Natives Claims Settlement Act (ANCSA), so their shareholders would benefit from the development of the resources. This economic opportunity for shareholders and descendants is precisely the purpose behind Congress' grant of entitlement of these lands to Calista and TKC.

- As ANCSA corporations, Calista and TKC have two primary goals: generate profit for the corporation and its shareholders and provide other socio-economic opportunities and benefits to shareholders and their descendants. The Donlin Gold project has potential to assist the corporations in meeting these goals.

Significant Job Opportunities

- While Alaska is enduring an economic downturn and jobs are being cut, Donlin Gold offers up to 3,000 jobs during construction and between 600 and 1,200 during operation.

- New, higher-paying jobs will allow for more residents to remain in the Yukon Kuskokwim (YK) region and preserve the subsistence way of life.

- Donlin Gold will support organizations that offer job-skills and training for a prepared workforce.

- The job-skills and training received will prepare the workforce for future occupations after the gold mine's operation.

- Donlin Gold relies on regional businesses to support the project, bringing in more business and profits to Alaska's economy.

Benefits to the Region and Alaska Natives

- Through the Alaska Native Claims Settlement Act 7(i) and 7(j) revenue sharing, the Donlin Gold project will provide dividends to all Alaska Native shareholders.

- Donlin Gold is committed to Alaska hire, with priority given to qualified TKC and Calista shareholders and their family members, in addition to residents from the YK region.

- With a local hire record that has exceeded 90 percent at the Donlin Gold camp, the project is committed to hiring residents of the YK region.

Environmentally Responsible Development

- Environmental studies have been part of the project since exploration began in the mid-1990s to help fulfill Donlin Gold's commitment to responsible development.

- To reduce the amount of proposed barge traffic on the Kuskokwim River, a 14-inch, buried natural gas pipeline has been recommended as the primary source of fuel for the generation of on-site power.

(continued on next page)

LESLIE R. HUNTER, SR.
4331 VANCE DRIVE, APT. B-6
ANCHORAGE, AK 99508

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

99506$0898 B900

US Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

99506$0898 B900

An Economic Stimulant

SER 4

- With an expected payroll of $100 million a year, the Donlin Gold project would be a reliable source of income source, allowing employees to put more money back into Alaska's economy.

SER 18

- Infrastructure plans for a power generation plant, water treatment plant, access roads, housing, two ports, a natural gas pipeline and an airstrip, will allow for local businesses to supply services, equipment and materials.

SER 12

- The Donlin Gold Project will provide opportunities to grow Alaska's economy outside of mining, by providing secondary and tertiary jobs that will further diversify the region's economy.

- The Donlin Gold project would be the biggest economic development project in the YK region, providing financial stability, business growth and a sustained way of life.

- The Donlin Gold project offers the opportunity to minimize the effects of the anticipated economic downturn.

- More than $480 million has been spent during exploration, most in the last 10 years.

Significant Job Opportunities

- While Alaska is enduring an economic downturn and jobs are being cut, Donlin Gold could offer up to 3,000 jobs during construction and between 600 and 1,200 during operations. This represents a significant positive impact on the economy of the region and state.

SER 12

- Through the Donlin Gold project, many indirect business opportunities are anticipated, such as logistics, transportation, training, education and health care.

- New, high-paying jobs will allow for more residents to remain in the YK region and preserve the subsistence way of life.

SER 13

- Donlin Gold will support organizations that offer job skills and training for a prepared workforce.

- The job skills and training received will prepare the workforce for future occupations after the gold mine's operation.

- Donlin Gold relies on regional businesses to support the project, bringing in more business and profits to Alaska's economy.

Benefits to the Region and Alaska Natives

SER 2

- Through the Alaska Native Claims Settlement Act 7(i) and 7(j) revenue sharing, the Donlin Gold project will provide dividends to all Alaska Native shareholders.

- Donlin Gold is committed to Alaska hire, with priority given to qualified TKC and Calista shareholders and their family members, in addition to residents from the YK region.

- With a local hire record that has exceeded 90 percent at the Donlin Gold camp, the project is committed to hiring residents of the YK region.

Environmentally Responsible Development

- Environmental studies have been part of the project since exploration began in the mid-1990s to help fulfill Donlin Gold's commitment to responsible development.

- To reduce the amount of proposed barge traffic on the Kuskokwim River, a 14-inch buried natural gas pipeline has been recommended as the primary source of fuel for the generation of on-site power.

- Donlin Gold will be the first large mine in Alaska to use an industry recommended synthetic liner in its tailings storage facility.

- Donlin Gold has conducted fishing activity and river use surveys on the Kuskokwim River, so mining operations do not disturb residents' subsistence way of life and practices.

- The project was designed to reduce the overall footprint of the mine and allow for safe management of water over the mine life and post closure.

- The tailings storage facility will be constructed of engineered rock fill and use a downstream construction method that is the most stable of all tailings storage facility types, designed for water storage and to withstand earthquakes.

- Donlin Gold will employ state-of-the-art mercury emissions controls to ensure the mercury emissions are well below air quality standards.

- Donlin Gold will construct an active water treatment plant to ensure water that is discharged from the site is treated to meet water quality standards.

Transparent Operations

- Donlin Gold provides informational materials translated in Yup'ik upon request, to inform residents about the proposed gold mine.

- Donlin Gold hosts village meetings throughout the YK region with updated information on the project.

Your comments are important; make sure you are heard.

We Need This Mine

Now more than ever, your voice is a crucial factor in determining the future of the Donlin Gold mining project and the future of the Yukon Kuskokwim region. Speak with the U.S. Army Corps of Engineers during the public comment period for the Donlin Gold project as they gather input from Alaskans during this critical and exciting time.

The Donlin Gold mine would provide significant benefits and opportunities to our state while upholding our commitment to responsible development.

Fred Kuppricks

456-4244

FBKS

Comments can be submitted at a meeting, through the website, by fax or by mail at:

Meeting: **DonlinGoldEIS.com/GetInvolved.aspx**

Website: **DonlinGoldEIS.com/Comment.aspx**

Fax: 907.753.5567

Mail: U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Meetings are scheduled as follows:

Aniak
January 20, 2016

Crooked Creek
January 21, 2016

Anchorage
January 28, 2016

Bethel
February 1, 2016

Akiak
February 2, 2016

Nunapitchuk
February 4, 2016

Quinhagak
February 16, 2016

Kipnuk
February 17, 2016

McGrath
February 26, 2016

St. Mary's
March 1, 2016

Emmonak
March 2, 2016

Toksook Bay
March 15, 2016

Hooper Bay
March 16, 2016

Tyonek
March 25, 2016

Holy Cross
March 30, 2016

Lower Kalskag
March 31, 2016

Donlin Gold is committed to:

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•

Providing jobs for families in the Yukon Kuskokwim region and the state.

•

Transparent communication about the project.

•

Respecting subsistence and cultural values.

•

Creating business opportunities that benefit the Alaska economy.

YOUR VOICE MATTERS.

Smith, Neal

From: Craig, Bill
Sent: Monday, April 18, 2016 2:20 PM
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: [EXTERNAL] Donlin Gold DEIS comment submitted
Attachments: IHTA Donlin DEIS Resolution 4.12.2016 Final Signed.pdf

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, April 18, 2016 1:12 PM
To: Craig, Bill
Cc: Newman, Sheila M POA
Subject: FW: [EXTERNAL] Donlin Gold DEIS comment submitted

Bill, FYI.

Sheila, last item is another request for an extension.

-----Original Message-----
From: Judy Bittner [mailto:judy.bittner@gmail.com]
Sent: Sunday, April 17, 2016 2:13 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold DEIS comment submitted

The Iditarod Historic Trail Alliance, a non-profit organization, submits the attached comments on the Donlin Gold DEIS.

Submitted on April 17, 2016

IDITAROD HISTORIC TRAIL ALLIANCE
P.O. Box 2323
Seward, AK 99664

RESOLUTION 16-01

Resolution passed by the Iditarod Historic Trail Alliance commenting on the Corps of Engineers Donlin Gold Project DEIS and the impacts to the Iditarod National Historic Trail

WHEREAS, the Iditarod National Historic Trail (INHT) is a unique historic and recreational 2400-mile trail system Congressionally designated a National Historic Trail under the National Trails System Act in 1978 as a scenic, recreational and historic transportation route through Alaska, and

WHEREAS, the National Trails System Act Section 7 (c) states other uses of National Trails are not to create substantial interference to the nature and purpose of the designated trail, and

WHEREAS, the INHT is administered by the Bureau of Land Management and is a part of the National Landscape Conservation System and guided by the *INHT Comprehensive Management Plan*, and

WHEREAS, the Iditarod Historic Trail Alliance (Alliance) is a non-profit organization and a partner to INHT land managers as set out in the National Trails System Act, Section 7(h), and is dedicated to the preservation, protection and cooperative management of the significant recreation, historic and cultural resources of the Iditarod National Historic Trail, and

WHEREAS, parts of the Iditarod National Historic Trail date back thousands of years to trade routes used by Alaska Natives, today's Iditarod National Historic Trail began with an Alaska Road Commission scouting expedition in mid-winter 1908 which led to the 1910-11 marking and building of the trail, and

WHEREAS, as stated in 1978 by Congress, the nature and purpose of the INHT is that it "offer(s) a rich and diversity of climate, terrain, scenery, wildlife, recreation, and resources in an environment largely unchanged since the days of the stampeders. It is the isolated, primitive quality of this historical environment that makes the National Historical Iditarod Trail proposal unique. Nowhere in the National Trail System is there such an extensive landscape, so demanding of durability and skill during its winter season travel. On the Iditarod, today's adventurer can duplicate the experience and challenge of yesteryear", and

IDIT 6

WHEREAS, the Alliance believes that the pipeline project permanently and irreversibly changes and destroys the integrity and scenic quality of the INHT in the affected segments through actions which include:

- the clearing of a 150-foot wide swath of trees and vegetation along the 58 miles of where the pipeline is co-located on, intersects with, or located within the trail corridor parallel to the Iditarod National Historic Trail,
- 4 miles co-located, 10.5 miles within 1000 feet and 13 crossings of the INHT,
- above ground inspection pipes and mile markers placed every mile along the pipeline,

IDIT 6

- the pipeline's permanent primitive road paralleling, crossing and/or occupying the Iditarod National Historic Trail from Skwentna to Puntilla Lake,
- the exchange of the historic and scenic Happy River Steps of the Iditarod National Historic Trail with a construction road,
- 12 winter routes and Shoofly Road crossings, 4.2 miles collocated and 6.5 miles proximate to the INHT,
- three gravel pits, two construction camps, six mobile sledge mounted crew camps, and
- two 5,000 foot airstrips within the INHT corridor,

IDIT 6 **WHEREAS,** the recreational patterns and experience of INHT users will be impacted by sound and air pollution, ground disturbance, and traffic of heavy machinery during construction causing the overall feel and interpretation of the area to change as the land changes from undeveloped to industrial use, and

IDIT 7 **WHEREAS**, the Donlin Gold Project will result in permanent man-made features within the viewshed of the trail and within the INHT corridor, permanently changing the landform, introducing structures not currently present, and modifying vegetation patterns, all of which interfere with the historic, cultural and scenic values of this internationally recognized trail, and

IDIT 9 **WHEREAS,** the Donlin Gold Project substantially interferes and adversely changes the character and setting of segments that currently retain excellent integrity of feeling, setting, location and association, and have been evaluated in the *INHT Comprehensive Management Plan* as Class A Scenic Quality Rating Units (SQRUs). These Units include: SL06, SL08, AR01, AR02, AR03, AR04, AR05, and AR06. Descriptive narratives for these segments includes:

- "views become expansive, with long vistas in all directions",
- "extremely remote trail section",
- "expansive and uninterrupted views occur in all directions due to lack of vegetation along the trail",
- "steep, jagged mountain peaks form narrow U-shaped valley",
- "definite enclosure along trail sections creates tight visual corridor,
- "the valley opens and becomes broader, providing expansive views to the west",
- "significant transition area between two physiographic provinces", and
- "expansive Alaska Range falls behind, while Kuskokwim Lowlands approach ahead", and

WHEREAS, the Iditarod Historic Trail Alliance believes the Donlin Gold Project will have major direct and indirect impacts on the INHT and meets the impact criteria of High Intensity (Magnitude), Permanent in Duration, Extended in Extent, and Unique in the Context of the resource as defined in the DEIS Section 3.0.4.1 because of its status as a Congressionally designated National Historic Trail,

IDIT 9 **NOW, THEREFORE BE IT RESOLVED** that the analysis of the impacts to the Iditarod National Historic Trail are not adequately identified or conveyed in a complete and concise manner that allows for an understanding of the scope and scale of the cumulative adverse impacts to the Iditarod National Historic Trail during construction, operations, and reclamation phases in the DEIS, and the Iditarod Historic Trail Alliance urges the Corps of Engineers to:

PAA 32 1. re-examine the DEIS and require an alternative that re-routes the pipeline to avoid impacts to the INHT and preserve its historical, cultural and scenic qualities,

IDIT 12 2. address the scope and scale of the adverse impacts and substantial interference to the nature and purpose of the Congressionally designated INHT under the authorities of the National Trails

IDIT 12

System Act and Section 106 of the National Historic Preservation Act, as well as the National Environmental Protection Act

IDIT 6

3. address the impacts to the recreational experience, setting, and feeling discussed in DEIS Section 3.16 and permanent changes in condition of the INHT caused by all construction and permanent infrastructure features, including the pipeline ROW, the Shoofly roads and construction features,

IDIT 7

4. require a more thorough documentation and disclosure of methodology and data for the conclusions reached within DEIS Section 3.17 on the scenic viewshed ratings and viewshed summary impact conclusions included in Table 3.17-5, and

IDIT 7

5. address impacts on the INHT viewshed in DEIS Section 3.17 caused by all constructed features, including but not limited to camps, airstrips, roads, pipeline markers, and Shoofly roads, and the pipeline ROW, during all three phases: the construction phase, the project operation phase, and the permanent viewshed impacts after the project is complete. These impacts should be addressed for each trail segment and landmark features in DEIS Section 3.17.3.

NEP 1

6. extend the comment period to ensure the public has adequate time to review the very large complex DEIS document, understand its content, and make comment.

Respectfully Submitted,

Erin McFarnon
Secretary

April 12, 2016
Date

Smith, Neal

From: Stan Hooley <shooley@iditarod.com>
Sent: Monday, April 25, 2016 1:56 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] iditarod trail committee position on donlin gold pipeline project
Attachments: iditarod trail committee position on donlin gold.docx

Dear Mr. Gordon,

On behalf of the board of directors of the Iditarod Trail Committee, I am pleased to submit the attached in support of the Donlin Gold pipeline project.

Sincerely,

Stan Hooley
CEO

Stan Hooley • CEO • Iditarod Trail Committee
2100 South Knik-Goose Bay Road • Wasilla, AK 99654
☎ 907.352.2204 ✉ shooley@iditarod.com

Iditarod Trail Committee Thoughts on the Donlin Gold Natural Gas Pipeline Project

Submitted by: Andy Baker, President, Danny Seavey, Vice President, Mike Jonrowe, Secretary, Aaron Burmeister, Paul Gebhardt, John Handeland, Mike Owens, Rick Swenson

In the February 17, 2016 edition of the Alaska Dispatch News, Dan Seavey expressed his views on the Donlin Gold Natural Gas Pipeline Project. In Dan's usual folksy manner, he likely caused many readers to believe the sky is falling. While everyone is certainly entitled to have an opinion, we don't share his. Rather, we, the Iditarod Trail Committee Board of Directors, believe that the proposed pipeline, as defined as Alternative 2 in the draft EIS, can be built and operated without negatively impacting the Iditarod Trail.

IDIT 2

Mr. Seavey's comments contained a number of factual errors that we will address later. Given the differences in some of the numbers he used, we can only surmise that he wrote his piece some time ago using outdated information, and waited to push the send button at a time of year when the Iditarod Trail Sled Dog Race will again begin to be a bigger part of the news cycle.

Very early on in this process, Donlin Gold asked us as an organization for input on their project plans, and to listen to any concerns we might have relative to their plans to build a pipeline. We learned a lot about what the proposed pipeline is, and also, perhaps equally importantly, what it is not.

PAA 3

One outcome of that dialogue was a change from the original plan to route the pipeline through the infamous Dalzell Gorge. We appreciate Donlin Gold relocating

alignment to the Alternative 2 route as identified in the draft EIS as it has the least amount of overlap with the trail. Contrary to what Mr. Seavey claims, only 4 miles of the 315 mile pipeline are co-located with the Iditarod Trail. And only another 10 1/2 miles of the pipeline will even be within three lengths of a football field of the trail. Other than 4 miles of trail, it seems that it will
IDIT 2 be a bit difficult for anyone to see any footprint of the pipeline from the Iditarod Trail right-of-way because of dense vegetation along much of the route. And in treeless areas, visual impacts will be negligible because of snow cover.

We are confident that the pipeline will be designed for minimum impact as it has a relatively narrow footprint and will be buried to reduce visual impact. We believe it is important for readers to know and understand that the proposed pipeline consists of a 14” buried pipe which makes this project much different than the 800 miles of 48” above the ground pipe that runs from Prudhoe Bay to Valdez.

All things considered, this doesn’t seem like much of an impact when you consider that nearly the entire Iditarod National Historic Trail right of way between Seward and Portage, a distance of 60 miles, is co-located with the Alaska Railroad.

Mr. Seavey also made the statement that ‘… will result in complete irreversible destruction…” Surely he knows how quickly alders and willows and other types of vegetation grow. We wonder if he would have much luck navigating, much less even finding, the old Rabbit Creek section of the Iditarod Trail which we haven’t used since 1988. The point? A trail that was commonly used 28 years ago would be difficult to identify today.

Readers might be surprised to learn that the Iditarod Trail Committee undertook a massive effort in the fall of

2014 to make dramatic and necessary improvements to a nearly impassable 30 mile section of the trail between Rohn and the Farewell burn. This project involved more than chainsaws, pick axes, shovels and tree trimmers. It was a project that included us having heavy equipment flown from Anchorage to Farewell in a C-130 and a skilled 5 man crew of operators who worked for nearly a month to eliminate many hazards deemed by many mushers as unsuitable for a dog race. Funding from the State of Alaska, a sizeable in-kind contribution from Cruz Construction, as well as funding from the Iditarod Historic Trail Alliance and the BLM, made it possible. All users are benefitting from this.

Why do we take the time to detail this? Simply to make sure everyone understands that year in and year out, the Iditarod Trail requires real work that makes real changes to what many might otherwise believe to be pristine and untouched wilderness.

We would be remiss to not point out that Donlin Gold has been a terrific supporter of the Iditarod. It is also important that everyone understands that they played an important role in helping make the trail passable in the aftermath of the Turquoise Lake Fire by dedicating a work crew and resources to supplement funds made available to us by the BLM and the Iditarod Historic Trail Alliance. Real work got done which made it possible for the Iditarod to travel that portion of the traditional trail that year, and in all likelihood was also a difference maker to some of the other events, as well as hunters and others who use the trail recreationally.

To summarize, we believe that the proposed pipeline, as defined as Alternative 2 in the draft EIS, can be built and operated without negatively impacting the Iditarod Trail.

We also understand and very much appreciate that the construction season for the pipeline will be scheduled to

limit impacts to sport and subsistence hunting which is an important consideration for many of our friends and supporters in various communities along the trail.

IDIT 1 Lastly, as we are talking about a mining project, a gold mining project at that, we find it interesting and perhaps even a bit nostalgic and ironic, that the Iditarod Trail itself was created to service the gold fields near the town of Iditarod many, many years ago.

From:	Stan Hooley
To:	donlingoldeis, POA
Subject:	[EXTERNAL] IDITAROD TRAIL COMMITTEE RESOLUTION IN SUPPORT OF THE DONLIN GOLD PIPELINE PROJECT
Date:	Monday, May 09, 2016 11:34:55 AM
Attachments:	RESOLUTION SUPPORTING DONLIN GOLD.pdf

Dear Sir/Madam:

Please find attached a resolution from the Iditarod Trail Committee Board of Directors, in support of the Donlin Gold Pipeline Project.

Thank you for the opportunity to comment.

Sincerely,

Stan Hooley
CEO

Stan Hooley • CEO • Iditarod Trail Committee
2100 South Knik-Goose Bay Road • Wasilla, AK 99654
☎ 907.352.2204 ✉ shooley@iditarod.com

Resolution of the Iditarod Trail Committee Board of Directors In Support of the Donlin Gold Pipeline Project

WHEREAS, early in its planning process, Donlin Gold requested the Iditarod Trail Committee to provide input on their proposed pipeline plans, and to listen to any concerns it might have relative to their plans to build a pipeline.

WHEREAS, the Iditarod Trail Committee appreciates Donlin Gold relocating alignment to the Alternative 2 route as identified in the draft EIS as it has the least amount of overlap with the trail.

WHEREAS, only 4 miles of the 315 mile pipeline are co-located with the Iditarod Trail under the Alternative 2 route, and only another 10 1/2 miles of the pipeline will even be within three lengths of a football field of the trail.

IDIT 2

WHEREAS, other than 4 miles of trail, it seems that it will be a bit difficult for anyone to see a footprint of the pipeline from the Iditarod Trail right-of-way because of dense vegetation along much of the route, and in treeless areas, visual impacts will be negligible because of snow cover.

IDIT 2

WHEREAS, the Iditarod Trail Committee board of directors believe that the proposed pipeline, as defined as Alternative 2 in the draft Environmental Impact Statement, can be built and operated without negatively impacting the Iditarod Trail.

WHEREAS, the Iditarod Trail Committee is confident that the pipeline will be designed for minimum impact as it has a relatively narrow footprint and will be buried to reduce visual impact.

SUB 9

WHEREAS, the Iditarod Trail Committee understands and very much appreciates that the construction season for the pipeline will be scheduled to limit impacts to sport and subsistence hunting, which is an important consideration for many of our friends and supporters in various communities along the trail.

NOW THEREFORE BE IT RESOLVED, The Iditarod Trail Committee Board of Directors hereby adopts this Resolution in support of the Donlin Gold Natural Gas Pipeline Project.

Dated: April 29, 2016

Andy Baker

Andy Baker, President
Iditarod Trail Committee

Mike Monrowe, Secretary
Iditarod Trail Committee

From: jimholte
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Friday, April 29, 2016 2:53:28 PM

CLIM 5 I am primarily curious to know if climate change has factored into any of the environmental or social analysis of the proposed mine. Rising temperatures threaten permafrost and villages. What happens to the holding tanks when the permafrost melts? I didn't hear any mention of this angle when I attended the Army Corps' thoughtful presentation in Bethel.

Blockedhttp://www.theguardian.com/environment/2016/apr/29/climate-change-refugees-arctic-obama-administration-warning

Sincerely,
Jane Imholte
Bethel, AK

From:	donlingoldeis, POA
To:	Bellion, Tara
Cc:	Evans, Jessica; Bella, Elizabeth; Isaacs, Jon; Newman, Sheila M POA
Subject:	FW: Donlin Gold Draft EIS comment
Date:	Thursday, August 04, 2016 8:28:54 AM

Tara/Jessica,

Please add these comments.

Jason Brewer
Regulatory Specialist
North Section, Alaska District
U.S. Army Corps of Engineers
jason.d.brewer@usace.army.mil
907-753-2823

-----Original Message-----
From: Indian Child Welfare Organized Village of Kwethluk [mailto:ovkicwa@outlook.com]
Sent: Thursday, July 28, 2016 9:33 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

FISH 5 I'm in opposition of the Donlin Gold project in its entirety due to the fact that the parent organization has a record of mishap after mishap world wide. My main concerns are high traffic of barges which would possibly harm salmon and other species of fish that go up the Kuskokwim River and its tributaries to span and including our main water source if there was to be a breach at the tailing holding area. It would probably decimate all living animals that frequent our main stem Kuskokwim River.

Sent from Mail <Blockedhttp://go.microsoft.com/fwlink/?LinkId=550986> for Windows 10

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MAY 0 2 2016
AK REGULATORY

January 28, 2016

Kurt Parkan, Marketing Director
Donlin Gold
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

RE: Donlin Gold Mine

Dear Kurt:

On behalf of Iron Dog, Inc., Board of Directors, please accept this letter of strong support for the efforts of Donlin Gold to develop the gold mine in the Yukon Kuskokwim region. We recognize the development of the region would bring improvements to the residents of the area and the entire state of Alaska. While offering multiple positive outcomes, reducing negative consequences is of course very important.

The current proposed route outlined in Alternative 2 minimizes impacts to important regional features such as the Historical National Iditarod Trail and results in virtually no effects to the Iditarod Sled Dog Race. This plan considers timing sensitivity needed during construction to further reduce impacts to the dog race, and important hunting for the users of the region. During the summer and fall, dense vegetation practically eliminates visibility of the pipeline, and in the more sparse areas, the snow cover during the winter and early spring accomplishes the same result. Almost all of the pipeline, approximately 98%, is outside of the historic trail and less than 4% is within 1,000 feet.

IDIT 4 We do not endorse Alternative 6A through Dalzell Gorge as it presents very specific dangers and dramatically increases negative impacts to the trail. Going through the gorge is much riskier than the proposed route and puts workers at greater risk of injury. We commend Donlin Gold for its forethought in choosing a safer route for both the building and future maintenance periods.

For the above reasons we support the pipeline route as proposed in the Draft EIS in Alternative 2.

Respectfully,

Marianne Beckham

Marianne Beckham
President

Cc: Kevin Kastner, Iron Dog Executive Director
Iron Dog Board of Directors

Iron Dog, Inc. 7100 Old Seward Highway, Suite C, Anchorage, AK 99518
phone 907.563.4414 fax 907.563.4080 www.irondog.org

From:	Craig, Bill
To:	Bellion, Tara; Evans, Jessica
Subject:	FW: [EXTERNAL] RE: Donlin Gold Draft EIS comment revised 1.1
Date:	Thursday, March 31, 2016 10:19:03 AM
Attachments:	Donlin EIS Comment 1.1.docx

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Thursday, March 31, 2016 10:13 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] RE: Donlin Gold Draft EIS comment revised 1.1

-----Original Message-----
From: Bruce Jaffa [mailto:bruce@jaffaconstruction.com]
Sent: Thursday, March 31, 2016 7:45 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Cc: dbseavey@gmail.com; 'Keeler, Kevin' <kkeeler@blm.gov>
Subject: [EXTERNAL] RE: Donlin Gold Draft EIS comment revised 1.1

From: Bruce Jaffa [mailto:bruce@jaffaconstruction.com]
Sent: Thursday, March 31, 2016 7:40 AM
To: 'POA.donlingoldeis@usace.army.mil' <POA.donlingoldeis@usace.army.mil>
Cc: 'dbseavey@gmail.com' <dbseavey@gmail.com>; 'Keeler, Kevin' <kkeeler@blm.gov>
Subject: RE: Donlin Gold Draft EIS comment revised 1.1

Mr. Gordon,

For the record, Please replace my earlier letter (comment) with this revised letter 1.1 with corrected INHT description and acronym.

Bruce Jaffa

From: Bruce Jaffa [mailto:bruce@jaffaconstruction.com]
Sent: Wednesday, March 30, 2016 10:24 PM
To: POA.donlingoldeis@usace.army.mil <mailto:POA.donlingoldeis@usace.army.mil>
Cc: carole@jaffaconstruction.com <mailto:carole@jaffaconstruction.com> ; jake@jaffaconstruction.com <mailto:jake@jaffaconstruction.com> ; dbseavey@gmail.com <mailto:dbseavey@gmail.com> ; 'Keeler, Kevin' <kkeeler@blm.gov <mailto:kkeeler@blm.gov> >
Subject: Donlin Gold Draft EIS comment

Please See the attached comment letter

Keith Gordon, Project Manager
USACOE, Alaska District
CEPOA-RD-Gordon
POB 6898
JBER, AK 99506-0896
March 30th 2016

Dear Mr. Gordon,

I am a 40 year Alaska resident/ pilot and property owner. My family and I own several parcels of remote property in the Talachulitna /Quartz Creek area near the project path. I have flown and snow machined in around and through Rainy and other Alaska Range Passes many times and am very familiar with the area for the proposed pipe line routes. I have reviewed the Executive summary and EIS documents. I am in support of the concept to deliver natural gas to the Donlin Project.

IDIT 6

As a strong supporter of the project I think it becomes essential to "get it right" and not create unnecessary harm in the process. The EIS offers opportunity to consider all aspects to allow reasonable development. My comments are specific to the route Skwentna to Farewell. I am opposed to disturbing the current route of the Iditarod National Historical Tail (INHT) or of any wild river such as Happy River. I believe that the INHT Trail system, as all National trails envision both winter and summer use. Terrain scars are long healing and very visible at seasonal transition periods. The altered view-scape of the clearing, construction and rehabilitation should be considered from the aspect of the transition season that highlights any anomaly in terrain and vegetation and not just a view during Summer/Winter.

IDIT 6

If there is an example of "pristine", then the bubbly, churning, white water canyon of the Happy River is it. The SOA in 1987 agreed to maintain the INHT (Chapter 3 pg 3.15-12) in a manner that protects historic values. The definition of this value is the responsibility of the SOA ADNR to provide. I think most users of the trail and vicinity believe view scape is a historic value. Further this stretch from Shell lakes to the mountains is one of the few relatively natural, undeveloped landscapes along the INHT. Highways, roadways, powerlines and other signs of man dot the ROW from Seward to Nome. It is correct for the EIS to value this scenic factor.

The project is correct in selecting Alternate 2 as preferred. Clearly Alt. 6A is aligned through difficult and unstable terrain for pipeline construction. From Finger Lake to Farewell the straightest route is not through via Alt 6A. Alternate 2 recognizes a route that is superior.

PAA 32

I do not understand why an Alternate routing for the pipeine and access roads further away from the IDHT corridor through the upper Skwentna and Happy River drainages was not selected for study. It should have been. This single IDHT area will be greatly impacted by excessive criss-crossing and an actual 4.5 mile over lay of the pipeline, construction access. It would appear from maps in the EIS that the river gains more consideration than the Trail.

PAA 32 Moving the development away from the IDHT may require choosing the 2nd best routing in some cases. In this area that should not be difficult to do. Keeping the construction activity, road and any maintenance access, clear of this trail corridor from MP 91 to MP 106 should be possible if the route selected for the service road were moved to the South of Indian Creek or to the North side of the valley, both these areas appear by map and overflight review to have reasonable ground slope and gravel. There appears to be plenty of distance from any slide chutes or swampy ground, really nothing that could not be simply dealt with.

VIS 2 Simulation photos, of possible low impact restoration, after construction, cannot be relied on without undue faith being placed in the management and engineering of unknown conditions that will be discovered during this construction project. Scars from historic activity remain visible to a great extent throughout the region of Cook Inlet and the Rainy Pass traverse.

Summary:

PAA 32 I would have little objection to a pipeline corridor that was kept away from rivers and the INHT except in an occasional tangential crossing. The base of the mountains in the Upper Skwetna area would be suitable for construction and the pipeline could use that area without significant impact. I generally support Alternate 2 with the above described objections and absolutely oppose Alternate 6A routing through Dalzell gorge.

Respectfully,
Bruce Jaffa
PO Box 107
Moose Pass Alaska 99631

JAGO
Contracting & Management, LLC.

406 West Fireweed Lane, Anchorage, AK 99503

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MAY 12 2016
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10-May-2016

Keith Gordon, Project Manager
U.S. Army Corps of Engineer
Alaska District CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK, 99506-0898
POA.donlingoldeis@usace.army.mil

Re: Donlin Gold Public Comments – Support for Alternative 2

Dear Mr. Gordon:

Jago Contracting & Management LLC. is an Alaskan company that provides consulting, logistical, operational, engineering and environmental support to Alaskan natural resource projects. Jago supports the Donlin Gold Proposed Alternative (Alternative #2) as an environmentally and socially responsible project that can stimulate Alaska's economy for decades to come.

As the evaluation of the Donlin Gold Draft EIS proceeds, we respectfully request that USACE consider the following comments in support of the Donlin Gold Proposed Alternative.

SER 4

Economic Benefits for the Yukon Kuskowkim (YK) Delta and the State

Economic times are difficult throughout Alaska as the state deals with a $4 billion deficit and a 75 percent decline in the State's income. Rural Alaska in particular is heavily impacted by the reduction of state dollars. The Donlin Gold project could produce gold for 27.5 years, augmenting the State's revenues while providing well-paying jobs in a region where few other opportunities exist. An estimated 3,000 jobs will be created during the approximate four-year construction phase, and between 600 to 1,200 jobs for the estimated mine life of 27.5 years. These jobs could help sustain communities in the YK Delta region as well as provide employment for many Alaskans around the state. Additionally, the royalties paid to Calista Native Corporation would also be shared with other Alaska Native corporations,

pursuant to the 7(i) and 7(j) provisions of ANCSA, bringing much needed financial support to Native Alaskan communities across the state.

Social Responsibility

PUB 6 Donlin Gold has worked in good faith with the local communities and interest groups for many years. They have made extensive efforts to travel to numerous villages and to present information in both English and the local Native language. In response to local concerns about impacts to fisheries on the Yukon River, Donlin Gold incorporated a natural gas pipeline into their project design to minimize fuel barge traffic on the river. By designing

GAS 1 excess capacity into the gas pipeline, Donlin Gold also created potential for local communities to access natural gas to address their future energy needs in the YK region.

IDIT 2 Working closely with residents and the Iditarod Trail Committee, Donlin Gold further optimized the pipeline design by aligning it to minimize impacts to local subsistence use areas and the Iditarod National Historic Trail.

Environmental Responsibility

NEP 4 Donlin Gold's project description demonstrates an understanding of environmental concerns and compliance with the State's stringent environmental regulations. It features vigorous environmental management principles including a fully lined tailings impoundment.

Thank you for considering our comments in support of the Donlin Gold Project during this public comment period.

Sincerely,

Patrick S. Egger

Jago Contracting & Management LLC.
Patrick S. Egger
Vice President

NSB 1

To whom it may concern, ① 3-14-16

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Hello, I am writing because I want to comment on the Donlin Gold mine, I say we know the risks we take, it may be good for awhile but are we in control of Mother Earth and what She does, I am not saying I am against it, and I am not saying I am for it.

I am not for Pebble, because that one will wave and tare our land up and heart the heart of our way of life and it will not be good for our children or animals.

I am happy about Donlin because, its not outside people trying to take advantage of us and leave when times get ruff, I like this because I lived in Anchorage all my life, I am half upik and Irish and I have been in and out of prison and I keep seeing how many people come here for jobs, and help and in doing so ave taken by temptation and drugs and

alcohol on a whole new level, and once they come in prison they are being forced in gangs and if they don't they get jumped and hurt, then they follow the ones that are bent on not bettering alaska and our people.

I was once one of those people, I am 33 yours old, been in this life and way for most of it and I made the same mistake the ones that move from the village here and meth and herion is now reaching the villages because of these people that come to jail and get caught in following others and get talked into easy money. I am on a different path, I just was sentence to 25 years with 7 suspended for shooting at a police officer, no one was hurt and I am so grateful. But it's because of drugs and wrong people in my life from youth on

up which led to that day (2) that changed my life, I hate drugs, I hate what this system does to not only Natives but all in forcing them to think and be a certain way, I have nine years left and plan to take this time to better myself so maybe I can help you to use me and maybe the officer to share our story to the young ones.

You see thats why I am so happy to see that we are now creating jobs for our people, to keep them where we belong, with mother earth, so please be careful with her and now I say I am for it, I look forward to hearing from you... if not I will continue to pray for you all and read.

I am learning to love our people, mother

earth, family and God but it starts with self, people can we start to fight this war on drugs entering our homes... to protect the youth because their our future.

Be careful, but to be successful we must take risks, I pray this is a good risk for our state.

With Respect.

Jamie J Vinson

I made my own choices, and take responsibility but if I can be easily influenced so will the ones that come to a city and not know what they are getting into.

James John Nichols #448770
Anchorage Correctional Complex-West
1300 East 4th Avenue
Anchorage, AK 99501

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U.S. Army Corps. of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

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MAY 2 3 2016
AK REGULATORY

May 9, 2016

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, Alaska 99506-0898

Attn: CEPOA-RD-Gordon

Dear Mr. Gordon,

I live in Bethel, Alaska in the Yukon-Kuskokwim region where the Donlin Gold Mine project is located. As someone who worked at the project site from 2007-2012, first as a driller, then carpenter and finally maintenance supervisor, I can give a first-hand account of the culture of safety and social responsibility that exists there.

SVE 1

As supervisor it was my responsibility to ensure that every member of the team had safety first of mind. I had routine safety meetings with the crew and if issues arose, they would be addressed promptly. Crewmembers were also responsible for routine safety reports to document any issues. Because the focus on safety at the project is so prevalent, I feel certain the environment in our region will not suffer.

PUB 6

Furthermore, the company has gone to great lengths to listen and respond to the concerns of the people in the region. Donlin has made changes to the project to address concerns and has created work schedules that accommodate the subsistence culture here. The company treated me well when I worked there and because of that I would go back given the opportunity for another job.

SER 5

Your approval of the project's Draft EIS could create more jobs for people in the region. That is hugely important because jobs are scarce and the Y-K Delta is one of the most expensive places in the state to live. We desperately need jobs. The Donlin Gold Project will be good for the people in this region, offering us jobs and a purpose while protecting our environment and our culture. Your approval is much appreciated.

Sincerely,

Bobby Japhet

Bobby Japhet

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: [EXTERNAL] Donlin gas line comment
Date: Wednesday, April 20, 2016 1:07:21 PM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Wednesday, April 20, 2016 10:30 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin gas line comment

-----Original Message-----
From: Ingrid Jensen [mailto:finnbears@yahoo.com]
Sent: Monday, April 18, 2016 10:39 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin gas line comment

Dear Sirs.

IDIT 8 I find it hard to believe that any mine can be allowed to leave such a large foot print anywhere, let alone on and along a trail in Alaska, that has been classified a National Historic Trail. I thought this meant it would be protected from such things. How can a pipeline project of this scale even be considered, to benefit only one mine.
The idea that this construction corridor will reclaim itself even in the next 100 years or more is preposterous.

PAA 39 It is my belief that there are other options to explore, like creating the power in a less invasive location, and sending in power by wire, that can be dismantled after the mining has ended leaving little trace.
I urge you to consider more options, not just which route to pick for the gas line. TOO much is at stake!

NEP 1 Please extend the comment period, so more people can weigh in. Most people I have talked to haven't been informed of the true impact, they only see Donlin throwing money around, and buying endorsements.

Mike Jensen

Willow, Ak

From: Michael Jesperson
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Project, Western Alaska
Date: Monday, May 30, 2016 9:54:03 PM

Mr. Gordon,
I'm writing in support of "Alternative 2" as written in the Environmental Impact Statement for the Donlin Gold LLC Project in Western Alaska.

SER 10 Having lived in Bethel Alaska (one of the communities that will be directly impacted by the mine) I know first had of the poverty, depression, daily struggles and people moving out of the region. All of these problems are directly affected by the lack of economic opportunity. If people had jobs, they would be able to provide for their families, continue living in their "Traditional" lands and maintain their "Subsistence" lifestyle.

GAS 1 The Donilin Gold Project developed via Alternative 2 will not only provide jobs it will reduce the cost of energy in Western Alaska. The proposed developers of the mine want to build a natural gas pipeline with capacity exceeding what they will need. Local communities along the pipeline route will be able to use the extra capacity to bring natural gas to a part of the country that has never had it. With energy flowing down a pipeline rather than being brought in by barge the cost of everything in the region will be reduced. Additionally, not as many fuel barges will travel from Washington to Western Alaska. Reduced barge traffic across the ocean and up the rivers of Western Alaska means a lower probability of a disaster at sea.

IDIT 2 Alternative 2 reduces the amount of development along the "Iditarod National Historic Trail". Construction along this corridor will be sensitive to the annual Iditarod Dog Sled Race and substance hunting.

SER 2 The Donlin Gold Project will provide significant tax revenue for local and State Government. The land and sub surface rights where the Proposed Donlin Mine will be located are owned by Regional and Village "Native Corporations" meaning revenue from the mine will flow to native groups throughout Alaska via ANCSA 7 (i) and 7 (j). This money is in addition to Tax revenue to government entities and wages paid to local workers.

The Donlin Mine if developed via Alternative 2 will provide jobs for hundreds / thousands of people over the 27 year production life of the mine. As I said above the land and sub surface mineral rights to the mine are owned by Alaska Native Companies. These companies are requiring Donlin to hire a high percentage of workers from the local area.

I reiterate I support the Donlin Gold Mine Project and the Alternative #2 developed by you and the Army Corps of Engineers.

Respectfully,
Michael Jesperson
1611 Dimond Drive
Anchorage, AK 99507

907.317.4313

May 31, 2106

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, Alaska 99506-0898

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JUN 0 2 2016
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Attn: CEPOA-RD-Gordon

Dear Mr. Gordon,

I Have in the past been and am again a resident of Bethel, Alaska and my wife and I have raised our family both in this area and in Sweden.
I am born and raised in Sweden and I have great insight about the mining industry in that country and Scandinavia and what I've also learned about the Donlin project.
This knowledge makes me understand what the Donlin Mining project really means.
It is with that perspective I write in support of the Draft EIS currently under review.

The Donlin Mining operation is a tremendous opportunity for the local economy and for the state as a whole.

SVE 1 But It is of the utmost importance that the operation is conducted in a environmentally responsible manner and that all appropriate rules and regulations will be complied with to assure safety to the environment and the people.
I believe its all possible and have seen success through mining technology, especially in the northern part of Sweden where mining has been a huge part of the national economy.
Mining is the second largest source of income for Sweden and has provided prosperity and security to the nation for more than 100 years.
The people there are very grateful for what that industry has provided and there has not been any major issues to the environment.
The companies have taken quality measures to ensure no environmental damage and have proven that mining can be conducted with high quality and safety.

In the YK region, the Nyac Mining District located in southwestern Alaska's Kilbuck Mountains, 63 miles east of Bethel and 330 miles west of Anchorage, has been in operation for more than thirty years with no significant environmental issues. Nyac is, besides other in the industry, a project that residents can look to as a good example for safe operations.

SUB 2 The people in the region rely on subsistence hunting and fishing for their livelihood.
If the Donlin project is conducted in compliance with the rules and regulations required and with modern technology, I do not believe anything will affect subsistence activities.

Finally, if all guarantees are in place for compliance with applicable rules and regulations and that the financing are available for safe corrective action and for safe project termination and reimbursement for damage to affected people in the area, the project should move forward.

Sincerely,

Ronny Johansson

Because of the alarmingly high number of tailings dam failures, the International Commission on Large Dams (ICOLD) convened several studies to investigate tailings dam failures (ICOLD 2001). In the 10 years since the ICOLD 2001 report, the failure rate of tailings dams has remained at roughly one failure every eight months, or about three failures every two years (Figure 2). Over a 10,000-year lifespan (a figure often used for how long these structures will need to maintain their integrity) (Wieland 2001) this implies a significant and disproportionate chance of failure for a tailings dam. One explanation might be the residual effects of outmoded designs and construction practices, but it has been 15 years since the International Commission on Large Dams initiated a major effort to investigate tailings dams and change construction and operational practices, and the rate of tailings dam failures has remained relatively constant.

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: Donlin Gold Draft EIS comment
Date: Wednesday, April 20, 2016 1:07:33 PM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Wednesday, April 20, 2016 10:31 AM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: Allen Joseph [mailto:ajoseph@avcphousing.org]
Sent: Monday, April 18, 2016 2:19 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

I am one of those people having mixed feelings about Donlin Creek.

On one hand, I know the Donlin Creek mine, if developed, could benefit hundreds of local people in the Yukon Kuskokwim Delta and provide them jobs for the life of the mine of 20 years more or less.

On the other hand, a tailings dam is supposed to exist for 10,000 years to keep contaminants in check (source: Wieland 2001, via National Park Service, see below quote).

Other experts say tailings dams must stand in perpetuity (LONG TERM RISKS OF TAILINGS DAM FAILURE, David M Chambers and Bretwood Higman, October, 2011).

MON 13

It's the prospect of a huge tailings dam that will have to be monitored for a millennia that leaves me nervous or anxious for our future generations of people that will depend on the river for their survival. Therefore, if that's a fact we will exchange 20 plus years of economic gain for thousands and thousands of years of constant monitoring and environmental remediation of this monstrous tailings dam.

As the COE most likely knows, since 1960 more than 100 tailings dam failures have been recorded all over the world from different types of mining activities. These dam failures have killed more or less 2,000 people, destroyed more than 2,000 homes, destroyed some villages, and displaced or affected over 3 million people that depended on the waterways or farmlands near rivers for their livelihood and existence. More often than not, the drinking water supply of affected communities or cities become poisonous for a period of time.

DAM 2

If there is ever a tailings accident at Donlin, like in other dam failures, I see the potential for destruction of the Kuskokwim River ecosystem - the fish, salmon and other marine life and birds that depend on the river system - and the loss of the subsistence way of life in the future for thousands of people that depend on the river. Like other people or cultures that experienced tailings dam failures, the effects of such a failure of the tailings dam at Donlin Creek will be long term and the people will suffer for years afterwards. The dam failure might not occur during our generation or lifetime, but it will occur in some

DAM 2

future generation - not just once, but maybe more than once.

This is why I am concerned: The Donlin Creek gold mine is expected to be one of the world's largest open pit mines. Some history of mining accidents show that toxic slurry can travel hundreds of miles downriver of a dam failure as it happened in the Baia Mare gold mining tailings dam failure in Romania in 2000. Five rivers were affected and in some of those rivers the contaminants killed all living things - fish, birds and animals - and destroyed the livelihood of commercial fishers in the three countries of Romania, Hungary and Yugoslavia. In all, 10 nations and 2.5 million people were affected in some way, mainly with poisoned drinking water. The Baia Mare mishap was Europe's 2nd worst environmental disaster, after the Chernobyl nuclear accident in Russia. More than 10 years later, some fish did come back but in fewer species and commercial fishing was still not possible in the worst-hit areas.

MIT 30

The Kuskokwim River is only one river here. If there is a tailings dam built, Barrick Gold and NovaGold as owners of Donlin Gold, must realize they are developing the mine upriver from the majority of villages and populations that rely or depend on the Kuskokwim for subsistence including commercial fisheries, and therefore must construct this dam in a way that is impermeable and be able to withstand a millennia of natural forces (earthquakes, record rainfall or snow melt, flash floods, etc.) and human activity (overtopping when water levels rise to the brim). The dam must not fail for thousands of years in the least or in perpetuity at the most.

Thank you very much for allowing me to comment.

Allen Joseph

Bethel, Alaska

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

NSB 1

Thank you for all your hard work. Hope you make lots of money. Thank you again.

Stephen D. Soshua

PURPLE HEART
FOREVER USA

Stephen D. Soshua - 11570 - P92648
Goose Creek Correctional Center
PO Box 877790
Wasilla, Alaska
99687

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

USACE RECEIVED JUN 01 2016 AK REGULATORY

From:	Kachemak Bay Conservation Society
To:	donlingoldeis, POA
Cc:	Kachemak Bay Conservation Society
Subject:	[EXTERNAL] Donlin Gold Draft EIS Comment (POA-1995-120
Date:	Tuesday, May 24, 2016 9:23:44 AM
Attachments:	KBCS comments on Donlin Mine Project Draft EIS The Final.docx

---

Mr. Gordon,

Please find the attached comments from Kachemak Bay Conservation Society.

Thank you,
Wendy Anderson, Secretary

--
Kachemak Bay Conservation Society
Homer, Alaska
kbayconservation@gmail.com

www.kbayconservation.orghttp://www.kbayconservation.org/

Kachemak Bay Conservation Society
3734 Ben Walters Ln, Homer, AK 99603
(907) 435-7154
kbayconservation@gmail.com

May 24, 2016

US Army Corps of Engineers
Keith Gordon, Project Manager
PO Box 6898
JBER, Alaska, 99506-0898

RE: KBCS comments on Donlin Project Draft Environmental Impact Statement (POA-1995-120)

Dear Mr. Gordon,

We appreciate the opportunity to comment on the Draft Environmental Impact Statement (DEIS) and we thank the U.S. Army Corp of Engineers (Corps) for its hard work. We are writing to express our opposition to any permitting of the Donlin Gold Mine Project. Accordingly, we urge the Corps ultimately to recommend Alternative 1: No Action, of the Environmental Impact Statement (EIS) once it is finalized. We have done our best to review the DEIS as well as comments from concerned agencies and citizens. We concur in comments submitted by Northern Alaska Environmental Center, Earthworks, et.al.[1] We also concur in comments related to hydrology issues as identified in the Northern Alaska Environmental Center Myers analysis of the DEIS. We add our own General comments below.

Need for the Donlin Project

The Donlin Gold stated need for the project is "to enable Calista[2] and TKC[3] to maximize economic benefits for their shareholders, from lands with mineral potential selected and conveyed to them under ANCSA, by producing gold to meet worldwide demand." (DEIS 1.3.2)

The DEIS restates the need for NEPA purposes as providing "economic benefits to Donlin Gold, Calista, and TKC shareholders; produce gold to meet worldwide demand; and provide local economic development." (DEIS 1.3.3)

[1] Comments re: tailings dam design at proposed Donlin Mine submitted jointly on May 30, 2016 by Northern Alaska Environmental Center, Earthworks, Cook Inletkeeper, Friends of Alaska National Wildlife Refuges, Northern Alaska Environmental Center, Alaska Community Action on Toxics, Ground Truth Trekking, The Wilderness Society, Southeast Alaska Conservation Council.
[2] The Calista Corporation
[3] The Kuskokwim Corporation

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NEP 6 The Corp has embellished the Donlin Gold statement of need to include local economic development- which appears nowhere in the Donlin Gold statement. Thus the Corp initially has distorted the statement of need and thus the public interest analysis in favor of the applicants. The DEIS should interpret the need for the project directly from the Donlin Gold statement: to make money for shareholders by providing gold to world markets. This is the need that should be balanced against the need to preserve and protect the Kuskokwim watershed natural and cultural resources.

Public Interest

NEP 5 In formulating its Record of Decision (ROD) on the Donlin Mine application, the Corp must balance the claimed purpose of the mine against the public interest as defined by 33 CFR 320.4(a). The EIS is a critical element in this balancing test. This need is balanced against the need to preserve and protect a unique ecosystem including indigenous cultures and a multitude of plant and fish species unique to Alaska. The hundreds of actual and potential impacts to the mine site and surrounding Kuskokwim watershed outlined in the DEIS should easily push the scales in favor of the public interest in preserving and protecting the Kuskokwim watershed from development of this type. Surely, the economic benefit of Calista and TKC shareholders cannot outweigh the impact from the Donlin Project to fish and wildlife, rivers and streams, plants and the health and welfare of humans. The waste from the mine will remain FOREVER, which is a long, long time. No one can really assess the environmental impacts from this mine 50 years from now. Given the size of the impacts from the mine, the pipeline and the toxic waste products produced, the DEIS should recommend the No Action alternative.

Financial evaluation of Donlin Gold partners

SER 22 As part of the feasibility assessment for the Donlin Project, the DEIS should evaluate the likelihood that Donlin Gold can financially and operationally implement the mine design and required mitigation measures. Nova Gold has initiated numerous projects in the US and Canada but has yet to construct and/or operate these projects successfully. In 2009, NovaGold paid $883,000 in EPA fines for violations of the Clean Water Act at the Rock Creek Mine in Alaska.[4] Rock Creek mine operations were eventually suspended and closed. NovaGold considered selling its interest in the Galore Creek Copper Mine at one point due to financial problems.

Barrick Gold seems to have maintained financial solvency in spite of its record of spills and other operational problems in its subsidiary Barrick Gold mining projects. Barrick

[4] Case 09-cv-00090 in U.S. District Court for District of Alaska.

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paid $16.4 million for environmental impact agreement breaches in Chile (2013),[5] had a tailings pool breach in the Philippines (1990s) and had a major cyanide spill in Argentina (2015)[6]. Other operational problems plagued its mine in New Guinea.

SER 22 It is a fact that spills and environmental disasters occur at mines regardless of the promises made and mitigation measures imposed because companies cannot control all people and all circumstances. The DEIS should consider the past record of Donlin Gold owners and on this basis find for Alternative 1: No Action. Any recommendation for application approval should include adequate mitigation to ensure protection of the Kuskokwim Watershed should Donlin Gold fail to complete the project or abandons the project prior to its planned mine closure.

DEIS modeling

DAM 3 We concur with commenters who state that some of the modeling done to assess impacts of the Donlin Project on water resources are inadequate. The mine site with containment dams and ponds is located in and near streams and rivers critical to salmon habitat that cannot be replaced. The containment facility will hold 568 million tons of highly contaminated mine tailings and chemical waste. (DEIS 2-30) The Corp must consider all worst case scenarios like catastrophic failure of tailing pond dams because these structures must exist forever. Tailing dam breaches do occur and one such incident is too many for the people and ecosystem affected.

WAQ 20 The modeling should include leaking of pit lake liners as well. Evidence that liners containing toxic chemicals will last forever must be presented. We doubt such evidence exists.

DAM 3 The criteria for mitigation measures must be that no spills and no breaches are acceptable during mine operations or after mine closure- not for 50 or 100 or 1000 years. The Corp must address the true gravity of potential impacts in its evaluation of measures required to make the Donlin Project truly safe for the environment and its inhabitants.

CLIM 10 Also, the Corp should model for changes in weather patterns that will result from global warming. Increases in precipitation can lead to overwhelming of containment dams. Reduced precipitation could cause lowered stream flows such that anadromous fish populations and the people who depend on them for food and livelihood would be impacted. These impacts could occur years after the Donlin Project group have taken their money and run.

In general, the DEIS should model worst case scenarios for all aspects of the Donllin Project- mining, transportation, pipeline and closure of the entire project.

[5] Pascua-Lama Mine.
[6] Veladero Mine, Argentina.

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DEIS Mitigation Measures

MIT 5 The DEIS identifies hundreds of mitigation measures needed to prevent or rectify impacts from the Donlin Project. Many of the proposed mitigation measures do not address worst case scenarios. It would be unacceptable to allow Donlin Gold to be unprepared to meet all possible negative impacts. The mitigation measures need to guarantee that no poisoning of the Kuskokwim watershed will occur- ever. Anything less is unacceptable. Monitoring of containment ponds and dams should be monitored monthly rather than quarterly or annually. Leakage of any amount of toxic material for the proposed 90 days could cause significant impacts to streams, fish and wildlife and humans who rely on these waters for food sources.

MIT 5 Mitigation measures must be designed using the strictest criteria- complete avoidance of negative impacts; compensatory measures are not acceptable for this region. There is no compensation possible for poisoning of rivers and streams and destruction of native fish populations, riverbanks, and the way of life of the people who depend on them. Mitigation measures must be effective forever; compensatory mitigation for future negative impacts will not be feasible.

BER 7 The EIS should recommend bonding and financial assurances that adequately cover all potential cleanup and monitoring of the mine site into perpetuity. That likely means a financial Trust that will outlive Donlin Gold, Calista and TKC.

MIT 5 The Donlin Mine rock contains high levels of mercury and other toxic substances. Recommended mitigation measures should guarantee containment of these toxic materials in perpetuity. If such containment is not feasible, and we assert it is not, then the Donlin Project itself must be deemed not feasible.

Impacts to Local Ecosystem and Inhabitants

Donlin Project will involve barging of huge amounts of diesel fuel up the Kuskokwim to the mine site- a 180% increase in traffic. Current barge traffic has already negatively impacted salmon harvests here; the proposed increase could devastate harvests. Potential impacts to the river and to other entities using the river should be evaluated- including worst case scenarios. All mitigation measures addressing testing and evaluation of erosion and impacts to fish spawning areas must be required, not voluntary.

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FSR 2 Diesel spills will occur over the timeframe of mining operations. The impacts of a large diesel spill would be catastrophic to fish populations and people who depend on them. Donlin Gold acknowledges it will not be not equipped to handle a large spill on the Kuskokwim River (DEIS 3.21-155). Why would we allow the unique and critical resources of this area to be endangered so a few people with no personal investment there can make money and walk away? Again, the proposed mitigation measures do not adequately address the definite and potential impacts to this region. The needs of the Kuskokwim ecosystem, including inhabitants, must outweigh the needs of shareholders to make money, so the most conservative spill prevention measures must be imposed.

Donlin Gold proposes to build 315 miles of new pipeline from Cook Inlet to the mine site. The potential impacts from this pipeline - to the wetlands, wildlife, plant life and cultural uses of the Iditarod Trail- are significant. The pipeline will cross 452 streams including 163 which support native fish populations and 42 major river crossings, all of which are Essential Fish Habitat for salmon. (DEIS 3.13-68) Alaska salmon populations, along with the people who depend on them for food and livelihood, are being threatened all over the state from a multitude of human activities. The additional impacts from this proposed dam project are not desired. The value of native fish stocks to the ecosystem, individuals and the state as a whole must not be underestimated or ignored.

MIT 5 The EIS must include modeling of worst case scenarios, from spills to earthquakes to disruption of rivers and streams to increased recreational use of the Iditarod Trail. The requisite mitigation measures must be specified and required for the Donlin Project- regardless of the financial cost of such measures.

In summary, the potential impacts of the Donlin Mine project are so extensive and pervasive that a 7,000 page DEIS cannot explain or account for all possible impacts. The financial investment required to institute the required monitoring and mitigation measures is more than enormous. However, the EIS must include evaluation of all worst case scenarios and mitigation measures because the Donlin Project is so extensive and will remain forever as a potential threat to the Kuskokwim Watershed. We

PAA 1 urge the Corp to incorporate all commenters' suggested improvements to the DEIS and ultimately to recommend the No Action Alternative.

Sincerely,

Kachemak Bay Conservation Society
Homer, Alaska
Jim Stearns, President
Wendy Anderson, Secretary

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Comment Form

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Important topics for comments would include:

- *Comments and questions about the accuracy of information in the Draft EIS.*
- *Comments and questions about the adequacy of methods or assumptions used.*
- *New information to be considered in preparing the Final EIS.*
- *New reasonable alternatives or revisions to current alternatives.*
- *Additional measures to reduce impacts (mitigation).*

Mary Kaiser

NSB 1

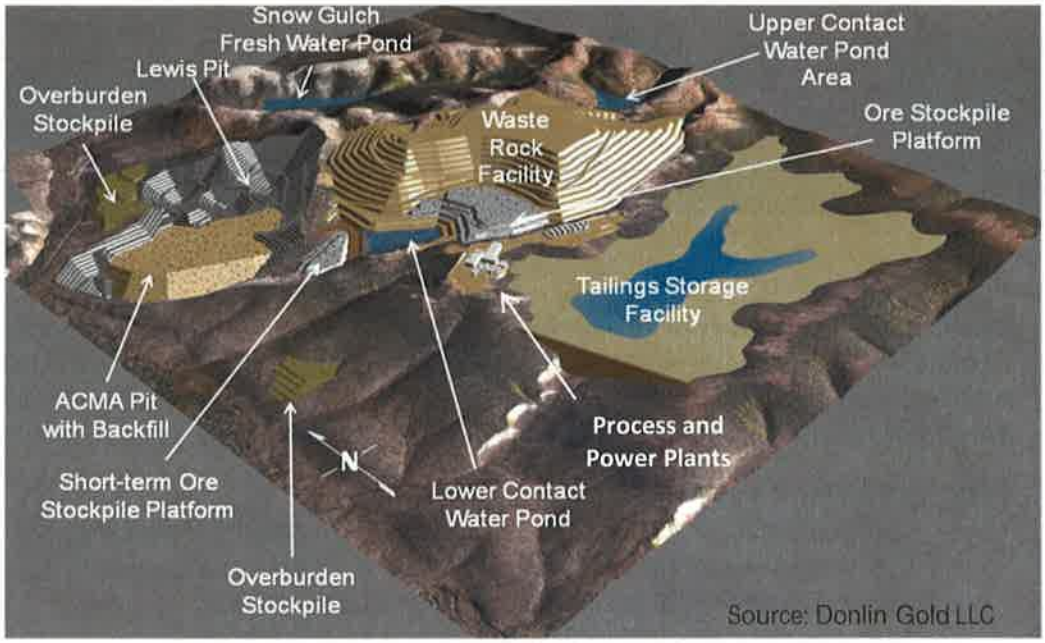
jobs (I want jobs for our village)

I am worried about the enviroment.

Layout of Proposed Mine Site

The image to the right illustrates the eventual layout of a proposed gold mine, ten miles north of the community of Crooked Creek on the Kuskokwim River in southwestern Alaska, for which the US Army Corps of Engineers is preparing an EIS. The project, proposed by Donlin Gold, LLC, includes a natural gas pipeline and transportation and components. You may use this mail-in form to submit comments.

For more information, please visit:
www.DonlinGoldEIS.com



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(To mail, fold below blue line. Photo: Dave Cannon)

Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, PO Box 6898
Joint Base Elmendorf Richardson, AK
99506-0898

from:

Donlin Gold Project EIS
US Army Corps of Engineers

Please place first-class postage here.

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold- Opinion
Date: Thursday, February 25, 2016 6:57:14 AM

-----Original Message-----
From: Joanne Kameroff [mailto:kameroff13@gmail.com]
Sent: Wednesday, February 17, 2016 10:16 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold- Opinion

Joanne Kameroff

P.O. Box 2211

Bethel, Ak 99559

907-545-3988

kameroff13@gmail.com <mailto:kameroff13@gmail.com>

February 17, 2016

U.S. Army Corps of Engineers

Blockedwww.poa.usace.army.mil <Blockedhttp://www.poa.usace.army.mil/>

Keith Gordon, Project Manager

Keith.Q.Gordon@usace.army.mil <mailto:Keith.Q.Gordon@usace.army.mil>

907-753-5710

To Whom It May Concern,

Hello, my name is Joanne Kameroff I'm from Bethel, Alaska but grew up in many different communities throughout the Kuskokwim River including Stony River, and Kalskag. When you hear the name Donlin Gold, what do you think of? Do you think of money, jobs, economic boost? Well, when I hear the name Donlin Gold, I think of pollution, and our fish and wildlife dying off. I think of our subsistence being lost, our culture of living off the land gone. This is why I am against the Donlin Gold Mine.

Barrick Gold is a Canadian company that has been mining since 1983, and they have used cyanide solution to filter out fine gold particles. First of all this method is unsafe. On September 12, 2015 in Argentina, Barrick Gold leaked over a billion liters of Cyanide Solution caused by the failure of the vent valve in the pipeline in Veladero Mine. This shows that Barrick Gold does not know how to safely use Cyanide, and they don't know how to contain it.

FSR 1

Pipeline spills and errors of the pipeline are very high. If these spills happen, our land won't be a healthy habitat for our Alaskan Wildlife. It can be potentially fatal for us, and for animals. The oil and gas can seep through the ground into underground reservoirs, contaminating everything on the way, and it can eventually lead to the waters that our fish spawn and reproduce in. Growing up in Stony River, and Kalskag made me realize on how big of an impact it would have to the surrounding villages,

FSR 1

and even the Y-K Delta.

The cost of Donlin Gold is outrageous, $6.7 bilion to build, and another billion just for the pipeline. I am wondering how are they going to pay off all these things like a food source for the workers, heat, electricity, and a proper living space, and to think about the possible dangerous situations Alaska's weather can do to the process of the mine, pipelines, tailings, and heavy equipment can get damaged. According to the Economist Newspaper the price of gold has been descending and ascending since 2008, gold prices reached a very high peaked in 2011, but has been descending ever since.

BER 3

The total span of this mine production is about 25-27 years of getting the gold. Gold prices are unsteady, how are they going to pay off everything? Also to contain the toxic waste is going to be a difficult task. Eventually Barrick Gold is not going to care anymore and this will bring our economy down both physically with the land and water, and mentally with the Alaskan residents mind.

SUB 15

What would Barrick Gold do? Would they care if our land and water got polluted? My opinion is, they wouldn't care. If they can eat the salmon and say everything is fine at the end of this process then by all means I apologize, but by the time this is over our salmon won't be eatable so don't kill our salmon for a quick high of wealth that would last only a few years. Remember S.O.S. Save Our Salmon.

Sincerely,

Joanne Kameroff

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

5-24-16

NSB 1

Donlin Gold.
Have done a lot
for people, jobs
& giving help to a
lot. I am very
proude of your
all. The help &
donations. also a
lot of jobs. Keep
up the good job.
Good Ideas

Marie Kamerapp
Box 183. Aniak, Ak. 99557

ANIAK, AK
99557-9998
MAY 25 2016
USPS

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
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Section 21

? Restriction on subsistance ? Communities/ which ones/ All in the Kusko ⓚ

?? * subsistance resources, NOISE, Moose/ fish

? Will all the barge traffic effect the subsistance activities

* Along the K ⓚ near Aniak there is a tractor sunk in the river? Alot of debris in the river.

* double hull should be in all barges.

* All barge traffice should stop @ Birch Tree xing

* ? What River ? impacts on subsistance lifestyles

SER 13

Training Facilities- Will there be or will be looking into a training facilities to train the local workers in the middle Kuskokwim area, this will greatly provide jobs in the ~~well trained~~ region.

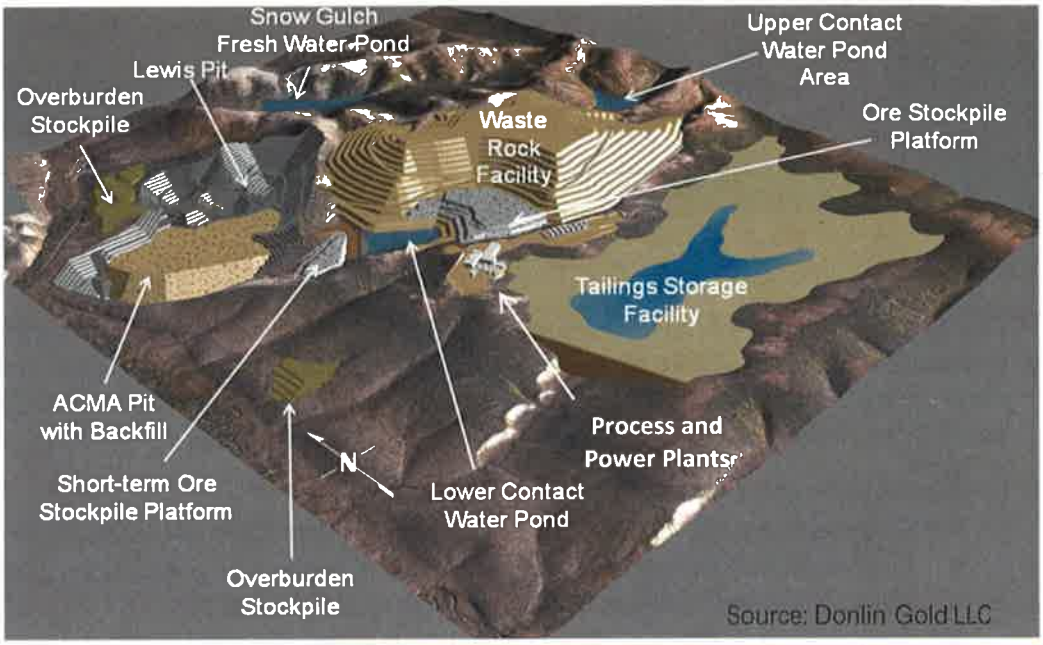
#10

Nicholas Kamoroff
676-0504
PO Box 305
Aniak AK 99557

Layout of Proposed Mine Site

The image to the right illustrates the eventual layout of a proposed gold mine, ten miles north of the community of Crooked Creek on the Kuskokwim River in southwestern Alaska, for which the US Army Corps of Engineers is preparing an EIS. The project, proposed by Donlin Gold, LLC, includes a natural gas pipeline and transportation and components. You may use this mail-in form to submit comments.

For more information, please visit:
www.DonlinGoldEIS.com



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(To mail, fold below blue line. Photo: Dave Cannon)

Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, PO Box 6898
Joint Base Elmendorf Richardson, AK
99506-0898

from:

Donlin Gold Project EIS
US Army Corps of Engineers

Please place first-class postage here.

Kameroff, Wassily

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AK REGULATORY

May 31, 201

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, Alaska 99506-0898

Attn: CEPOA-RD-Gordon

Dear Mr. Gordon,

I began working on the Donlin Gold Mine project starting in 1996 and worked there through 2014 when the permitting process began. I worked in various positions and I have witnessed first-hand the opportunities the project has brought to the people of the Yukon-Kuskokwim Region in Alaska. I am pleased to write in support of the Donlin Gold Project Draft EIS that is currently under review.

PHL 3

My first position was with the Calista Corporation as its Shareholder Hire Coordinator. My job was two-fold and involved teaching the residents job skills and how to take verbal instructions but also involved teaching the company contractors about the various cultures in each village to help with communication. Verbal communication did not often translate well to villagers who were taught skills by working with their hands. That job was double duty and lasted until around 2006 when I began to work with Donlin Gold as its Community Liaison and Camp Director.

The project was the biggest thing that had ever happened in the region for jobs, and it gave the residents a reason to make better choices about alcohol and drugs. One of my duties was to travel around the villages and conduct urine analysis (UA) tests. The first year we had around a 95% failure rate. The second year the UA failure rate was around 50% and the third year we had less than a 10% failure rate.

The project gave the people who wanted to work the chance to get cleaned up and get their act together. It was difficult at first for people to make the adjustment and the first year, we experienced a 386% turnover rate. For me it was predictable because residents were used to short-term jobs that allowed them to collect their paychecks and go on a binge. The difference with Donlin was that then they wanted to come back and I was the one who had to let them know it didn't work that way and eventually the alcohol abuse leveled off.

By the fourth year, the turnover rate was dwindling down and the last five or six years we had virtually no turnover. Our random monthly UA tests were no longer a problem for the people who came back to work from the villages. I now work for the Kuskokwim Corporation as their Community Liaison but would happily return to Donlin for work when and if the jobs become available.

Sincerely,

Wassily Kameroff

From:	James Kari
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Re: Donlin Gold Draft EIS comment
Date:	Wednesday, May 18, 2016 9:50:59 AM
Attachments:	donlin-eisJK4.rtf

Dear Sirs:

Please replace the file I sent you yesterday with this one.: donlin-eis-JK4.rtf. I made some important and I think constructive additions to it this morning.
Please confirm this change.
James Kari

On Tue, May 17, 2016 at 8:33 PM, James Kari <jmkari@alaska.edu> wrote:

> Please see attached comments
>
> James Kari
> Professor Emeritus of Linguistics
> Alaska Native Language Center
> University of Alaska Fairbanks

May 18, 2016
Comments on Donlin Gold Project, Draft EIS, November 2015

James Kari, Professor Emeritus
Alaska Native Language Center
University of Alaska Fairbanks

US Army Corps of Engineers. 2015. *Donlin Gold Project, Draft Environmental Impact Statement.* Anchorage: CEPOA-RD. JBER, AK, November. www.donlingoldeis.com/EISDocuments.aspx

In February of 2016, I downloaded all of the files for the Donlin Gold Project that have been submitted to the US Army Corps of Engineers. I am an expert on Alaska social sciences and especially Athabascan anthropology and linguistics. I maintain primary language data on three Western Alaska Athabascan languages that are in the area of the proposed Donlin Gold Mine and its proposed pipeline route (Dena'ina, Upper Kuskokwim, and Deg Hit'an).

CUL 2

I have spot-checked various sections of the EIS for which we have expertise. In particular, we have paid attention to these files:

filename: 8 Environmental Analysis Social.pdf (668 pages)
filename: 12 Chapter 6 Consultation.pdf
filename: 13 List of Preparers.pdf
filename: 15 Chapter 9 References.pdf
filename: ScopingPoster3PipelineRoute.pdf

Throughout these chapters there is inadequate information on the ethnographic context of the Athabascan groups that have occupied the areas of the Donlin Gold Pipeline route. For example, the most comprehensive and well known source for the Dena'ina Cook Inlet Basin, Kari and Fall 2003 is not cited. Also the 2004 National Park Service report on the Upper Kuskokwim by Raymond Collins is not cited. I could elaborate upon what was *not* cited, but the ethnographic context in the Donlin EIS documents would not pass the standards expected in a graduate student's comp exam question for a literature survey on the ethnographic sources for the area of the proposed mine and its pipeline route.

LAND 18

The subsistence discussions make general statements such as on p.3.15-30:

> Existing land use within southwest Alaska is largely limited to residential and commercial facilities in the few permanent villages in this region, temporary encampments along the Kuskokwim River, and industrial activity at the small mines that are found throughout the region. Subsistence and recreational hunting and fishing occur widely, as discussed in Sections 3.16, Recreation and 3.21, Subsistence. Land use is generally limited by the small population of southwest Alaska (ARCADIS 2013a).

In this section it would have been appropriate to have listed the various documents from the ADFG Subsistence Division for the mine site area, the downstream areas along the Kuskokwim, and along the proposed Donlin Gold Pipeline route.

CUL 2

The archaeological surveys of the mine site and the proposed pipeline route that Donlin Gold sponsored between 2004 and 2014 were conducted by NLUR in Fairbanks. While these archaeological survey reports are cited, apparently those surveys did not make use of background documents that may have augmented their search for potential sites. These would include for example the first maps such as: Herron, 1900; Sleem, 1910; and Brooks, 1911, that show the major foot trails between Tyonek, the Skwentna River, Happy River, Rainy Pass, and the South Fork of the Kuskokwim.

CUL 2

I found this statement on Traditional Cultural Landscapes and Traditional Cultural Properties to be noteworthy: (8 Environmental Analysis Social.pdf; sec. 3.20.2.6.2, (Pp 298-299 of pdf, emphasis added):

> Cultural uses of the natural environment, such as ceremonial or other religious use of places, plants, animals, and minerals. These types of resources can include Indian (in this case, Native Alaskan) sacred sites that may or may not be considered as Traditional Cultural Properties (TCPs), cultural landscapes, ethnographic landscapes, rural historic landscapes including trails and transportation routes, and historic mining landscapes, for example.
>
> A Traditional Cultural property (TCP) is defined as a place that is "eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1992). TCPs often represent the location where important traditional events, activities, or cultural observances have taken place in the past, yet remain active in the community's or tribe's cultural practices. An ethnographic study involving the affected tribes can assist in properly identifying and evaluating the significance of TCPs. Confidential results of the ethnographic study would then be shared with the lead agencies and may or may not be distributed as public information.
>
> As discussed above, the history of the region is characterized by intensive use and occupation by the Dena'ina and Yup'ik peoples, including residential and camp locations, subsistence resources, origin locations, place names, and travel routes. **Data on these locations are contained in a variety of sources, including published and unpublished historic accounts, oral traditions, and recorded interviews, but have not been compiled into a comprehensive document as part of the current proposed undertaking. Further development of the PA and Section 106 consultations with affected tribes may result in additional documentation of TCPs in the future.**

This statement appears to have been added to the chapter as an afterthought. The statement acknowledges that many sources pertinent to the identification of TCPs in the project area have not been cited in the 2015 documents. However, the EIS does *not* include a list of these specific sources. Note that the reference to "use and occupation by the Dena'ina and Yupik peoples" is a misstatement that reflects the improper specification of the ethnolinguistic groups affected by the project: Dena'ina (the Inland and Upper Inlet dialect areas should be specified), Upper Kuskokwim, Deg Hit'an (Kuskokwim dialect), and Central Yupik (middle Kuskokwim dialect).

CUL 2

I recommend that the 2015 Donlin Gold EIS be expanded to include an adequate treatment of the relevant ethnographic, ethnohistoric, subsistence and language sources. Several of the preparers of the 2015 report are qualified to do this. Lacking such revisions, Chapter "8 Environmental

Analysis Social" does not meet the standards of other EIS statements for the several Cook Inlet mega-projects that I have seen such as the Point McKenzie Rail Extension, the PacRim Chuitna River Coal, the Susitna Hydroelectric Project the treatment, the Alaska LNG Project, and the Pebble Mine.

CUL 2

Moreover, if a future stage of work on cultural resources for the Donlin Gold project is to address the suggestions in the **paragraph cited above in boldface**--that is to assemble all of the relevant sources on place names, trails and land use patterns, and to evaluate Traditional Cultural Properties--then a subcontract with a well-qualified two-person team would need to be formed to do this, say in a one-year time frame.

PUB 5

I have review the current Donlin Gold website at http://www.donlingold.com/. Here I have noted the high quality video productions that introduce the Donlin Gold project in the context of the Yupik people of the region. As I linguist I am impressed by the effort here to portray Yupik cultural perspectives. The Yupik language captioning is excellent. I would like my comments on the shortcoming of the 2015 Donlin EIS to be constructive.

CUL 2

There are two very important archival collections that with proper editorial leadership could become highly important contributions to Alaska ethnography and linguistic documentation. Both of these collections contain primary materials about the ethnographic landscape of the Donlin Gold Pipeline route or the Donlin Gold Mine site area

1) The Upper Kuskokwim language audio collections at Alaska Native Language Center/Archive have grown dramatically in the past five years. In November of 2014 linguist and historian Ray Collins of McGrath has brought in his personal archive of papers, language field notes and over 40 audio recordings. Mr. Collins research on Upper Kuskokwim language and anthropology spans fifty years. Especially significant is a group of 31 recordings made by Chief Miska Deaphon (1903-1985) of Nikolai. In 1980–81, Deaphon self-recorded his own memoirs. These texts are monolingual, slowly paced, and feature detailed accounts about hunting, wildlife, places, trails, and handling of dogs throughout the UK language area. Furthermore, Ray Collins and Betty Petruska did drafts of many of Deaphon's texts during 1990-1992 when Ray Collins was at the UA Rural Center in McGrath. During 2015 and 2016 some work on the MD texts is being done under the sponsorship of Denali National Park and grants to the Native Village of Telida. This appears to be one of the most detailed and comprehensive set of place-intensive narratives ever recorded for any Alaska Native language.

Ray Collins and I are both interested in editing and publishing the Deaphon texts. This project is well suited to be advanced in phases of funding. Perhaps Donlin Gold and various federal agencies such as NPS and BLM could participate. We think that two to three years and at least $100k of funding would allow us to prepare a book of land use narrative by Deaphon and a few other speakers from Nikolai or Telida.

CUL 2

2) The Nixe Mellick Collection is a group of about 70 audio recordings, maps and various notes. Nixe Mellick was a Yupik store-owner and pilot from Sleetmute. Mellick donated these materials to the Lake Clark National Park in 2004. For nearly thirty years Mellick interviewed

CUL 2

and recorded with many elders from the Middle and Upper Kuskokwim area. Mellick also collected artifacts and implements, and he was highly knowledgeable about traditional technology. The potential of the Mellick Collection is well known. With planning and editorial leadership, the audio recordings could be transcribed and annotated. These would be a major contribution to the ethnohistory and ethnogeography of the Middle Kuskokwim area.

CUL 2

To summarize, in topic areas in which I have expertise, the 2015 EIS documents should be expanded and improved. At a minimum, the most important sources on ethnography, subsistence and language should be cited and summarized. This is important to have good bibliographic coverage for the three Athabascan languages and for Middle Kuskokwim Yupik.

If the Donlin EIS process is expanded to do a thorough job on the ethnographic landscape of the mine site area and the proposed pipeline route, a two-person team of qualified researchers is required. If the Donlin Gold group wishes to partner with agencies (perhaps NPS and BLM), there are two valuable projects that have great potential for the advancement of primary documentation on the Native traditions for the Middle and Upper Kuskokwim River areas.

DonlinGold EIS – BLM ANILCA Section 804 Analysis

Good afternoon, my name is Willie Kasayulie from Akiachak, Alaska and I serve on local tribal council for Akiachak Native Community and village corporation for Akiachak Limited. I will also disclose that I serve on the Board of Director for Calista Corporation.

During the implementation of ANCSA land selection process for Akiachak Limited, we worked with local elders to identify lands that would best provide access and availability to subsistence resources within a limited 115,000 acres allotted for selection under ANCSA based on the number of shareholders that were eleigible for enrollment in 1970's.

Despite the restricted allotted lands, the Elders stated that our access to subsistence resources goes beyond the 115,000 acres Akiachak Limited owns. In fact the whole Calista region was the bread basket for the indigenous peoples that called the region home. Subsistence took place on land and waters where resources were accessible. In most cases lands adjacent to rivers, creeks and shorelands in the coast were used. Winter access to lands allowed our people to conduct subsistence activities away from the waterways.

With limited cash availability, family and close relatives would pool their financial resources to conduct subsistence activities. Which is true today too. The high cost of doing subsistence activities require a great deal of financial resources today. It means that individuals must have jobs to purchase hunting licenses, ammunition, food and fuel for their hunts. It means that any hunter will need to hunt until they are successful.

In all that we do to conduct subsistence activities, there are always risks and we are fully aware of the consequences long before westernized forms of utensils we use for granted today became available.

SUB 23

The Alaska Native and the American Indian are the most regulated people in the world by the federal and state governments. Even today, our own people from different subregions require us from the lower river to purchase access fees to hunt in their selected lands. Without access permit, we can't go above the high water mark to hunt as we have done so a mere 45 years ago.

We reject the assertion in the 804 analysis that there could be significant restrictions to subsistence, and we are offended that BLM contends they know more about subsistence than we do. In fact the 804 analysis seems to be more of a "scare" tactic. It makes us wonder who the BLM's expert was, and if local residents were contacted, because the analysis is more opinionated rather than substantive in content.

ANIL 2 The 804 analysis was also conducted on State and ANCSA lands. I would like to see authorization of documents from the State of Alaska. I know that Calista Corporation Board of Directors have not approved such documents from BLM to conduct 804 Ananlysis on the corporate lands. BLM as a federal agency is responsible for federal lands. The law was intended to truly analyze subsistence related impacts of development on federal lands.

Many of us has seen wildlife roaming at oil fields in North Slope and along the Trans- Alaska Pipeline. If there were to be impacts on the subsistence resources along the TAP and oil fields, they would not be visible. I anticipate the same to occur on the pipeline ROW for the big game animals to browse.

WAQ 8 There seems to be a lot of misleading statements in the 804 analysis and scare tactics used by BLM's "expert". We all know that any village organization, including mining operations, would have to adhere to NEPA and Clean Water Act for discharge of any water waste. The analysis seems to be leading as if discharge of water is already impacting the fish we depend upon, which is misleading. Water quality standards are developed to protect the uses of the State's waters, including fish and aquatic life.

SUB 8 Some parts of the region are easily accessible by urban hunters. There are costs associated with these areas and our people rarely, if not at all, hunt these areas. These areas have hunting conflict and pressure already existing due to influx of urban trophy hunters and it has nothing to do with subsistence and impact of Donlin project is nonexistent. The Farewell area would be best addressed by the State of Alaska by providing appropriate oversite of hunting .

PAA 7 Our preference for development is for minimal impact to the land and its renewable resources. It would seem BLM should have followed this guideland. We are opposed to a diesel pipeline because it would result in a substantial footprint with more requirements for maintenance. Alternative 3B is not favored since diesel power generation would result in more greenhouse emissions.

SUB 18 We expect any impacts to subsistence from the development of our land to be minimal. We appreciate the efforts of Donlin Gold to develop a project that is sensitive to the subsistence needs of our region. Being able to continue subsistence activities is a big concern because of increased cost of fuel and supplies in our area. Jobs at the mine will allow our shareholders and their families to have the time and financial resources to practice subsistence.

LEG 2 Finally, as Calista Corporation, we request a consultation with Department of the Interior and its' agencies to take place, as required by federal law and Executive Orders, in the very near future.

WILLIE KASAYULIE
Post Office Box 29
Akiachak, Alaska 99551
907-545-5568

USACE
RECEIVED
APR 05 2016
AK REGULATORY

April 1, 2016

Mr. Don Kuhle, Regulatory Division
U.S. Army Corps of Engineers
P.O. Box 6898
Joint Base Elmendorf Richardson, AK 99506-0898

Dear Mr. Kuhle,

I have served in many capacities on local, regional, statewide, national and international organizations that promote to protect the homelands and advance the economic, social and political integrity and opportunities for the Indigenous peoples from different parts of the world.

Alaska Natives, and those of us living in the Yukon/Kuskokwim delta, share many similarities with other Indigenous peoples in terms of our socio-economic, as well as political, disadvantages despite the rich cultural strengths each of us have in our homelands. Strides are being made albeit in a snail's pace, in my opinion.

I have traveled extensively within the Y/K delta villages and hear many concerns from the tribal peoples living in our villages. Many of our villages still live in the third world conditions (lack of running water and sewer in the homes), up to 85%+ unemployment (especially young adults), high cost of energy and transportation. We are also starting to see the out migration of young adults (our primary workforce) from their villages into urban areas. When opportunities exist for cash economy, people stay. SER 8

Donlin Gold, if it moves forward, will provide much needed infusion of cash economy to individuals, villages, the Y/K region, as well as the State of Alaska. In many of our village travels, many ask when the project will move forward and many are hopeful that this project becomes a reality.

Donlin Gold anticipates of upwards of 3,000 jobs to be created during the construction phase for three to four year infrastructure development of the mine site and associated development to support the mine. As it moves forward for the expected life mine of 27 year operation phase, 600 and 1,200 jobs will be created. These are the jobs people in the villages ask about.

In our village trips, we speak to the young people in the village schools about the Donlin Gold opportunities. These are the workforce that will make the mine operational. These types of opportunities will allow the young people to stay in their homelands and preserve our cultural integrity. With steady source of income, jobs will allow them to TWL 4

SER 11 pay for expenses that help support our subsistence way of life, such as hunting materials, transportation modes and fuel. Being able to provide for themselves and their families independently will give them a sense of purpose and internal fulfillment, ultimately improving the quality of life in their villages.

Ideas are being discussed how the region can benefit collectively to bring down the high cost of energy and transportation. We are in communication with our State legislators, as well as regional organizations that work for our people, how we can collectively seek solutions to better the lives of our people. Donlin Gold is many of one facets being discussed.

PHL 3 Donlin Gold will bring many opportunities to the Y/K delta region with their demonstrated commitment to local hire with a drug and alcohol-free work zone. Residents will have motivation to give up dangerous vices, which could lead to fewer drug and alcohol related deaths. With fewer deaths in the region, we could experience a brighter future for our communities tormented by tragedies, financial turmoil and broken dreams. The Donlin Gold project has the potential to be a beacon of light for our people.

The village residents are hopeful that this project moves forward. Our people are resilient, hard working, productive, responsible and caring people. How else can we have survived up to this era. Please allow our people the opportunity to prosper and thrive into the next generation.

I thank you for the opportunity to comment on the proposed Donlin Gold mine project.

Respectfully submitted,

Willie Kasayulie

W. Kasayulie
Box 29
Akiachak, AK 99551

AKIACHAK
APR
1
2016
99551

MR. DON KUHLE, REGULATORY DIVISION
US ARMY CORPS OF ENGINEERS
P.O. Box 6898
Joint Base Elmendorf Richardson, AK
99506-0898

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DonlinGold EIS – BLM ANILCA Section 804 Analysis

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Despite the restricted allotted lands, the Elders stated that our access to subsistence resources goes beyond the 115,000 acres Akiachak Limited owns. In fact the whole Calista region was the bread basket for the indigenous peoples that called the region home. Subsistence took place on land and waters where resources were accessible. In most cases lands adjacent to rivers, creeks and shorelands in the coast were used. Winter access to lands allowed our people to conduct subsistence activities away from the waterways.

With limited cash availability, family and close relatives would pool their financial resources to conduct subsistence activities. Which is true today too. The high cost of doing subsistence activities require a great deal of financial resources today. It means that individuals must have jobs to purchase hunting licenses, ammunition, food and fuel for their hunts. It means that any hunter will need to hunt until they are successful.

In all that we do to conduct subsistence activities, there are always risks and we are fully aware of the consequences long before westernized forms of utensils we use for granted today became available.

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ANIL 3

We reject the assertion in the 804 analysis that there could be significant restrictions to subsistence, and we are offended that BLM contends they know more about subsistence than we do. In fact the 804 analysis seems to be more of a "scare" tactic. It makes us wonder who the BLM's expert was, and if local residents were contacted, because the analysis is more opinionated rather than substantive in content.

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Many of us has seen wildlife roaming at oil fields in North Slope and along the Trans- Alaska Pipeline. If there were to be impacts on the subsistence resources along the TAP and oil fields, they would not be visible. I anticipate the same to occur on the pipeline ROW for the big game animals to browse.

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SUB 2 We expect any impacts to subsistence from the development of our land to be minimal. We appreciate the efforts of Donlin Gold to develop a project that is sensitive to the subsistence needs of our region. Being able to continue subsistence activities is a big concern because of increased cost of fuel and supplies in our area.

SER 11 Jobs at the mine will allow our shareholders and their families to have the time and financial resources to practice subsistence.

Finally, as Calista Corporation, we request a consultation with Department of the Interior and its' agencies to take place, as required by federal law and Executive Orders, in the very near future.

Kasigluk, Incorporated **d/b/a Akulmiut Laavkaarat**

Serving Akulmiut
P.O. Box 39
Kasigluk, Alaska 99609-0039
907-477-6113/6114
Fax: 907-477-6026

DEPARTMENT OF THE ARMY
ATTN: Sheila Newman
AK District, U.S. ARMY CORPS OF ENGINEERS
PO BOX 6898
JBER, AK 99506

7/18/16

To Whom It May Concern:

Kasigluk Board of Directors would like to thank the US Army Corps of Engineers, Alaska District, for giving us the opportunity to consult with them on the proposed Donlin Gold mine. On behalf of the Shareholders and people of Kasigluk, we are completely in opposition of the development of Donlin Gold mine. There are several factual reasons why we strongly oppose its development although we are not situated on the Kuskokwim river which will have the most impact in its development but we join other Kuskokwim villages in gathering annual fish from the river. Because the risks of an accident from its development, outweigh the limited benefits it will reap for some of our villages vs. the fish that we harvest annually for our sustenance for the winter, because the most damage it will cause will be mainly to that river, the main migration route of the fish, but it would also include its tributaries.

DAM 7

First, the fact that the weather is never really predictable, but scientifically calculated, it changes unexpectedly from sunny to miserable and our Alaska weather is no exception to unforeseen changes. These can have devastating negative effects on the development: a disaster would wipe out the fish that could last a long time before it returns to normal.

CLIM 5

Second, the natural disasters that occur at any time, any season, such as the earthquakes that are increasing in Alaska at different locations and measurements, is one example. Another would be the wildfires and rainstorms that has caused floods. Including the amount of snowfall that has been fluctuating during the winters.

FSR 2

Third, the barges that go up the river to supply the mine would certainly be impacting the fish that come up to spawn. They would certainly have a devastating affect with the barges carrying millions of tons of whatever toxins their carrying should they have an unexpected accident and spill their contents on the Kuskokwim. The Kuskokwim has had a history of changing channels annually, too.

MIT 5 Forth, although the company, Donlin, has taken precautionary measures and have assured the land owners, the residents, the public and the harvesting community members of the Kuskokwim, that they are prepared, the question would be, what are they prepared for??? The better question would be, are they prepared to compensate for the loss the communities will be hit with, the loss of the fish that they are going to be responsible for?

SER 17 Finally, the thirty years that the mine is to be in operation, or until the gold has been depleted, would only benefit a few that are qualified to be hired but will not benefit the other 80% or more of the residents.

SVE 6 The Kuskokwim is our lifeline from the annual harvest of fish that sustains us for the coming winters. The accidents would certainly have severe negative effects and impacts on the harvesting communities and are risks that we cannot take to protect the fish that come up the Kuskokwim to spawn and its tributaries. The river is our main grocery store for the rest of the winter, and sometimes beyond. Nothing will ever replace the fish that we depend on. The fish, chinook, chum, sockeye, and coho have been part of our dietary nourishment, which sustain our body in good health throughout the years. Any other substitute food, wouldn't measure up to the fish we have depended on for nourishment. The people and communities that depend on the fish would certainly be put into a devastating position. The loss of such, certainly outweighs the risks of the development the mine poses, then the benefits the communities have been thriving on from the fish and provide them with their annual winter supply of food. The benefits from the fish, clearly outweighs the risks of the annihilation of the fish and the meager jobs that will not employ the harvesting community during its operation, but only a select few who are qualified for those positions.

Therefore, we are entirely and vehemently against the Donlin Mine development.

Thank you for taking the time to accept and address our concerns in opposition to the mines development and including them in your consideration.

By the order of the Board of Directors;

Moses White, Chairman

Howard R. Tinker, Secretary

From: Kathleen Kavanagh
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Tuesday, May 31, 2016 7:09:29 PM

Hello,

FISH 4 I would like to comment on the Donlin Gold Mine project. The salmon in Alaska are some of the last stronghold of this fishery in the USA. Climate, pollution, and habitat loss have decimated populations in the lower 48. We can not afford to put this fishery at risk in Alaska. Please do risk salmon since they are irreplaceable.

Regards,
Katy

Katy Kavanagh

Smith, Neal

From: rada@pacriminstitute.org
Sent: Friday, April 22, 2016 8:53 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] proposed Donlin Gold Mine project

Greeting

NSB 1

As an engaged Alaskan, serving as commissioner on two municipal commissions and a non-profit organization, I care most about the wellbeing of our state and people who live here. For over 20 years, I have been extremely fortunate to call Alaska home. My family includes my parents, their children and great children who love Alaska just like I do. I am a product of the University of Alaska system, most recently of its graduate program in Environmental Permitting.

Today I am writing in support of the proposed Donlin Gold Mine project, Alternative 2. I believe this alternative is environmentally responsible and takes into account issues people care about. Environmental studies have been going on since the inception of the project, for over 20 years. The project will provide jobs and needed revenue to the State.

State's economic viability is an important factor in protecting our environment. The environment is protected when governments can afford to enforce the environmental regulations.

Resource development was a condition that allowed Alaska to become the 49th state in the Union. Resource development is what funds the system that maintains a balance between protecting what needs to be protected and developing what needs to be developed. Development enables us to fund on-going scientific programs both by Federal agencies and academia.

Sincerely
Rada Khadjinova, PMP

Tel. 907-727-3828
E-mail: rada@pacriminstitute.org

From:	Bellion, Tara on behalf of DonlinEISAR
To:	Bellion, Tara
Subject:	FW: FYI - request for extension and another public meeting.
Date:	Monday, April 04, 2016 1:00:08 PM
Attachments:	Resolution 16-15 Donlin Gold Comment Period Extension.pdf

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_____
From: Gordon, Keith POA [Keith.Q.Gordon@usace.army.mil]
Sent: Friday, March 11, 2016 10:27 AM
To: Newman, Sheila M POA; Craig, Bill; Brewer, Jason D POA
Subject: FYI - request for extension and another public meeting.

-----Original Message-----
From: Bob Charles [mailto:BCharles@kniktribe.org]
Sent: Friday, March 11, 2016 10:23 AM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>
Cc: Richard Porter <RPorter@kniktribe.org>; Theo Garcia <TGarcia@kniktribe.org>; Kevin Toothaker <KToothaker@kniktribe.org>; Shawna Theodore <STheodore@kniktribe.org>; Alfred Tellman <ATellman@kniktribe.org>
Subject: [EXTERNAL] RE: Call in # for tonite's Anchorage meeting but, this may not be your best opportunity to comment. Please see below.

Hi,

The Knik Tribal Council met recently and adopted the attached resolution requesting a six month extension for public comments on the Donlin DEIS as well as requesting a public meeting in Wasilla, Alaska.

Thanks,

Bob Charles
Tribal Transportation Program Manager
Knik Tribe
P.O. Box 871565
Wasilla, Alaska 99687
Direct (907) 373-3153
Cell (907) 306-2503

-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Wednesday, February 10, 2016 11:04 AM
To: Bob Charles <BCharles@kniktribe.org>
Subject: RE: Call in # for tonite's Anchorage meeting but, this may not be your best opportunity to comment. Please see below.

Bob,

Re the interview I noted that I as the PM would support an extension (I was not indicating that I would support a 6 month extension) and I then went on to tell the interviewer that my recommendation for an extension would be discussed with the CA's and then go the USACE management for a final decision.

We routinely get requests for extensions of EIS and well as our 10/404 comment periods. I noted for the interviewer that if a decision is made to extend the schedule that it would likely be made very near or at the April 30 deadline.

-----Original Message-----
From: Bob Charles [mailto:BCharles@kniktribe.org]
Sent: Wednesday, February 10, 2016 9:00 AM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>; Vivian, Shannon <shannon.vivian@aecom.com>; Evans, Jessica <jessica.evans@aecom.com>; Campellone, Estrella F POA <Estrella.F.Campellone@usace.army.mil>; Andraschko, Amanda M POA <Amanda.M.Andraschko@usace.army.mil>; jeff.bruno@alaska.gov; Jen.Mark@epa.gov; david.m.seris@uscg.mil; bbcc@starband.net; mnicolai@live.com; ctc_env@yahoo.com; chuathtradcouncil@gmail.com; napaimute@gci.net; gary.mendivil@alaska.gov; wong.herman@epa.gov; godsey.cindi@epa.gov; fordham.tami@epa.gov; director@kuskokwimcouncil.org; Isaacs, Jon <jon.isaacs@aecom.com>; jennifer_spegon@fws.gov; william.mckinley@alaska.gov; Reimer, Gary <gary.reimer@aecom.com>; Craig, Bill <bill.m.craig@aecom.com>; Narvaez.Madonna@epa.gov; Edmond.Lorraine@epa.gov; Kluwe, Joan <joan.kluwe@aecom.com>; dmushovi@blm.gov; dballou@blm.gov; Jack.Winters@alaska.gov; heather.scannell@alaska.gov; Steve.Nanney@dot.gov; Brelsford, Taylor <taylor.brelsford@aecom.com>; Michael.nagy@cardno.com; jfoley@calistacorp.com; jmcatee@calistacorp.com; mec@Kuskokwim.hostpilot.com; catherine.heroy@alaska.gov; Donald.t.johnson@dot.gov; akiakepaigap@hotmail.com; shannon.miller@alaska.gov; aniaktribe88@yahoo.com; sarah.yoder@alaska.gov; carls.angie@gmail.com; david.deisley@novagold.com; ron.rimelman@novagold.com; sfoo@barrick.com; kzamzow@csp2.org; dchambers@csp2.org; Harris-Fleagle, Donalene <donalene.harris-fleagle@aecom.com>; pmcgrath@srk.com; Bellion, Tara <tara.bellion@aecom.com>; Rosenthal, Amy <amy.rosenthal@aecom.com>; ajb@kuskokwim.com; DonlinEISAR <DonlinEISAR@urs.com>; jbrune@ciri.com; Doug_Limpinsel@NOAA.gov; rlk@Kuskokwim.hostpilot.com; mari_reeves@fws.gov; mmartinez@calistacorp.com; efernandez@DonlinGold.com; ctc.wnesbit@gmail.com; dangillikin@gmail.com; gweglinski@DonlinGold.com
Subject: [EXTERNAL] RE: Call in # for tonite's Anchorage meeting but, this may not be your best opportunity to comment. Please see below.

Hi,

I read an article this morning at the KYUK website that the City of Bethel is considering a resolution requesting a six months extension of the public comment period for the Donlin Gold DEIS. The article further quotes your support for the extension. What is the process for considering and adopting an extension? You were quoted that the USACE and cooperating agencies will make that decision together.

BlockedBlockedhttp://kyuk.org/bethel-city-council-considers-extension-period-for-donlin-draft-eis/

Thanks,

Bob Charles
Tribal Transportation Program Manager
Knik Tribe
P.O. Box 871565
Wasilla, Alaska 99687
Direct (907) 373-3153
Cell (907) 306-2503

-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Thursday, January 28, 2016 11:39 AM
To: Vivian, Shannon <shannon.vivian@aecom.com>; Evans, Jessica <jessica.evans@aecom.com>; Campellone, Estrella F POA <Estrella.F.Campellone@usace.army.mil>; Andraschko, Amanda M POA <Amanda.M.Andraschko@usace.army.mil>; jeff.bruno@alaska.gov; Jen.Mark@epa.gov; david.m.seris@uscg.mil; bbcc@starband.net; mnicolai@live.com; ctc_env@yahoo.com; chuathtradcouncil@gmail.com; napaimute@gci.net; gary.mendivil@alaska.gov; wong.herman@epa.gov; godsey.cindi@epa.gov; fordham.tami@epa.gov; director@kuskokwimcouncil.org; Isaacs, Jon <jon.isaacs@aecom.com>; jennifer_spegon@fws.gov; william.mckinley@alaska.gov; Bob Charles

<BCharles@kniktribe.org>; Reimer, Gary <gary.reimer@aecom.com>; Craig, Bill <bill.m.craig@aecom.com>; Narvaez.Madonna@epa.gov; Edmond.Lorraine@epa.gov; Kluwe, Joan <joan.kluwe@aecom.com>; dmushovi@blm.gov; dballou@blm.gov; Jack.Winters@alaska.gov; heather.scannell@alaska.gov; Steve.Nanney@dot.gov; Brelsford, Taylor <taylor.brelsford@aecom.com>; Michael.nagy@cardno.com; jfoley@calistacorp.com; jmcatee@calistacorp.com; mec@Kuskokwim.hostpilot.com; catherine.heroy@alaska.gov; Donald.t.johnson@dot.gov; akiakepaigap@hotmail.com; shannon.miller@alaska.gov; aniaktribe88@yahoo.com; sarah.yoder@alaska.gov; carls.angie@gmail.com; david.deisley@novagold.com; ron.rimelman@novagold.com; sfoo@barrick.com; kzamzow@csp2.org; dchambers@csp2.org; Harris-Fleagle, Donalene <donalene.harris-fleagle@aecom.com>; pmcgrath@srk.com; Bellion, Tara <tara.bellion@aecom.com>; Rosenthal, Amy <amy.rosenthal@aecom.com>; ajb@kuskokwim.com; DonlinEISAR <DonlinEISAR@urs.com>; jbrune@ciri.com; Doug_Limpinsel@NOAA.gov; rlk@Kuskokwim.hostpilot.com; mari_reeves@fws.gov; mmartinez@calistacorp.com; efernandez@DonlinGold.com; ctc.wnesbit@gmail.com; dangillikin@gmail.com; gweglinski@DonlinGold.com
Subject: Call in # for tonite's Anchorage meeting but, this may not be your best opportunity to comment. Please see below.

All,

There WILL be a call in # available for the Anchorage meeting.

The number is (888) 369-1427 access code 261-6705

Please note that this is not your best opportunity to comment if you can attend (or call into) other meetings because we very likely will have to limit commentors time tonite do to the # of people expected to want to comment. Bethel is the only other location . where we might also have to establish a time limit.

So, you may be interested inn listening to comments. The program starts at 600 PM but the opening presentations and poster session will take until 7:30 or 7:45. So we likely won't start receiving comment until that time.

KNIK TRIBAL COUNCIL

KNIK, THE OLDEST VILLAGE IN COOK INLET

RESOLUTION 16-15

A RESOLUTION FORMALLY REQUESTING A SIX (6) MONTH EXTENSION OF THE OFFICIAL COMMENT PERIOD FOR THE ARMY CORPS OF ENGINEER'S DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE DONLIN GOLD PROJECT.

WHEREAS, Donlin Gold LLC has applied for permits to develop an open pit, hard-rock mine about 10 miles north of the community of Crooked Creek, in southwest Alaska; and

WHEREAS, Donlin Gold's proposed mine is located approximately 277 miles west of Anchorage; and

WHEREAS, in addition to the mine site, the project has two other major components: transportation infrastructure and natural gas pipeline infrastructure; and

WHEREAS, the construction of and planned lifetime of the mine and related infrastructure lasts for the next 30 plus years; and

WHEREAS, monitoring of the tailings and the area around the mine will be required for perpetuity; and

WHEREAS, the 317 mile natural gas pipeline begins in Beluga and on up through the Alaska Range though the Kuskokwim region to the proposed mine near Crooked Creek, Alaska; and

WHEREAS, the natural gas pipeline will cross important wetlands, streams and rivers in the Upper Cook Inlet and may result in unrecoverable and un-restorable impacts to wetlands in the Upper Cook Inlet; and

WHEREAS, the Upper Cook Inlet has already experienced impacts to wetlands in the Susitna Flats created by the construction and installation of a 20" natural gas pipeline called the Enstar Beluga to Anchorage pipeline in 1984 which resulted in water filled trenches in floating mat bog wetlands of the Susitna Flats; and

WHEREAS, the project will undoubtedly affect the citizens of Upper Cook Inlet and the Kuskokwim river for decades and possibly centuries to come; and

WHEREAS, the Army Corps of Engineers Draft Environmental Impact Study (DEIS) was

released on November 27, 2015; and

WHEREAS, the DEIS itself totals over 5,300 pages; and

WHEREAS, in addition to the sheer volume of the EIS, the report itself includes numerous technical and engineering terms that require additional research and investigation by the average reader; and

WHEREAS, currently the comment period for the EIS is essentially five months and is slated to end on April 30, 2016;

WHEREAS, the magnitude of the proposed project and its impacts on subsistence activities, the environment, economic development, job creation and other such concerns make it extremely important that the comment period be open for as long as necessary to allow a thorough understanding and thoughtful comment time period that is not rushed;

WHEREAS, it is necessary for adequate time be provided for the Knik Tribe to determine the functional value of impacted wetlands and consider options for compensatory mitigations to be included in the EIS; and

NEP 1

WHEREAS, it is essential that all citizens, tribal entities, governmental bodies, and agencies have an adequate amount of time to read, review, digest and form thoughtful comments regarding the DEIS report on this project.

NOW, THEREFORE, BE IT RESOLVED, the Knik Tribal Council does hereby formally request an extension of at least six (6) months and at least one more public comment meeting in Wasilla, Alaska, for the public to offer comment on the Army Corps of Engineers' Donlin Gold Draft Environmental Impact Study.

CERTIFICATION

This certifies that the foregoing resolution of the Knik Tribal Council was adopted by the Knik Tribe. The Council is made up of 5 members with a quorum of 5 established. The foregoing resolution was adopted on this 2nd day of March, 2016, by a vote of 5 in favor, 0 opposed, and _____ abstaining.

ATTEST

Knik Tribe President

Knik Tribe Secretary

From:	Bob Charles
To:	Gordon, Keith POA; Campellone, Estrella F POA; Andraschko, Amanda M POA; Brewer, Jason D POA; jeff.bruno@alaska.gov; Jen.Mark@epa.gov; david.m.seris@uscg.mil; ctc_env@yahoo.com; chuathtradcouncil@gmail.com; napaimute@gci.net; gary.mendivil@alaska.gov; godsey.cindi@epa.gov; fordham.tami@epa.gov; Isaacs, Jon; jennifer_spegon@fws.gov; william.mckinley@alaska.gov; Reimer, Gary; Craig, Bill; Narvaez.Madonna@epa.gov; Edmond.Lorraine@epa.gov; dmushovi@blm.gov; dballou@blm.gov; Jack.Winters@alaska.gov; heather.scannell@alaska.gov; Steve.Nanney@dot.gov; Brelsford, Taylor; catherine.heroy@alaska.gov; Donald.t.johnson@dot.gov; akiakepaigap@hotmail.com; shannon.miller@alaska.gov; aniaktribe88@yahoo.com; sarah.yoder@alaska.gov; carls.angie@gmail.com; kzamzow@csp2.org; dchambers@csp2.org; Harris-Fleagle, Donalene; Bellion, Tara; Rosenthal, Amy; Vivian, Shannon; DonlinEISAR; Doug_Limpinsel@NOAA.gov; mari_reeves@fws.gov; dangillikin@gmail.com; Bella, Elizabeth; ssweet@blm.gov; arabuck@blm.gov; abittner@blm.gov; mspencer@blm.gov; crookedcreektraditionalcouncil@gmail.com
Cc:	Richard Porter; Theo Garcia; Kevin Toothaker; Shawna Theodore; Alfred Theodore; Richard Martin; Matthew Schmitt
Subject:	RE: FYI - USACE will extend comment period on Donlin DEIS until May 31, 2016. Public Notices announcing this expected to go out today. No further extensions expected.
Date:	Tuesday, May 10, 2016 8:40:29 AM
Attachments:	Knik DEIS Comments General_mts.docx

Hi,

Attached are Knik Tribe's comments on the Donlin DEIS.

Thanks,

Bob Charles
Tribal Transportation Program Manager
Knik Tribe
P.O. Box 871565
Wasilla, Alaska 99687
Direct (907) 373-3153
Cell (907) 306-2503

-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Tuesday, April 26, 2016 8:11 AM
To: Campellone, Estrella F POA <Estrella.F.Campellone@usace.army.mil>; Andraschko, Amanda M POA <Amanda.M.Andraschko@usace.army.mil>; Brewer, Jason D POA <Jason.D.Brewer@usace.army.mil>; jeff.bruno@alaska.gov; Jen.Mark@epa.gov; david.m.seris@uscg.mil; ctc_env@yahoo.com; chuathtradcouncil@gmail.com; napaimute@gci.net; gary.mendivil@alaska.gov; godsey.cindi@epa.gov; fordham.tami@epa.gov; jon.isaacs@aecom.com; jennifer_spegon@fws.gov; william.mckinley@alaska.gov; Bob Charles <BCharles@kniktribe.org>; gary.reimer@aecom.com; bill.m.craig@aecom.com; Narvaez.Madonna@epa.gov; Edmond.Lorraine@epa.gov; dmushovi@blm.gov; dballou@blm.gov; Jack.Winters@alaska.gov; heather.scannell@alaska.gov; Steve.Nanney@dot.gov; Taylor.Brelsford@aecom.com; catherine.heroy@alaska.gov; Donald.t.johnson@dot.gov; akiakepaigap@hotmail.com; shannon.miller@alaska.gov; aniaktribe88@yahoo.com; sarah.yoder@alaska.gov; carls.angie@gmail.com; kzamzow@csp2.org; dchambers@csp2.org; donalene.harris-fleagle@aecom.com; Tara.Bellion@aecom.com; amy.rosenthal@aecom.com; shannon.vivian@aecom.com; DonlinEISAR@urs.com; Doug_Limpinsel@NOAA.gov; mari_reeves@fws.gov; dangillikin@gmail.com; elizabeth.bella@aecom.com; ssweet@blm.gov; arabuck@blm.gov; abittner@blm.gov; mspencer@blm.gov; crookedcreektraditionalcouncil@gmail.com
Subject: RE: FYI - USACE will extend comment period on Donlin DEIS until May 31, 2016. Public Notices announcing this expected to go out today. No further extensions expected.

Should have clarified that the timeframe for commenting on Donlin's application for 10/404 permits from USACE also originally ended 4/30 and will also now be extended to May 31. So you have the option to comment on the DEIS as well as Donlin's application for USACE permits through 5/31.

-----Original Message-----
From: Gordon, Keith POA
Sent: Tuesday, April 26, 2016 7:22 AM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>; Campellone, Estrella F POA <Estrella.F.Campellone@usace.army.mil>; Andraschko, Amanda M POA <Amanda.M.Andraschko@usace.army.mil>; Brewer, Jason D POA <Jason.D.Brewer@usace.army.mil>; 'jeff.bruno@alaska.gov' <jeff.bruno@alaska.gov>; 'Jen.Mark@epa.gov' <Jen.Mark@epa.gov>; 'david.m.seris@uscg.mil' <david.m.seris@uscg.mil>; 'ctc_env@yahoo.com' <ctc_env@yahoo.com>; 'chuathtradcouncil@gmail.com' <chuathtradcouncil@gmail.com>; 'napaimute@gci.net' <napaimute@gci.net>; 'gary.mendivil@alaska.gov' <gary.mendivil@alaska.gov>; 'godsey.cindi@epa.gov' <godsey.cindi@epa.gov>; 'fordham.tami@epa.gov' <fordham.tami@epa.gov>; 'jon.isaacs@aecom.com' <jon.isaacs@aecom.com>; 'jennifer_spegon@fws.gov' <jennifer_spegon@fws.gov>; 'william.mckinley@alaska.gov' <william.mckinley@alaska.gov>; 'BCharles@kniktribe.org' <BCharles@kniktribe.org>; 'gary.reimer@aecom.com' <gary.reimer@aecom.com>; 'bill.m.craig@aecom.com' <bill.m.craig@aecom.com>; 'Narvaez.Madonna@epa.gov' <Narvaez.Madonna@epa.gov>; 'Edmond.Lorraine@epa.gov' <Edmond.Lorraine@epa.gov>; 'dmushovi@blm.gov' <dmushovi@blm.gov>; 'dballou@blm.gov' <dballou@blm.gov>; 'Jack.Winters@alaska.gov' <Jack.Winters@alaska.gov>; 'heather.scannell@alaska.gov' <heather.scannell@alaska.gov>; 'Steve.Nanney@dot.gov' <Steve.Nanney@dot.gov>; 'Taylor.Brelsford@aecom.com' <Taylor.Brelsford@aecom.com>; 'catherine.heroy@alaska.gov' <catherine.heroy@alaska.gov>; 'Donald.t.johnson@dot.gov' <Donald.t.johnson@dot.gov>; 'akiakepaigap@hotmail.com' <akiakepaigap@hotmail.com>; 'shannon.miller@alaska.gov' <shannon.miller@alaska.gov>; 'aniaktribe88@yahoo.com' <aniaktribe88@yahoo.com>; 'sarah.yoder@alaska.gov' <sarah.yoder@alaska.gov>; 'carls.angie@gmail.com' <carls.angie@gmail.com>; 'kzamzow@csp2.org' <kzamzow@csp2.org>; 'dchambers@csp2.org' <dchambers@csp2.org>; 'donalene.harris-fleagle@aecom.com' <donalene.harris-fleagle@aecom.com>; 'Tara.Bellion@aecom.com' <Tara.Bellion@aecom.com>; 'amy.rosenthal@aecom.com' <amy.rosenthal@aecom.com>; 'shannon.vivian@aecom.com' <shannon.vivian@aecom.com>; 'DonlinEISAR@urs.com' <DonlinEISAR@urs.com>; 'Doug_Limpinsel@NOAA.gov' <Doug_Limpinsel@NOAA.gov>; 'mari_reeves@fws.gov' <mari_reeves@fws.gov>; 'dangillikin@gmail.com' <dangillikin@gmail.com>; 'elizabeth.bella@aecom.com' <elizabeth.bella@aecom.com>; 'ssweet@blm.gov' <ssweet@blm.gov>; 'arabuck@blm.gov' <arabuck@blm.gov>; 'abittner@blm.gov' <abittner@blm.gov>; 'mspencer@blm.gov' <mspencer@blm.gov>; 'crookedcreektraditionalcouncil@gmail.com' <crookedcreektraditionalcouncil@gmail.com>
Subject: FYI - USACE will extend comment period on Donlin DEIS until May 31, 2016. Public Notices announcing this expected to go out today. No further extensions expected.

DEIS – Response to Agency Comments: General
April 21, 2016

Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
Knik	3.11.4.2.3	3.11-98	Over one-quarter of the deciduous scrub shrub wetlands impacted by pipeline construction are identified as bog or fen habitats (Table 3.11-31). Pipeline construction through certain bogs and fens react similarly when a pipeline installation cuts through these wetlands during either winter or summer construction. The backfilled portion of the trench becomes an open water area. There may be no practicable effective mitigation measure to avoid this conversion. Beside avoidance through routing other potential mitigation measures could include avoidance of any surface vegetation impacts by using either horizontal boring or horizontal directional drilling (HDD) techniques. However, the abundance of bogs in central Alaska and the typical crossing lengths for these areas generally prohibit using simple HDD installations. Effective restoration of floating mat bog and fen areas may not be possible beyond compensation through mitigation banks.	The Beluga to Anchorage natural gas pipeline constructed in 1984 provides an excellent example of wetlands impacts from buried pipelines. Throughout much of the pipeline corridor there are visible open water-filled trenches, up to 20 feet wide in certain areas. After over thirty years it is apparent that recovery or restoration is impossible in these areas. Similar impacts of the Donlin natural gas pipeline on wetlands throughout the pipeline corridor can be expected especially in areas where there are bogs and fens. Compensatory mitigation for these areas should be identified in the final EIS. Additionally, the loss of the wetland function in site-specific locations will likely alter the hydraulic retention time, temperature and chemical characteristics of the precipitation which is exported off the landscape.	MIT 7 MIT 7	
Knik	3.11.4.2.3	3.11-98	Pipeline corridor effects on soils 8 years after summer installation in Wisconsin consistently showed compaction and hydraulic alteration with higher soil bulk density and lower soil moisture (Olson and Doherty 2012).	As indicated above, the Beluga to Anchorage pipeline provides a more realistic example of pipeline impacts to soils and wetlands than impacts in Wisconsin. Existing projects built on similar terrain in Alaska have demonstrated the outcome of construction impacts on these unique types of wetlands. The combination of physical barriers created by backfill, the weight of equipment and the road-surface material itself combine to create compaction and subsidence of the existing floating-mat vegetation; this vegetation does not appear to repair itself even after long periods of time. This is likely due to the alteration of hydraulic retention properties which are absent after compaction and subsidence.		

WET 4

	Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
WET 3	Knik	3.11.4.2.3	3.11-99	Excavation, filling, and clearing of wetlands and waters for construction of the buried pipeline, transmission line, construction camps, storage yards, workspaces and access roads could alter or remove the wetlands capacity to provide hydrologic, biogeochemical, and biological functions. Between 5 and 8 percent of pipeline study area wetlands rated high for the four hydrologic functions could be altered by trenching for pipeline wetland installation and associated activities (Table 3.11-32, Appendix K, Tables K-12 and K-13; 3PPI 2014b).	For reasons indicated above, rather than "could alter" it is expected that wetlands capacity to provide hydrologic, biogeochemical, and biological functions "would" be altered or removed. Evidence of this outcome is apparent when reviewing the impacts of the 1984 Beluga to Anchorage pipeline which shares many similar design and construction features and crosses similar wetland habitats.		

Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
Knik	3.11.4.2.3	3.11-100	Post-construction restoration of some forested and scrub shrub wetlands may be possible; however, long-term effects are likely to remain. Restoration along the pipeline corridor in areas where wetland hydrology is supported by permafrost would be difficult, especially in slope and riverine HGM classes. An estimated 21 percent of wetlands within the pipeline construction right-of-way are supported by permafrost with about 13 percent on thaw stable permafrost and 8 percent on thaw unstable permafrost (Table 3.11-33). Most permafrost based wetlands are located within the Tanana-Kuskokwim Lowlands ecoregion and support deciduous scrubshrub wetlands, although a high proportion of herbaceous wetlands are also permafrost based (Table 3.11-33). Thaw stable permafrost-based wetlands occurred in flat (84 percent) and slope (15 percent) wetlands, and thaw unstable permafrost-based wetlands occurred in flat (83 percent) and slope (16 percent) wetlands (3PPI et al. 2014).	The areas where long term effects or permanent effects would remain should be identified for compensatory mitigation.		

MIT 7

Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
Knik	3.11.4.2.3	3.11-103	Winter Access Routes During construction of the pipeline winter access corridors would be developed in the Cook Inlet Basin to transport equipment and supplies over the 3-year construction period. Routes would be cleared of trees and shrubs with no ground disturbance. Winter access routes would be maintained by packing, watering, and grading the snow and ice surface. While portions of the routes are collocated with existing winter trails, some additional vegetation clearing would be required in areas where no trail exists and to widen existing trails from 10 or 15 feet to 30 feet. Preliminary estimates of potential wetland vegetation clearing and wetland distribution based on NWI and project wetland data are listed in Table 3.11-34, and shown in Figure 3.11-26.	Total area, 196.3 acres are affected by proposed winter access routes: Oil Well Road; Big Bend Trail; Kutna; Alexander, Bear Creek. There are significant areas of wetlands including bogs and fens throughout these proposed winter access routes that would be impacted long after construction (see map below). The weight of the ice road itself, compounded by the weight of the transport vehicles could kill off vegetation underneath the ice road, particularly in bogs and fens. The ice road would not melt right away in the spring and the vegetation underneath could die off and may not recover. What would remain in bog and fen areas would be a water filled trench as demonstrated by impacts still seen today from the Beluga to Anchorage pipeline built in 1984. These problems are compounded by warm, wet and snowless winters seen in recent years leaving areas with limited snow pack and insufficient ice to support an overland ice road. The Knik Tribe is opposed to the proposed winter access routes and instead recommends a river ice road beginning from the existing ramp at Deshka Landing, down the Susitna River, up the Yetna River and then up the Skwetna River be utilized. Ice modeling for the Susitna Watana Hydroelectric Dam study indicates sufficient ice to support a seasonally operable ice road. Sufficiency could be increased by packing, watering and grading the river ice road surface. The map below shows a proposed ice road route for consideration as an alternative to the overland winter access road. Additionally, this route has been used by local peoples to transport building materials and goods for cabins, lodges and other activities in the vicinity. It is deemed the most operable and 'budget friendly' route for people to utilize when transporting materials in the area, this type of utilization of the seasonal river-ice corridor is also substantially less impactful than the creation of single-use overland ice-roads and bog crossings.	WET 4 PAA 11	

DEIS – Response to Agency Comments: General
April 21, 2016

Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
Knik	3.11.4.2.3	3.11-106	Twenty years after installation of a natural gas pipeline through a boreal forest in Wisconsin, Zimmerman et al. (1993) found: adjacent wetland areas were not altered in type; sheet flow restriction had been reversed naturally; no non-native plants had invaded the natural area; 75 percent of the ROW area was wetland; and the ROW increased overall vegetation diversity. The pipeline may also cause slight increases in water temperatures where the pipeline crosses through wetlands near the compressor station. Effects would be most pronounced in small ponds and wetlands, as excess heat would dissipate in larger water bodies and flowing waters. Small ponded wetlands over the pipeline may freeze later and thaw sooner than surrounding wetlands. Potential pipeline operations impacts on streams may include the potential for localized chilled pipeline sections that could result in the formation of ice dams and aufeis, which are discussed in Section 3.5, Surface Water Quality. Ground surface disturbances can also create conditions that lead to aufeis formation. Bedding materials, construction materials such as liners, or the pipeline can create a subsurface blockage of shallow groundwater flow causing the ground water to seep from the ground. In most cases adverse aufeis conditions generated by the pipeline would be corrected to ensure the structural integrity of the pipeline and would result in little if any impact to wetland vegetation as discussed in Section 3.5, Surface Water Quality.	Although Northern Wisconsin does exhibit plant communities which are representative of the southern edge of the circumpolar boreal forest, citation of (Zimmerman et al) is not relevant for numerous reasons; primarily the difference in seasonal temperature and precipitation regimes, soils composition and the annual dispersion of solar insolation; . These factors combine to create substantially different successional outcomes for existing plant communities and therefore does not represent a reasonable comparison [between Wisconsin and Alaska]. As discussed above, the Beluga to Anchorage pipeline constructed over thirty years ago provides a better example of pipeline impacts on wetlands which are unique to Alaska. Additional concerns over alteration of the temperature and drainage regimes in site specific locations relate to the uncertainty of climate change. Many wetlands and shallow surface waters harbor unique aquatic and riparian habitats which exist due to very small margins in temperature and drainage. Human alteration of these temperature or drainage margins, combined with a changing climate make the successional outcome of these sites highly difficult to predict and therefore highly difficult to conserve. Meaningful compensatory mitigation is required in these situations.		

Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
Knik	3.11.4.2.3	3.11-110	Although in general a smaller area of wetlands would be affected by operations, potential effects within the permanent ROW would be longer term. Between 2 and 3 percent of pipeline study area wetlands rated high for each of the four hydrologic functions could be altered by pipeline operations (Table 3.11-37, Appendix K, Tables K-14 and K-15; 3PPI 2014b). Altered hydrologic functions could extend effects to the streams connected to or downstream from the affected wetlands. Maintenance vegetation clearing with no ground disturbance could reduce wetlands capacity for modification of water quality and export of detritus biogeochemical functions especially for riverine deciduous forested or scrub shrub wetlands. About 2 to 3 percent of study area wetlands rated as high functioning for the two biogeochemical functions may experience a reduction in these functions (Table 3.11-37). The areas of potential operational effects on moderate and high functioning wetlands within each ecoregion are illustrated in Figure 3.11-27, Figure 3.11-28, and Figure 3.11-29.	It is highly likely that potential effects would be unrecoverable particularly in areas with bogs and fens, and unstable permafrost. Environmental reparations may not be possible in these types of conditions so wetland banking and meaningful environmental offsets must be utilized to address the loss of these unique habitats.		

WET 4

Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
Knik	3.11.4.2.3	3.11-115	Donlin Gold has incorporated procedures to be implemented during pipeline routing, construction, operations, and closure designed to avoid and minimize adverse impacts to wetlands; and has committed to provide compensation for unavoidable wetland impacts.	The final EIS should identify compensatory mitigations for wetland areas with bogs and fens.		
Knik	3.11.4.2.3	3.11-116	The primary compensation for wetland damage caused by the pipeline construction would be reclamation of the ROW to reestablish wetlands and wetland functions. Site-specific best management practices would be identified and applied. Where losses would be permanent with no possibility for restoration, compensatory mitigation could be developed collaboratively with the Corps and other federal, state and local agencies and landowners. Donlin Gold's conceptual CMP has identified potential compensatory mitigation mechanisms for unavoidable loss of wetlands (Table 3.11-38). Mitigation is further discussed in Chapter 5, Impact Avoidance, Minimization, and Mitigation.	The final EIS should identify compensatory mitigations for wetland areas with bogs and fens.		

WET 4

MIT 7

Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
Knik	3.11.4.2.3	3.11-118	Anticipated Alternative 2 pipeline construction effects on wetlands would be medium in intensity with 5 percent of wetlands affected and a potential reduction in functional capacity for 5 to 8 percent of high functioning wetlands for each evaluated function within the pipeline wetland study area (Table 3.11-31 and Table 3.11-32). While construction-related effects would have a medium intensity, operations-related effects would generally be low in intensity (Table 3.11-36 and Table 3.11-37). Many construction-related effects on wetlands would be short-term, because reclamation and restoration would begin soon after construction. Because of the extended recovery time for boreal forest wetlands, expected short-term effects may become long-term or permanent. While most wetlands would be restored, functions may be reduced for extended periods. About 21 percent of the pipeline ROW would cross permafrost-based wetlands; 8 percent of which are on unstable permafrost soils which may be difficult to restore as wetlands (Table 3.11-33). Most permafrost-based wetlands would be crossed during winter to minimize disturbance from trenching. The geographic extent of wetland impacts from the pipeline would be regional (affecting small areas of wetlands across multiple watersheds). Much of the wetland area impacted by the pipeline construction and operations	In wetland areas with bogs and fens the effects will be high in intensity and long term, and possibly unrecoverable.		

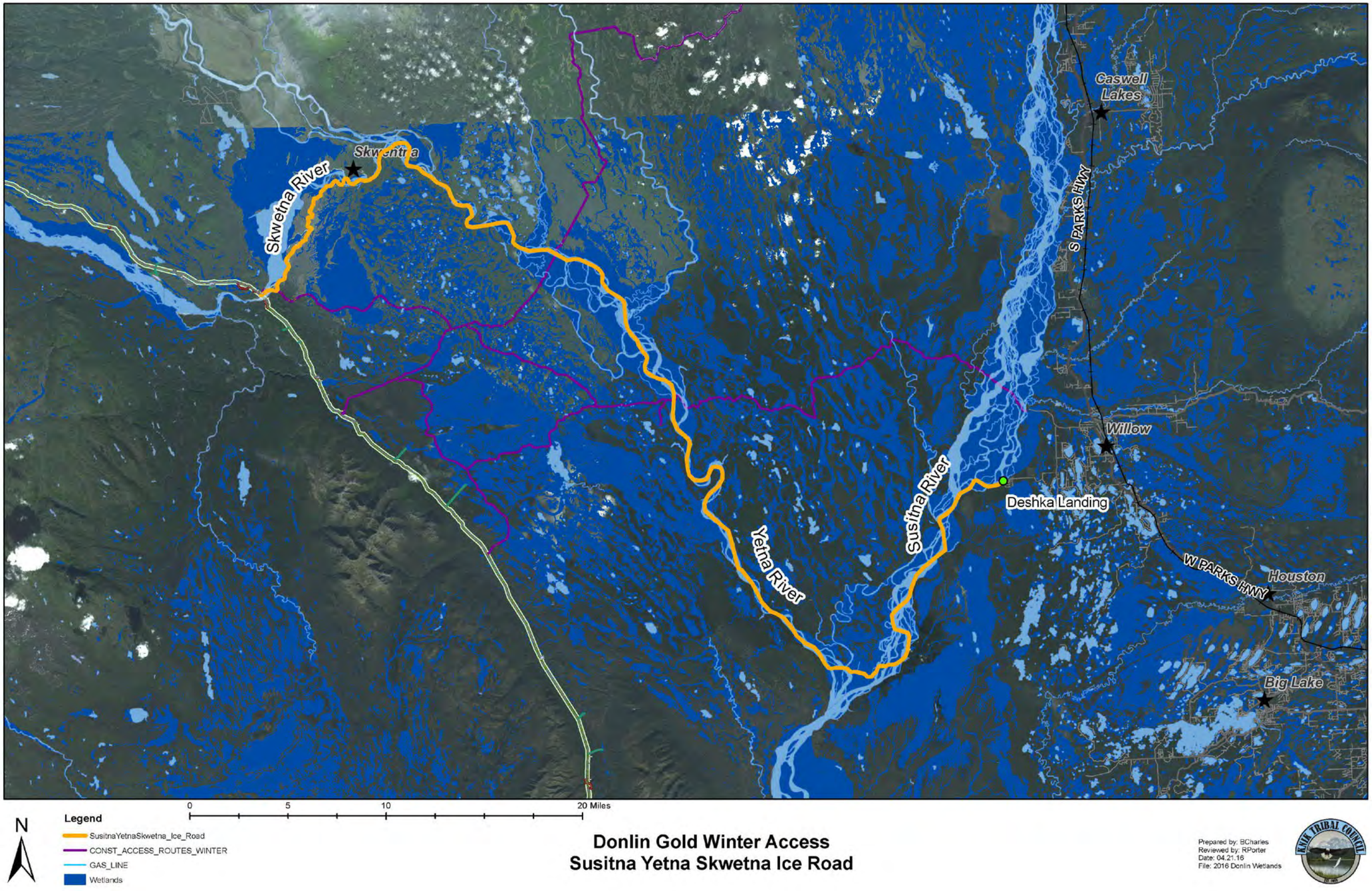
WET 4

	Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
WET 4	Knik	3.11.4.2.4	3.11-119	Warming may also increase the thawing of permafrost over time. In Project areas like the pipeline, increased thawing might lead to more open water areas. Permafrost thaw may cause ground subsidence leading to water-filled depressions.	As indicated above, the Beluga to Anchorage pipeline provides a demonstration of a pipeline in wetlands causing open water areas and water filled depressions. These areas demonstrate reduced hydraulic retention time, altered temperature regimes and reduced filtration capacity.		
WET 4	Knik	3.11.4.2.5	3.11-119	The anticipated direct and indirect effects on wetlands from all the components of Alternative 2 would be generally medium in intensity, long-term to permanent in duration, local to regional in extent, and primarily common in context with some effects on important wetland resources (Table 3.11-40). The impact of the construction, operations, closure, and reclamation for Alternative 2 on wetlands would be considered moderate as defined in Section 3.11.4.	In wetland areas with bogs and fens the effects should be high in intensity and long term, and possibly unrecoverable.		

Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
Knik	3.11.4.2.5	3.11-121	The Corps is considering additional mitigation (Table 5.5-1 in Section 5.5, Impact Avoidance, Minimization, and Mitigation) to reduce the effects presented above. These additional mitigation measures include: · Train site construction managers to oversee work of specialists in wetland recognition, permit stipulations, and BMPs; · Use mats or other appropriate types of ground protection to minimize disturbance to ground vegetative cover during non-winter construction; · Salvage and replace the native vegetation mat in wetlands, and/or reestablish wetland vegetation that is typical of the general area, where practicable; · Mark wetland boundaries and vegetation clearing limits with flagging or other markers to prevent crews from damaging more vegetation than needed during construction; and · Use large surface area/low impact tires on or near wetlands to help reduce equipment impacts.	There should be efforts to identify best management practices during winter construction in wetland areas to preserve the vegetative cover over the pipeline trenches. A best management practice may include frost packing the trench cover in bogs and fens, cutting the trench cover in blocks, setting the blocks aside during construction and replacing them over the trench fill afterwards. This should be explored further to determine an appropriate best management practice for the Donlin Natural Gas winter pipeline construction in wetland areas with bogs and fens.		

MIT 21

PAA 11


Caswell Lakes
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Skwentna
Skwetna River
Willow
Susitna River
Deshka Landing
Yetna River
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Legend
SusitnaYetnaSkwetna_Ice_Road
CONST_ACCESS_ROUTES_WINTER
GAS_LINE
Wetlands
Donlin Gold Winter Access
Susitna Yetna Skwetna Ice Road
Prepared by: BCharles
Reviewed by: RPorter
Date: 04.21.16
File: 2016 Donlin Wetlands

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

It is our environment that provides jobs for our people in Calista Region. For many years now since Commercial fishing has depleted, jobs in villages are scarce. At one time, Canneries in Naknek would provide summer income. Those have also depleted too. Along with lower pay, Asians and foreigners have claimed those jobs Now!
My applause to Donlin Gold Mine project for providing training and jobs to our people in Calista Villages. Gives them pride and hope for their future. Thank you.

Sincerely

Lucy Knoll

SER 10

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

USACE RECEIVED JUN 01 2016 AK REGULATORY

FAIRBANKS AK 99701 25 MAY 2016

LUCY ELAINE KNOLL
6983 NO NAME LN
FAIRBANKS AK 99712-3760

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Tuesday, April 12, 2016 8:47:31 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Tuesday, April 12, 2016 6:48 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment

-----Original Message-----
From: James Knowles [mailto:knowles.james1@gmail.com]
Sent: Monday, April 11, 2016 12:43 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

NSB 1

Hi this is Mr. James Knowles of Manley Hot Springs, AK.
I currently am employed, as a Caterpillar Heavy Equipment mechanic at the Fort Knox gold mine.
I am half way through my 9th year there & love the mining industry in Alaska.
I look forward to the mining operation to start as soon as possible, at the Donlin Project! Studying the past & present info, it looks to be an awesome mine to be involved with. I plan to apply for employment there.

Sent from my iPhone

USACE
RECEIVED
MAY 1 1 2016
AK REGULATORY

April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15 Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to IDIT 1 known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims LAND 1 Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Ray Kukowski
Taiga Mining Company, Inc.
Anchorage, Alaska
(907) 240-3766

US Army Corps of Engineers¶
Donlin Gold Project EIS¶

Please place first-class postage here.

from:

Kurt Kuhne
Yuut Elitnaurviat

NSB 1

Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, PO Box 6898
Joint Base Elmendorf Richardson, AK
99506-0898

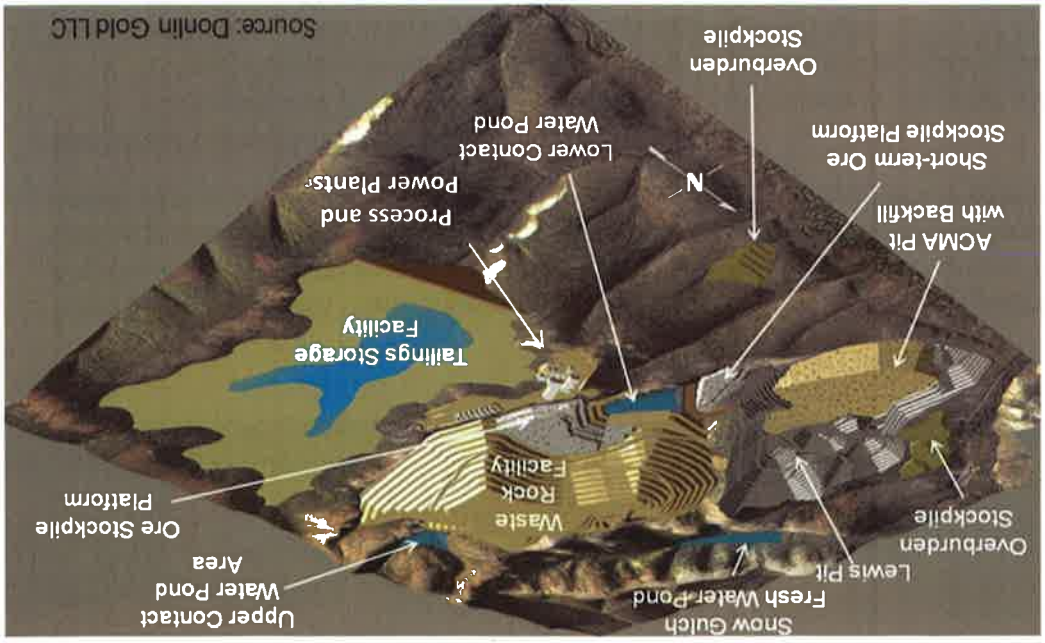
(To mail, fold below blue line. Photo: Dave Gannon)

(fold here)

Layout of Proposed Mine Site

The image to the right illustrates the eventual layout of a proposed gold mine, ten miles north of the community of Crooked Creek on the Kuskokwim River in southwestern Alaska, for which the US Army Corps of Engineers is preparing an EIS. The project, proposed by Donlin Gold, LLC, includes a natural gas pipeline and transportation and components. You may use this mail-in form to submit comments.

For more information, please visit:
www.DonlinGoldEIS.com



US Army Corps of Engineers

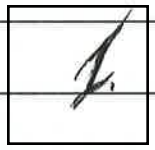
Donlin Gold Project EIS

Comment Form

The Corps welcomes your comments on the Draft Environmental Impact Statement. If you'd like to mail your comments, please feel free to use this form. Write your comments below then fold this page in thirds so the mailing address shows. Additional pages can be inserted. Remember to affix first class postage. You can also email your comments to POA.donlingoldeis@usace.army.mil, or fax them to (907) 753-5567.

Important topics for comments would include:

- *Comments and questions about the accuracy of information in the Draft EIS.*
- *Comments and questions about the adequacy of methods or assumptions used.*
- *New information to be considered in preparing the Final EIS.*
- *New reasonable alternatives or revisions to current alternatives.*
- *Additional measures to reduce impacts (mitigation).*



1 BSN

From: Isaacs, Jon
To: DonlinEISAR
Cc: Bellion, Tara
Subject: FW: [EXTERNAL] Kuskokwim River Watershed Council Comments For The Proposed Donlin Gold Mine
Date: Friday, May 27, 2016 9:51:46 AM
Attachments: KRWCDEISCommentsSubmitted5_26.pdf

-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Thursday, May 26, 2016 5:22 PM
To: Isaacs, Jon; Bellion, Tara
Cc: Dave Cannon
Subject: FW: [EXTERNAL] Kuskokwim River Watershed Council Comments For The Proposed Donlin Gold Mine

Dave,

Ok. Tahnks

-----Original Message-----
From: Dave Cannon [mailto:krwcsolidwaste@kuskokwimcouncil.org]
Sent: Thursday, May 26, 2016 6:15 PM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>; abittner@blm.gov
Cc: Adrian Boelens <aboelens@kuskokwimcouncil.org>; krwcsolidwaste@kuskokwimcouncil.org
Subject: [EXTERNAL] Kuskokwim River Watershed Council Comments For The Proposed Donlin Gold Mine

Hello Keith and Alan,

Please find attached the Kuskokwim River Watershed Council's comments on the Donlin Gold DEIS.

ANIL 16 We would like our comments to be entered into both public records - that is, the Corps of Engineers' as well as for BLM's 810 Determination.

Sincerely,

Dave Cannon
krwcsolidwaste@kuskokwimcouncil.org <mailto:krwcsolidwaste@kuskokwimcouncil.org>
P.O. Box 334
Aniak, AK 99557
(907) 675-4705 (C) 676-0012

May 26, 2016

Mr. Keith Gordon

Project Manager

U.S. Army Corps of Engineers

Mr. Gordon,

The following are the Kuskokwim River Watershed Council's comments on the Donlin Gold Draft Environmental Impact Statement.

CLA 5

The word ensure appears over 230 times in the draft document. Unfortunately, relatively few things on a project such as this can be assured. Here are just several sections where the word ensure is inappropriate: Section 3.10-58, Section 3.10-47, and Page 44 in Volume 19 of the hard copy.

To be 100% certain that those things above will or won't happen is impossible. Specifically, things like mitigation measures, over extended periods of time, often become lax due to time constraints or cost overruns, or fall victim to implementation error and human error.

Consequently, the Kuskokwim River Watershed Council (KRWC) believes that the document is overly optimistic in its overall assessment that several impacts will be inconsequential or that mitigation will circumvent any impacts.

FISH 8

The strongest example of that is in the assessment of impacts to rainbow smelt. Page 143 of Section 3.13 states: *To minimize potential impacts of bed scour, barge traffic would be tracked using GPS and real-time river stage and depth monitoring systems to* ***ensur****e vessel passages are conducted through the deeper portions of the channel, especially in confined and shallow segments of the river.*

The use of the word **ensure** is inappropriate because there are no assurances that the tugs and barges will not deviate from the deepest sections…and the possibility exists that developing eggs would be in close proximity to the deepest section (i.e., thalweg), and that the water depth in the deepest section would be inadequate to protect the eggs from harmful prop turbulence.

The DEIS even states in Section 3.13 that impacts, at least in 2015, would have been unavoidable - ***During the 2015 rainbow smelt spawning survey, spawning occurred as shallow as 8.7 feet along a relatively confined channel segment. In such locations, a medium to high level of injury or mortality to incubating eggs could have resulted from the propeller scour of passing tug traffic, depending on the tug's horsepower rating and engine speed. Because of the narrow width and relatively shallow depth across this particular channel segment, it is unlikely that impacts to incubating rainbow smelt eggs could have been avoided by altering the line of travel of barge traffic***.

The only way to ensure that smelt or their eggs would not be impacted in any way by the proposed activity as stated in Alternative 2, would be to cease baring operations in the vicinity of Lower and Upper Kalskag during the period when the smelt are about to spawn and for roughly twenty-one days afterward while the eggs are developing

FISH 8

The concern with the smelt is that for all practical intents and purposes, it is a single population that enters the mouth of the Kuskokwim all at the same time as opposed to a long protracted run for chums, kings and other salmon species. They then travel in a group upstream to their relatively limited area or areas to spawn. At this time no one knows just how many smelt return each year to spawn. If something were to happen that would reduce the spawning and egg development success for any given year, a significant proportion of the population could be in jeopardy.

Cumulative Effects Analysis

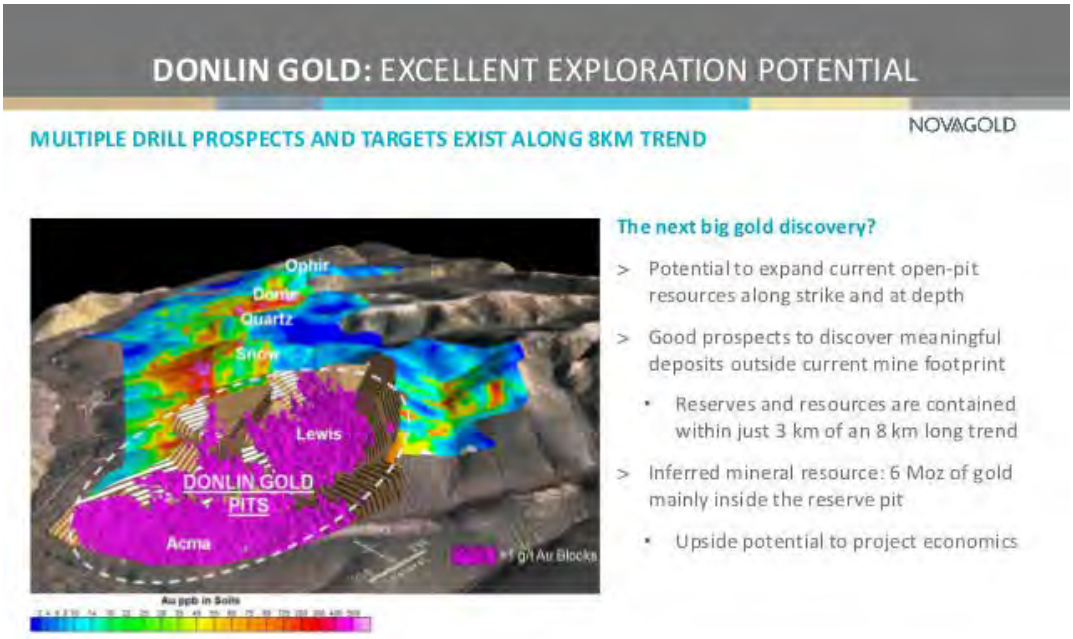
Social Implications

Table 4.2-2 states that since there has not been a formal proposal to develop a borough anywhere within the Kuskokwim drainage, that such a formation would be considered an external action that does not qualify as being reasonably foreseeable.

However, there has been significant effort by people, local governments of the middle Kuskokwim Region and The Kuskokwim Corporation in the past four months looking into the possibility of creating a borough. The general consensus is that the formation of a borough is inevitable if the mine were to be built, while the formation of a borough would have major implications with how schools and local governments are funded.

If a borough were created, then there would be the need for a continued revenue stream upon closure of the proposed Donlin Gold mine. NovaGold, one of the partners in the Donlin Gold project shows potential for additional prospects in the vicinity of the project as shown in the photo below.

SER 14



Section 4-33 states that impacts to groundwater quality "*would range from low to high intensity, be temporary to permanent in duration, localized in extent, and affecting a common to important resources*. *Overall, the additive incremental impacts to groundwater quality attributable to Alternative 2 would be minor to moderate*."

Biological Implications

WAQ 28

If further development were to proceed, that would, at a minimum, have additive impacts on soil disturbance, erosion, surface water and sediment quality, and groundwater quality; none of which are currently addressed in the DEIS.

The KRWC believes that such potential for development should be considered in a cumulative effects analysis, particularly since it would have a further reduction in the amount of water flowing in Crooked Creek. Depending on the implications for a high K factor shown in table 3.13-30, Crooked Creek eventually could lose 50% or more of the water that is critical for salmon and the other fish species that inhabit it.

Bethel Port Facility

TRAN 2

An analysis for the need for an improved or expanded port facility in Bethel seems to be lacking in the DEIS. A poster provided by Donlin Gold on April of 2016 at a meeting in Aniak with a Calista/Lynden logo shows the construction of approximately 600 feet of riprap with a sheet pile bulkhead dock located at the Knik Construction. Such reinforcement of the bank will divert stream channel energy away from the newly constructed section downstream to unprotected banks possibly causing an unknown amount of unnatural erosion that could possibly have significant repercussions with villages like Oscarville…especially considering cumulative effects from further upriver already reinforced sections (i.e., the seawall protecting Bethel).

Such an impact should be addressed in the final EIS.

Sincerely,

/S/

Adrian Boelens

Executive Director

Kuskokwim River Watershed Council

KUSKOKWIM RIVER Watershed Council

February 28, 2017

Mr. Richard Darden

Project Manager

U.S. Army Corps of Engineers

Hello Richard,

I'm glad we had a chance to meet during the week of the Alaska Forum on the Environment.

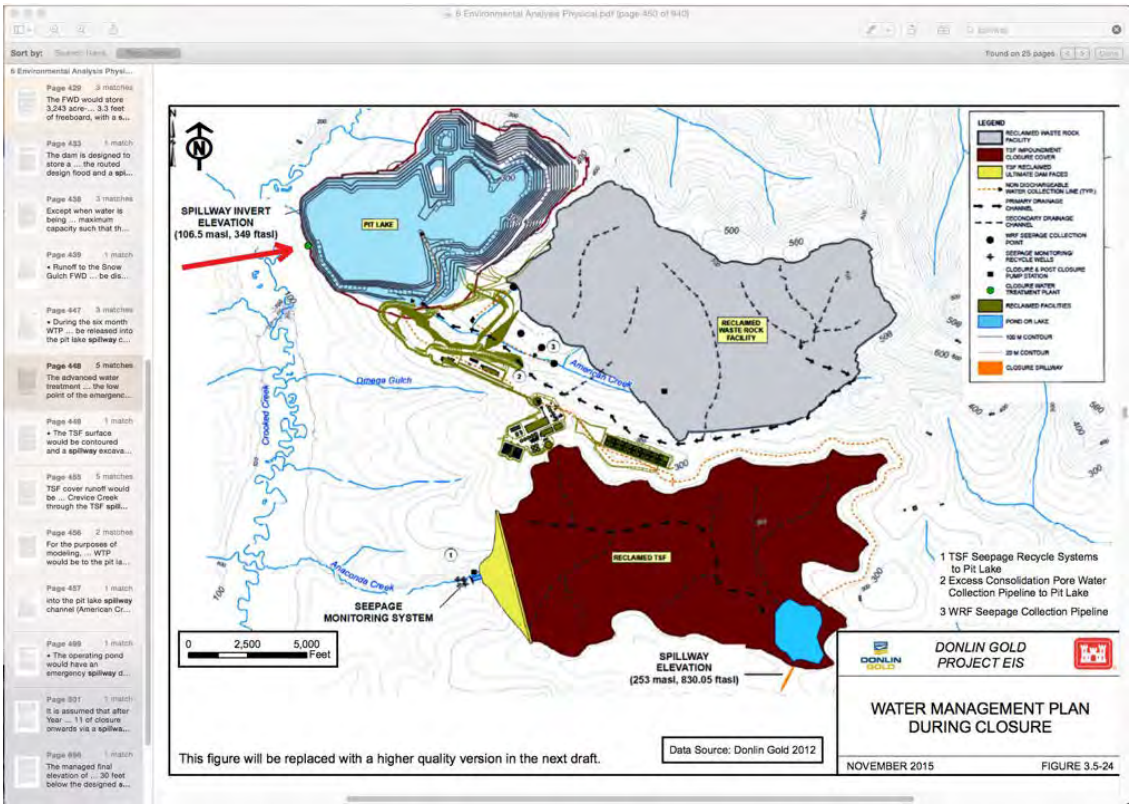
Since that time there have been several occurrences in California and Alaska that have the Watershed Council concerned about certain aspects of the proposed Donlin Gold project and whether or not they'll be fully addressed in the Final Environmental Impact Statement.

One concern is showing up in several locations in California because of the extensive rains they've received - most notably the near miss of the infrastructure failure at the Oroville Dam. Had the water behind the dam been a little higher, the emergency spillway would have failed causing a potentially catastrophic disaster. The word potential does not do justice for what almost happened. The following pictures come closer to showing what can happen when mother nature throws hydrologists and engineers a curve ball.

Photo: Kelly M. Grow, California Department Of Water Resources

No one knows at this time, at least to our knowledge, what caused the main concrete spillway to erode. But it was the malfunction of it that led to the potential collapse of the emergency spillway, which was never tested or used over the dam's fifty-year history. I'm not a hydrologist, but I had a suspicion that if you run large quantities of water over steep, natural ground (much of it covered only with scattered brush and trees) that substantial erosion would occur. During the emergency spillway operation, engineers estimated that they were within one-hour of losing the entire emergency spillway as erosion quickly began head cutting up to within fifty feet of the concrete base as shown in the photo below.

Our main concern with the Donlin project is for a failure of the water treatment plant associated with the pit lake once it fills with water…or its inability to keep up with an anomalous spring runoff or a series of excessive rain events much like California has seen. Of critical import is that the water will need to be treated for a long, long time…if not forever.



WAQ 10

The DEIS (3.5-88) states: *The emergency spillway would be constructed in the west corner of the pit and discharge to Crooked Creek (Figure 3.5-24). The spillway would be designed to convey the PMF and to prevent fish passage from Crooked Creek into the pit lake (SRK 2012b). In the event that pumping was interrupted, it is estimated that the length of time it would take for the pit lake to fill from the typical annual beginning of runoff elevation (i.e. about elevation 328 feet) to the spillway crest elevation (i.e. about elevation 359 feet) would be about 6 years, assuming average precipitation conditions (BGC 2015l). Put another way, the storage volume available between an elevation of 328 feet and an elevation of 359 feet is sufficient to contain the runoff from the PMP 24-hour precipitation, plus the runoff from the 100-year annual wet year plus the runoff from 3 average precipitation years, assuming the pumping operation is not restored. Because this would allow more than adequate time for the pumping system or water treatment plant to be repaired, even allowing for a combination of extreme events, a discharge to Crooked Creek through the emergency spillway from the mine pit lake is considered to be very unlikely. Thus, adverse impacts to Crooked Creek are not expected since the pit lake freeboard, the pumping system, and the advanced water treatment plant would be adequate to prevent overflow to Crooked Creek during the expected range of conditions.*

WAQ 10

However, Dr. Tom Myers in his *Technical Memorandum Review of the Draft Supplemental Environmental Impact Statement*, contends that depending on actual conductivity rates and other uncertainties (e.g., climate change), the pump and water treatment facility may not be able to keep up with the inflow into the pit lake. His concern, like ours, is that treatment of the pit lake water may be necessary for ever.

Failure of the pit lake spillway would not cause the concern for life or property like at the Oroville Dam, and that's not our biggest concern. Just overtopping of toxic water and it entering Crooked Creek would wreak havoc with the biota and likely have negative implications in the Kuskokwim River…that is the worst-case scenario that is not out of the realm of possibility.

WAQ 18

A similar argument for inaccurately modeling storm runoff could be made for the tailings storage facility - mostly while the mine is in operation; as seen from the Mount Polley and Bento Rodrigues dam disasters, modern day structures are known to fail in major ways.

As far as risks being explained in the EIS, the KRWC has a concern that worst-case scenarios are not fully considered in the draft document. What's more disconcerting to us who live in the Kuskokwim is the fact that Donlin Gold is not in favor of such analyses. Here is an excerpt from a scoping letter Stan Foo supplied to the Corps in March of 2013: *The CEQ regulations and relevant judicial decisions require consideration of reasonably foreseeable impact; however, agencies do not have to require remote and highly speculative consequences. This distinction is reflected in CEQ guidance which no longer requires evaluation of the so-called "worst case scenario" (see question 21 "Worst-Case Analysis" was withdrawn). Some participants at the scoping meetings stated that the EIS needs to address catastrophic failures such as pipeline breaks or dam failures. In considering the extent to which issues such as these should be addressed in the EIS, if at all, we encourage the Corps to give due consideration to those impacts which are foreseeable and essential to the consideration of alternatives versus those which are remote and highly speculative. For example, we know of no other EISs that evaluated impacts due to a tailings dam failure, and we think that scenario should not be evaluated in the Donlin Gold EIS.*

As noted, we most certainly do not believe that such failures are highly speculative events as the folks from Donlin Gold assert given that water treatment may be necessary in perpetuity. It's hard to wrap one's head around something that will take place forever (like the seamless operation of a piece of machinery in a remote location that must be regularly serviced and maintained), especially when you consider that over time, mechanical equipment tends to wear and break down. One only has to watch the nightly news to see how often aging infrastructure causes not only environmental damage, but harm to life and property.

****

FSR 1

Now – on to the other concern that is driven by a recent incident dealing with development and concern for a potentially negative consequence; this one in Cook Inlet less than 300-miles to the east. The Hilcorp pipeline that has been leaking since at least February 7th has not been repaired due to difficult winter conditions. This mishap is located in Cook Inlet which, by Kuskokwim River standards, is rather easy to access and in close proximity to industrial emergency response equipment.

If a similar situation were to occur in the remote Kuskokwim once a pipe is in place, it would be that much more difficult to access and effectively repair the damaged pipe. To add substantially to the

difficulty in repairing such a failure is the fact that the inlet does not have the constant current that a flowing river like the Kuskokwim River is subject to. Consequently, erosion would be a significant factor to contend with.

FSR 1

The Kuskokwim River Watershed Council believes that the people of the region need to understand the true tradeoffs in order to make an informed decision as to whether the concerns outweigh the benefits for a project like this. Consequently, we believe that it's imperative that worst-case scenarios for failures of the pit lake water treatment plant and a subsequent overtopping of the pit lake spillway, the tailings dam, and natural gas pipeline under the Kuskokwim River be incorporated into the Final Environmental Impact Statement.

/S/

Dave Cannon

Solid Waste/Water Quality Coordinator

Kuskokwim River Watershed Council

LABORERS' INTERNATIONAL
UNION OF NORTH AMERICA
LOCAL 341

2501 Commercial Drive, Anchorage, AK 99501
Phone (907) 341-0341 Fax (907) 341-0342
www.local341.com

January 28, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

RE: Laborers' Local 341's favorable support for the Donlin Gold project

To whom it may concern:

On behalf of Laborers' Local 341 and its more than 2,200 members, I write in support of the Donlin Gold project.

LAND 1

The land and resources belong to the shareholders of The Kuskokwim Corporation (TKC) and Calista. During the Alaska Natives Claims Settlement Act (ANCSA), Calista selected the mineral rights at Donlin Gold, and TKC selected the surface estate so their shareholders would benefit from the development and production of the mine. This economic opportunity for shareholders and descendants is precisely the purpose behind Congress' grant of entitlement of these lands to Calista and TKC. Furthermore, it is TKC's and Calista's right and duty to support development of their natural resources for the benefit of the people of the region.

SER 12

During this uncertain economic times that Alaska is facing, a project like this would provide a significant and positive impact in the region and throughout the State. Approximately 3,000 jobs during the four years of construction would be created and between 600-1,200 jobs for the remaining 27.5 years of the mine would be to support the project. These are direct employment numbers, many additional indirect business opportunities are anticipated in areas such as logistics, transportation, training, education and healthcare.

PUB 6

Donlin Gold has conducted extensive studies to develop an environmentally and socially responsible gold mine project. The natural gas pipeline proposal is a result of conversations with the region about reducing the amount of diesel barges on the Kuskokwim River. The use of natural gas for power generation, instead of diesel, will also reduce air emissions.

SER 20

I hope you consider the benefits for the State and the royalties paid to statewide Alaska Native corporations with the Donlin project and approve it moving forward.

Sincerely,

A.J. Merrick II

A.J. "Joey" Merrick II
Business Manager/Secretary-Treasurer
Laborers' Local 341

JOEY MERRICK
BUSINESS MANAGER SECRETARY-TREASURER

LARRY MOONEY
PRESIDENT

STACY ALLEN
VICE PRESIDENT

PETE DAHL
BUSINESS AGENT

SERGIO ACUÑA
BUSINESS AGENT

BRANDON CALCATERRA
BUSINESS AGENT

From:	Brandon Calcaterra
To:	donlingoldeis, POA
Cc:	Joey Merrick
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Tuesday, May 31, 2016 4:11:39 PM
Attachments:	Donlin Gold Army Engineers EIS .pdf

Please see our attached comment regarding the Donlin Gold Project.

Thank you,

Brandon Calcaterra
Business Representative
Laborers' Local 341
Direct: (907) 341-0306
Main: (907) 341-0341
Fax: (907) 341-0342

LABORERS' INTERNATIONAL UNION OF NORTH AMERICA
LOCAL 341
2501 Commercial Drive, Anchorage, AK 99501
Phone (907) 341-0341 Fax (907) 341-0342
www.local341.com

May 31, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

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IDIT 2

Donlin Gold has conducted extensive studies to develop an environmentally and socially responsible gold mine project. The proposed pipeline in Alternative 2 minimizes any impacts to the Iditarod National Historic Trail with no impacts to the actual Iditarod Sled Dog race. Also, the construction would be sensitive to the timing of the Iditarod and Iron Dog races as well as hunting season.

I hope you consider the benefits for the State and the economic impacts through lower cost energy options to the region with the Donlin Gold project and approve it moving forward.

Sincerely,

A.J. Merrick II

A.J. "Joey" Merrick II
Business Manager/Secretary-Treasurer
Laborers' Local 341

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BUSINESS AGENT

SERGIO ACUÑA
BUSINESS AGENT

BRANDON CALCATERRA
BUSINESS AGENT

From:	Evans, Jessica
To:	Volper, Kaley
Subject:	FW: Donlin Gold Draft EIS comment
Date:	Wednesday, April 26, 2017 3:44:47 PM
Attachments:	Donlin Gold Army Engineers EIS .pdf

Jessica

Jessica Evans
Environmental Scientist/Planner
D 1-907-261-6764
jessica.evans@aecom.com

AECOM
700 G Street, Suite 500, Anchorage, Alaska 99501
T 1-907-562-3366 F 1-907-562-1297
www.aecom.com

From: Brandon Calcaterra [mailto:bcalcaterra@local341.com]
Sent: Tuesday, May 31, 2016 4:05 PM
To: donlingoldeis, POA
Cc: Joey Merrick
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

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Thank you,

Brandon Calcaterra
Business Representative
Laborers' Local 341
Direct: (907) 341-0306
Main: (907) 341-0341
Fax: (907) 341-0342

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May 31, 2016

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PETE DAHL
BUSINESS AGENT

SERGIO ACUÑA
BUSINESS AGENT

BRANDON CALCATERRA
BUSINESS AGENT

From: Bellion, Tara
To: Evans, Jessica
Subject: FW: [EXTERNAL] Comment on Donlin Gold Proposed Pipeline Project
Date: Tuesday, March 08, 2016 9:54:28 AM

-----Original Message-----
From: Bryce Lake [mailto:bryce_15a@yahoo.com]
Sent: Monday, March 07, 2016 5:30 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Comment on Donlin Gold Proposed Pipeline Project

Comment on Donlin Gold Project Proposed Pipeline

Here's a couple of things to consider:

WILD 1

I would like to bring up that the proposed pipeline corridor could impact local moose and wolf interactions in a way that maybe hasn't yet been considered, and that this could have implications for human hunters. Here's the logic. Moose are attracted to artificial linear corridors running through a forest, such as those built to bury a pipeline. Not too surprising really, as these corridors provide easier walking and access to new food sources. Wolves catch on that this new landscape feature also provides easier and faster walking, and additionally, contains more moose than the surrounding landscape average. Contact between the two goes up, with the end result being more moose killed on a local scale. Over time, moose might catch on and start to avoid the corridor all together, to the detriment of those persons (or wolves) who might happen to hunt in the corridor vicinity. For the naysayers, these exact scenarios have played out between caribou and wolves in the Alberta oil sands region. For more information, visit Blockedhttp://sciencecases.lib.buffalo.edu/cs/files/caribou.pdf or google search "Alberta sands linear corridor wolf caribou. In Alaska, the trans-Alaska pipeline could be promoted as evidence that moose and wolves can co-occur around a pipeline without impacts. However, where the pipeline runs through forest, it is also adjacent to a major highway and several communities, a much different situation than what is proposed. Anyway, good to think things through and to know about the possibility of something like this ahead of time. I suggest the proposed EIS should at least acknowledge this possibility.

LAND 3

In addition, ATV/UTV and snowmachine users will undoubtedly use the corridor (whether legally or illegally if their use is not authorized). They will carve up the landscape with feeder trails that connect to the main pipeline corridor to get greater access. In summer, particularly, their trails will become quickly evident. Winter trails will take longer to appear, but over time, and with enough use, they will. The proposed pipeline corridor contains lowland/swampy habitat where scars can occur after just a single pass. This exact trail scar scenario has played out elsewhere in Alaska: Alaska game management units 11, 13, 20D, and 20A, for example. Then the State of Alaska, Department of Natural Resources, has to come in and regulate these activities, at a cost to the state. I feel like this could be summed up as another case of the old adage, you don't get something for nothing.

Bryce Lake
Fairbanks, Alaska

Smith, Neal

From: John Lamborn <jlamborn@cruzconstruct.com>
Sent: Friday, April 22, 2016 3:51 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To whom it may concern.

NSB 1

I support the Donlin Gold project. It has had a positive impact on the Alaska community. The project is run by responsible people and are very cognizant of the world around them. This will be a win – win for the State of Alaska, our kids and our grand kids and their kids too.

Sincerely,

John Lamborn

Smith, Neal

From: C Lamborn <jklamborn@mtaonline.net>
Sent: Friday, April 22, 2016 2:53 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To whom it may concern:

NSB 1

I fully support this project. Donlin has proven they are community-driven and have contributed greatly to the whole of Alaska.

From: John Lamborn
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Creekl Mine
Date: Friday, May 27, 2016 9:59:54 PM

NSB 1

To whom it may concern,

I support the Donlin Creek Mine. There is no reason to oppose this mine. Donlin has been a good steward of the land and have employed local people since the inception of the project. This project needs to go forward for the good of Alaska and the Kuskoquim valley.

Sincerely,

John Lamborn

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AK REGULATORY

April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15 Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to
IDIT 1 known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims
LAND 1 Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Signature

RICHARD LANE
Print Name

Bill Lang #8841
Anchorage Correction Complex
1400 EAST 4th AVE.
Anchorage, Alaska 99501

ANCHORAGE AK 995
09 DEC 2015 PM 1 L

Keith Gordon
Project Manager Army Corps of Engineers
CEPOA-Rd-Gordon
P.O. Box # 6898
JBER, AK 99506-0898

99506+0898

Billy L Ang #8841
1400 EAST 4th AVE.
Anchorage, Alaska
99501

USACE
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DEC 11 2015
AK REGULATORY

12/8/15

Keith Gordon,
Project Manager
Army Corps of Engineers
CEPOA-RD-Gordon
P.O.Box #6898
JBER, AK 99506-0898

Dear Sir, By Way of introduction my name is Billy Lang I am a Veteran of the United State Army National Guards. I read the artical in the Alaskadispatch News about Donlin gold mine, I currently hold (3) Water treatment and (3) Wastewater certifications from California State University. It is my Aim in the next (2) years to complete Industrial Wastewater Treatment I & II in California. I would like to know Which Wastewater treatments System Will be used to operate The Donlin mines, Any available information you can send me will be greatly Appreciated. Thank-you in advance.

WAQ 6

Sincerely,
Billy Lang

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May 19, 2016

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, Alaska 99506-0898

Attn: CEPOA-RD-Gordon

Dear Mr. Gordon,

SER 5

I grew up in Kongiganak and Bethel in the Yukon-Kuskokwim region of Alaska where I raised my children, living in part, from subsistence hunting and fishing. I am one of the lucky ones as two of my children who live in Bethel both have good jobs. Many of the people in our villages are unemployed. That is why I write today in support of the Donlin Gold Mine Project Draft EIS under your consideration. The opportunity for good paying jobs in the region is very important for the future of our youth.

I'm familiar with the project and the company as I had the privilege of working for Donlin Gold for the past five years in community relations and outreach. In that capacity I travelled extensively, to almost thirty villages a year, letting people know about our project. Some had questions and some had concerns.

Many of the youth, anxious for the opportunity to work, asked when training and jobs would be available. Others had concerns about potential impacts to our environment and we let them know about the stringent regulations the federal and state governments have on mining. That knowledge gave some of the residents reassurance and support for the mine. Others, however, oppose mining in general and always will regardless of any reassurance they may have received.

SER 12

Quite frankly many of the people who vehemently oppose the mine are well off. Their children and grandchildren will never have to worry about college expenses or finding good jobs. They are well connected and have the means to buy what they need to subsist with boats, snow machines, four-wheelers, guns, ammunition, nets, camps, and money for fuel.

Others are not and I wonder what good is a river full of fish, moose and caribou in our wilds, and birds in the air if we do not have the means to buy the equipment and tools necessary to access them. The region is divided into two groups, the haves and the have-nots. Unfortunately, the "haves" will be the only ones able to utilize our resources.

To make matters worse, news regarding budget cuts to state and federal spending is foreboding. Community assistance is being drastically reduced and many of the few

SER 12

jobs in our villages are going to be cut even further. How will our communities survive? I live in Bethel and the cost of living is not as high here as it is in the villages. However, basic utilities such as water, sewer, electricity, fuel, rent and mortgage, take at least half of our income. I worry how residents in our villages are going to be able to survive, let alone subsist, once the budget cuts are realized in the next few years.

PHL 8

The Yukon Kuskokwim Health Corporation submitted a resolution opposing the mine based on speculation. One of the issues raised was out-migration of people from our region. Their premise is that people who are trained and have good jobs will no longer want to life in the villages. If the people move, it will be based on recent and future budget cuts to state, federal and city governments, not a project that will offer jobs and contribute to the region's economy.

Furthermore, YKHC is not living up to its mandated duty to the people of the region "working together to achieve excellent health", by not ensuring basic sanitation infrastructure in each village. This seems a more likely reason for people to move. I am sure many of the people who worked at the mine would still live in their villages if these basic rights were provided by their health entities.

The Donlin Gold project will provide up to 3000 jobs during the 3-5 year construction period with an annual payroll of $375 million. Once in production, the project will provide from 600 to1400 jobs, with an annual payroll of $100 million. Donlin Gold has an excellent track record for local hire, as 90% of employees during exploration were shareholders and descendants. Furthermore, Donlin Gold has a commitment to the region to train and hire as many local people as possible. Let's give our people a chance to stay in our region. I urge the Corps to select Alternative 2 in the Donlin Gold DEIS.

Quyana,

Colleen Laraux

Colleen Laraux

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, Alaska 99506-0898

99506$0898 B900

From: Bellion, Tara
To: Evans, Jessica
Subject: FW: Donlin Gold Draft EIS comment
Date: Tuesday, March 08, 2016 9:56:29 AM

-----Original Message-----
From: Dave Larimer [mailto:Dave.Larimer@smmpogo.com]
Sent: Thursday, March 03, 2016 9:29 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

As an Economic Geologist in Alaska, I am extremely well versed in the geology and hydrothermal system of the Donlin Deposit. However more importantly, I understand the economics of what Donlin represents...to the State of Alaska, and to the Yukon Kuskokwim region. I would like to take this opportunity to express my personal support for the Donlin Gold mining project and implore the US. Corps of Engineers logically proceed without political bias in supporting this project.

With extremely lower than favorable oil prices, the State of Alaska is in financial crisis. State funding has been slashed on all fronts, and the University of Alaska, the premier education and research facility just had to reduce their budget below feasible operating levels. The State is in a bind and has a bleak future...however the future of Alaska is much like its past...and that is Mining.

SER 12

The approval of the Donlin project will stimulate and help create new jobs to one of the poorest regions in Alaska. Additionally the infrastructure plans for energy and roads will greatly support local business in the local region.

In the years that I have tracked this project I have seen nothing other than ethically responsible development plans from Donlin Gold company. Mining can and must be conducted correctly and there is no doubt in my mind that the current oversite is more than sufficient to advance this project ethically.

As I stated above Donlin is more than just another gold mine. It is a model of hope and increased prosperity for the State and for all Alaskans during this period of financial instability.

DAVE LARIMER

Dave Larimer
Chief Geologist

Sumitomo Metal Mining Pogo LLC.
Direct Phone: +1.907.895.2725
Cell:907.388.3455

Pogo Radio Channel: Exploration
eMail: Dave.Larimer@smmpogo.com

From: Frank Lawerence
To: donlingoldeis, POA
Subject: [EXTERNAL] I am opposed to the Donlin Mine
Date: Wednesday, May 25, 2016 9:53:12 PM

SVE 2

My name is Frank Lawrence. I am a resident of Bethel, Alaska. I am against the proposed Donlin Mine. I do not believe the HUGE risk is worth the minor temporary gain that might come to this community.

From:	Craig, Bill
To:	Bellion, Tara; Evans, Jessica; Smith, Neal
Subject:	FW: Donlin Gold Draft EIS comment
Date:	Friday, April 22, 2016 8:56:06 AM
Attachments:	image001.png

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, April 22, 2016 6:12 AM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: Alex Leavens [mailto:aleavens@stgincorporated.com]
Sent: Thursday, April 21, 2016 2:42 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To whom it may concern,

SER 8 I am writing this email in support of the Donlin Gold Mine project. Employment in this region of Alaska can be hard to come by making this mine a wealth of opportunities to allow local folks to continue their way of life within the Region and keep them from having to relocate to more populated areas seeking employment. This project can expect to provide nearly 3000 jobs in construction and other areas for the first 4 years and continue with a solid workforce of nearly 1000 full time jobs for the lifespan of the mine. The economic boost to the state will be felt on many levels and unmatched in the Region. Not only will jobs be directly created by the mine itself, but the need for more power, transportation, and communications infrastructure will create numerous additional opportunities for both local residents and other businesses that call Alaska home.

SER 6 With a background in both construction and rural utilities I have first-hand witnessed the need for these types of responsible in Region opportunities. I have spent well over 27 years working alongside the people that call this area of the state home. There are daily struggles that we rarely experience in more populated areas and a project like this could bring advancements in not only a highly trained local workforce, but to all facets of local living to include healthcare, education, and safety. I cannot strongly emphasize enough the need for this type of development in rural Alaska.

Donlin Gold has completed extensive studies and worked tirelessly to create methods of operation that make it both environmentally sound , but also a solid socially responsible member of the community. I have had the pleasure to witness first hand on my visit to the mine the steps taken to insure that each and every action is made with forethought and precision. Ideas such as the use of natural gas instead of diesel, constructing an active water treatment plant for discharge water, and the design of an earthquake proof Engineered tailings dam all show Donlin Gold's commitment to the health and safety of not only the people of the Region, but their environment as well.

Please consider these items and how this project will improve the level of being for each person living in

the Region and beyond as this projects moves toward reality. The State of Alaska's future rides on this type of responsible resource development bringing improvements on multiple levels to local communities allowing continued success for their way of life. Please do not hesitate to contact me with any questions or concerns.

Thanks,

Alex Leavens

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''22 CFR Part 125.4 (b) (9) applicable.''

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Donnie
Date: Thursday, February 25, 2016 6:59:56 AM

-----Original Message-----
From: Jeff Lebegue [mailto:jefflbc@xmission.com]
Sent: Thursday, February 18, 2016 7:29 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donnie

NSB 1

Please do not allow this mine to be built.
The preservation of the Historic Iditarod Trail is at stake.

Jeff Lebegue
jefflbc@xmission.com

From:	Klaus Lerch
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Tuesday, May 31, 2016 8:04:45 PM

Dear Sir

I expressing my deepest concerns about the proposed Donlin Gold mine project.

SVE 2 This mine project leaves to much of a nature impact with a scale like that. Mayor long term destruction of the natural habitat and unforeseen impacts to the local inhabitants and wildlife, are only some of the sick and never enough money making methods we see in our society. Money is a big thriving power, and specific in this case puts no consideration for the outcome of our future generations.

DAM 8 Tailings are left behind in an area where earth quakes are very common. Spilling in the waterways where our precious food like salmon lives. Water fowl and other animals will be contaminated in the dead and poisson tailings fluids. There are there FOR EVER.

Please don't allow the farther process of ANY big scale open pit mining like that.

Best regards

Klaus Lerch

This email is free from viruses and malware because avast! Antivirus protection is active.
Blockedhttps://www.avast.com/antivirus

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment
Date: Thursday, February 25, 2016 6:50:47 AM

-----Original Message-----
From: Liebing, Mike BIS [mailto:Mike.Liebing@otis.com]
Sent: Monday, February 15, 2016 12:47 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

I would like to provide my opinion as a member of the public and as a citizen of Alaska. I wish to clearly add my voice in support of the continued responsible development of the Donlin Gold Mine.

I am a 50 + year old life-long Alaskan and have seen both good and bad development of resources within the State. We, as a state have a long tradition of successfully developing natural resources and that track record has led to much prosperity for the people of Alaska as well as enriching the nation by adding to our on shore reserves and production of oil, gas and minerals vital to the security of the nation.

I do not subscribe to the notion that all development and resource extraction is in the long term good, I strongly support this specific project for the following reasons.

1) This project has been developed in harmony and with tremendous input from the local population. They have taken concrete actions to ensure the support from the tribes and villages of the region and conducted themselves with the highest respect for the traditions and cultures of their neighbors.

2) They have consistently sough the highest and best science in developing their plans for the mine development, always selecting the "Best" methodology which is seldom or never the cheapest.

SER 8

3) The economic benefits that this mine will bring to this economically challenged area will not only bring money into an area with few source of income, but will allow the preservation of a way of life that in increasingly difficult to sustain. The exodus from rural to urban Alaska in search of a sustainable economic life is one of the most serious challenges facing our native culture in Alaska

GAS 1

4) This project has the potential to also bring a much more economic energy source (natural gas) to are that is economically crippled by the cost of energy.

This project, if permitted to continue through to production, will be a model to which other mines will be compared and potentially raise the standards for all other areas. The developers of this project deserve the right to pursue this full force under the watchful eyes of regulator at both the state and federal level. The legally established processes for this development must be allowed to continue and not be derailed by forces outside the area being effected who consistently oppose any significant development on ideology rather than any concrete basis is science of law.

From: Tad Lindley
To: donlingoldeis, POA
Subject: [EXTERNAL] In support of Donlin Gold
Date: Wednesday, June 01, 2016 8:26:12 AM

Dear Army Corps of Engineers-

The economy in our region is underwritten largely by grants and transfer payments. While many people are still hard working, welfare is destroying the lives of many others. The Donlin Gold project offers an opportunity for every person in our regions who wants to work to do so. Currently we suffer from some of the highest poverty and suicide rates in the nation. An export industry like mining offers a way to reverse both of these trends by putting adults back to work in an industry with rigid drug and alcohol testing and a work schedule that allows people to still participate in traditional subsistence activities.

SER 10

I have lived in Bethel for over twenty years and intend to do so indefinitely. I am actively involved in subsistence activities. Thank you for taking the time to read my letter of support.

Theodore "Tad" Lindley
PO Box 1584
Bethel, AK
99559

From: Barbara Liu
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Tuesday, May 31, 2016 11:14:17 PM

Hello,
I understand today is the last day to comment on this very important issue. I understand ten Kuskokwim village corporations upriver consented with Calista regional corporation for Donlin to explore for subsurface minerals and potentially there is money to be had from it. As profit companies, I know the intent is to extract mineral that will affect not just the location where it's developed to do that. Casings will be stored underground, etc. As a landowner, Calista shareholder, and having regional interest to keep our region wilderness and pristine, I oppose such a project going full blown to environmentally pollute the air, water, and land. Land is precious to us, the animals, birds, plants, trees and insects. Clean water is important for the fish and to us especially today with drought and the levels of acidification in the ocean. Several years ago, I wrote to President Obama opposing off shore arctic ocean drilling because the Inupiat people have depended on Bowhead Whales for thousands of years. I write to you now opposing Donlin Gold mining because the Yupiit people have depended on Kuskokwim Salmon for thousands of years. By stopping your exploration, these two waterways sanctuaries to whales and salmon and I add sanctuary to more than whales and salmon will continue to be wilderness, pristine, and blessing to its inhabitants in our great state. Let's all endeavor to keep it that way without tearing through with your ships, barges, drills, chemicals, and waste. Thank you for your consideration to hear what I had to say today. Please take into account people's comment on this serious concern.

SVE 4

Sincerely,
Barbara Liu
Box 1724
Bethel, Alaska 99559

From: Rebecca Logan
To: donlingoldeis, POA
Subject: [EXTERNAL] DEIS for Donlin Gold Project
Date: Tuesday, April 26, 2016 8:34:11 AM

To Whom It May Concern:

On behalf of 600 Alaskan companies and their 30,000 employees, I am writing to encourage you to choose Alternative 2 from the DEIS for the Donlin Gold Project.

- The social and economic benefits of this project to the region, state, and to the nation;
  - Through ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations.
  - The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the YK region and fund traditional subsistence activities.

SER 1

  - Rural Alaska is being impacted most by the reduction of state and federal dollars. Alternative 1 (the no project alternative) will likely have a negative impact on the YK region.

- The potential for lower cost energy options to the region such as the proposed natural gas pipeline which will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YK region.
- Job opportunities which will likely lead to reduced out-migration, helping to maintain rural schools and culture, including traditional ways of life.
- The Donlin Gold project could produce gold for 27.5 years, while providing well-paying jobs in a region where few other opportunities exist.
- The State of Alaska Department of Natural Resources enforces stringent regulations overseeing mining activities statewide that effectively protect the environment, wildlife, and human health.
- New mining operations in the area, should they come to fruition, can be of great economic benefit to Alaska and local communities, as well as Alaska Native corporations and shareholders.
- This project will likely provide responsible economic prospects for this region and for Alaska, while protecting the subsistence resources.
- The proposed pipeline in Alternative 2 is designed to minimize impacts on the Iditarod National Historic Trail. There would be insignificant impacts to the trail and no impacts to the Iditarod Sled Dog race.
- Construction of the gas pipeline would be sensitive to the timing of the Iditarod and Iron Dog races as well as hunting season.
- The EIS process gives Alaskans and other stakeholders adequate time to fully review the project documents, and to provide input on the plans.
- The project will offer long-term opportunities for rural Alaskans to develop skills and to enable them to not only continue living in rural Alaska, but to prosper.
- An estimated 3,000 jobs will be created during the approximate four-year construction phase, and between 600 to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the economy of the region and the state.

- Donlin Gold's project description demonstrates an understanding of environmental concerns, and features vigorous environmental management principles.
- Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources.

Thank you for your consideration -

Rebecca Logan
General Manager
Alaska Support Industry Alliance
563-2226
351-0970 cell
rlogan@alaskaalliance.com
Blockedwww.alaskaalliance.com

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

I write to express my opposition to to Donlin Gold Mine. I've been told my comments would be taken more seriously if I cited sections in the DEIS. I have borrowed these volumes but the task of reading them + deciphering the technological information is daunting. I wish I had more time. I'd particularly like to be more informed about the pit lake - that is a very worrisome prospect to me. But the public comment period is up today + I'm out of time to read more.

WAQ 11

From all I have read + heard so far, there is a risk that subsistence activities and the environment would be negatively affected. That prospect makes the cost outweigh the benefit. ~~Nothing is~~ No amount of money or jobs are worth hurting the land.

SVE 6

Carrie Longpre
676-0645

I am opposed.

Carrie Longpre
PO Box 184
Aniak, AK 99557

ANIAK, ALASKA
FROM ME TO YOU
MAY 31 2016
FOREVER USA

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

USACE
RECEIVED
JUN 02 2016
REGULATORY
AK

From:	BOB LOPETRONE
To:	EIScomments@DonlinGoldEis.com
Subject:	Donlin Gold
Date:	Thursday, February 18, 2016 8:58:06 AM

Hello; I would like to write in favor of the Donlin Gold project. There are many reasons why we believe that this project should be permitted.

1.The State of Alaska needs resource development to maintain a sound economy.

2. There are very few high paying jobs in interior Alaska for the people there to feed their families, which would lead to the better well being for all in concern.

SER 4 3. With declining oil revenues on the North Slope this project will help keep some workers from having to rely on public assistance.

PHL 3 4. The project in the Kuskokwim rejoin (may) by giving some a way to support their needs and a sense of purpose and wellbeing, help with the rate of alcoholism and suicide rate in remote Alaska. This remains to be seen.

5. Alaska is the most scrutinized place on earth for the environmental community so there will be many assurances that state and federal agencies do their respective jobs well.

HAB 1 6.The natural gas line needed to power the project from Cook Inlet to said project can be done to limit destruction of habitat along the way.

PAA 3 7. Natural gas is the least harmful product to ship long distance over the tundra, If a leak were to occur it would not do any damage like oil and there would not be any transmission lines run overland.

8.We believe that our natural gifts were put on this earth to be used "not" abused and development in the 2016 era can and should be done in a responsible way, the rape and pillage days of old are over.

9. There are projects in our state that have demonstrated that the Donlin project can be done with proper safeguards to benefit all in concern.

Thank you Bob Lopetrone Anchorage Alaska

From: Joe Lucas
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Friday, April 29, 2016 9:01:43 AM

Good Morning, Mr. Gordon.

I am writing to comment on the Draft Environmental Impact Statement (DEIS) for the Donlin Gold Project. The DEIS appears thorough and informative while presenting the project in manner that is easy to read and understand.

The Project is designed to meet or exceed the stringent requirements of relevant environmental laws and regulations while providing social and economic benefits the region, state, and to the nation such as the following;

SER 2 • Through ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold Project will provide revenue to all Alaska Native regional and village corporations.

SER 5 • The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the YK region and fund traditional subsistence activities.

SER 1 • The potential for lower cost energy options to the region such as the proposed natural gas pipeline which will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YK region.

SER 18 • Job opportunities which will likely lead to reduced out-migration, helping to maintain rural schools and culture, including traditional ways of life.

Rural Alaska is being impacted most by the reduction of state and federal dollars. Alternative 1 (the no project alternative) will likely have a negative impact on the YK region.

For these reasons, I support Alternative 2, the applicant's proposed action.

Thank you for the opportunity to comment,

William Lucas

Apartment #6
115 E. Potter Drive
Anchorage, AK 99518

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RECEIVED
APR 19 2016
AK REGULATORY

April 18, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Dear Mr. Gordon,

NSB 1

My name is Marlis Luke. I was born in Bethel, Alaska and lived in Mt. Village majority of my youth. I am a Calista Corporation Descendant and currently work for Calista as an executive assistant.

Growing up in Mt. Village, my family depended on subsistence hunting and fishing for their livelihood. Every year we put hundreds of fish away for winter, berry picked, ice fished, moose hunted, trapped rabbit, duck and ptarmigan hunted and gathered wild vegetables from the land.

I support Alternative 2 in the Draft EIS for the Donlin Gold Mine Project. I believe it's a project that will be done in an environmentally responsible manner with respect for our land, our fish and game, and our subsistence way of living. What's more the project will provide the means for our people to maintain our way of life by providing opportunities with good paying jobs that will allow us to pay for the fuel, equipment and tools we use for subsistence activities.

Having grown up in the YK region, and as a Calista Descendant, I am knowledgeable of the needs of the YK region. With many struggling for a consistent source of income in the YK region, I believe we need Donlin Gold and the economic stability it could bring to the region.

The Donlin Gold project has been a long time coming allowing time for due diligence in planning for construction, production and closure. Now is the time to move forward with the project for the benefit of our people. Your consideration is appreciated.

Sincerely,

Marlis Luke

Marlis Luke

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

99506#0898 B900

Smith, Neal

From: S and C Lyman <weety2009@hotmail.com>
Sent: Sunday, April 24, 2016 12:08 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

NSB 1

Dear Corp of Engineers,

My family and I would like to express our support for the Donlin Gold Project.

When I was born in 1949, and during the 1950's, and 60's my father operated the Decoursey mine located some five miles Northwest of Donlin, the Snow Gulch placer located three miles North, and the Red Devil mine located thirty miles East. Upon leaving the immediate area in 1965, my father moved his mining expertise a hundred miles Northeast to White Mountain, where he died in 1974 and is buried only a few miles from the natural gas pipeline route proposed by Donlin.

I inherited my father's love of mining and came back to Snow Gulch in 1980 to continue his placer operation to this day. My family and I are still here after 36 years, but now it is time to retire.
I know the area, know the people, and have seen the benefits of industry. We are extremely fortunate to have a mine-able resource in our area to allow for further industrial growth. It would be a shame not to take advantage of this golden opportunity in an area where jobs are in such short supply.

My family and I have watched this project from it's inception. We have marveled at how thorough Donlin Gold has been in researching what would be the best way to proceed, while taking into consideration all of the public input, and what is best for the environment unique to our Kuskokwim region. We feel that Donlin Gold has proven itself to be a responsible company who will be able to properly care for the environment while running the mine.

It is our hope that the Donlin project will continue forward, knowing the guaranteed benefits to the people in the region will be positive and far reaching.

Sincerely, Spencer, Carolyn, Aurora, and Icey Lyman

From:	Jeanine St. John
To:	donlingoldeis, POA
Cc:	Jeanine St. John
Subject:	[EXTERNAL] Comments - Donlin DEIS
Date:	Friday, May 27, 2016 10:17:45 AM
Attachments:	Donlin - DEIS Comments.pdf

Please see attached.
Thank you,

Jeanine M. St. John
Vice President
6400 S. Airpark Place Suite 1
Anchorage, AK 99502
(907)249-0215
Mobile (907)250-4038
Email: jjohn@lynden.com

Description: Lynden-Tagline

May 27, 2016

Lynden Incorporated
6400 South Airpark Place
Anchorage, AK 99502
(907) 245-1544
Fax: (907) 245-1744

Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Via email: POA.donlingoldeis@usace.army.mil

RE: Donlin DEIS

Lynden is a multi-modal transportation and logistics company, with over 900 Alaska employees, a history of scheduled service to Alaska starting in 1954, and extensive activity throughout the state of Alaska, including support for all segments of the economy. Lynden has provided transportation services for the resource industry including significant logistics support for virtually every project in Alaska. Our company benefits both directly and indirectly from increase resource development in the form of continued jobs and transportation services.

We are writing to express Lynden's support of Alternative 2-Donlin Gold's proposed project.

We have been working with the Donlin team, including, TKC, Calista, and multiple contractors for many years regarding the logistics of supporting such a large infrastructure and mining project in a very remote location. During many discussions, we have been supportive of finding economic, safe, viable ways to help bring the project to production.

Our experience working in the area includes over 40 years of barging operations both into Bethel, and the various villages and locations on the Kuskokwim River from the mouth of the Kuskokwim to McGrath. We have operated throughout Western Alaska – along all of the major river systems.

We provide multiple trips, including ocean-going tugs and barges, river tugs/barges/landing craft, and hovercraft every year, and have done so safely and without a spill.

BARG 5

There has been noted concern for the excess volumes of barge traffic that may come as a result of the construction and development of this mine. However, we want to point out that our experience demonstrates that the actual barge traffic was significantly more from the 1970's-1990's, and that in fact, the current volumes we are seeing are substantially diminished due to the increased technology and completion of many of the larger airstrips in the interior along the Kuskokwim River. The volume proposed by the mine project is well within what we consider safe for commercial operations interacting with personal use on the Kuskokwim River.

We have moved hundreds of thousands of tons of rock/aggregate from material sites in Aniak and Kalskag to various villages on the Kuskokwim River. Additionally, we support projects throughout Western Alaska. As an example of our experience, this year, we are hauling 384,000 tons of aggregate in Western Alaska (286,000 tons to Hooper Bay, 18,000 tons to Shishmaref, and up to 20,000 tons to Bethel). We study the river and track the situation on the river daily during our operating season. This information is critical for our crews to operate safely, and our crews take pride in being safe and efficient in all our operations.

Lynden through its subsidiary, Alaska Marine Lines, is the primary carrier in Western Alaska. Alaska Marine Lines provides regularly scheduled seasonal service to approximately 60 individual communities, most of which are remote and located on undeveloped waterways.

From a safety perspective, Lynden companies' operate with a stringent Safety Management System, which includes systems and procedures for safe operations, spill response, and annual crew training with the latest information and refresher training. In addition to our operations and training, we belong to Alaska Chadux for response support in the region.

TRAN 5

An example of our experience in working through local concerns includes the operation of our hovercraft. The vessel has been delivering mail and other cargo along the Kuskokwim since 1997. The proposed operating plan was met some concern by the local residents, and as a result, an Environmental Assessment was completed. The assessment included a noise study to address concerns. The result of that study by the DOT (for the USPS) was a finding of no significant impact, and the rules for operations were established and set in place. We have been consistently operating in concert with the other traffic on the Kuskokwim River since our start-up.

Our crew includes local personnel, many with over 20 years of experience operating in the marine environment. One of the most respected captains in the region, "Took" Laraux has been working for us since the late 90's. We strive to have the best people, with the safest operation, and top-notch gear providing service to the local communities up and down the Kuskokwim River.

We have been involved with most of the recommendations regarding the type of tugs and barges, river conditions, and commodities that would be needed to support such a large mine. We echo the comments and excitement of our local employees that development of the mine in the area can be done safely, supported efficiently, and will provide excellent job opportunities for our employees, their families and neighbors in the area.

We are available at any time for consultation or discussion regarding our experience and the anticipated logistics requirements of supporting this mine. Please do not hesitate to contact the Lynden team if additional transportation and logistics information is required. I am best contacted via the following email, stauffer@lynden.com

Sincerely,

Larry Stauffer
Vice President - Marine

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APR 22 2016
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Neil MacKinnon
1114 Glacier Ave.
Juneau, Alaska 99801

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

April 18

, 2016

Greetings,

I am a fourth generation Alaskan that has hunted, fished, subsisted, worked and raised a family in Alaska. I fully support Donlin Golds' Alternative 2 proposal to develop a world class mine on Native Corporation lands in the Kuskokwim. The lands were selected by the Native people of the region so that their shareholders would benefit from the development and production of the mine. Precisely the purpose behind Congress' grant of entitlement of these lands to Calista and the Kuskokwim Corporation.

The proposed mine will generate 3000 construction jobs for four years and then 600 to 1200 good paying year round jobs for the life of the mine. This will be a significant positive impact on the economy of the region and the state. Well-paying meaningful work will allow residents to remain In the Yukon Kuskokwim region and have the cash income to enable and enjoy a subsistence lifestyle.

SER 18 The improved transportation and infrastructure to support the mine will bring with it better services and lower cost energy, goods and services to all residents of the region.

TRAN 5 The projected barge traffic is not at all unreasonable in context with the other traffic (100 to 200 boats) on the river. The Kuskokwim River has historically been used for just such transportation and Donlin's proposal is not a significant increase over existing use or impacts.

This area of Alaska has a long mining history. It needs to continue with the Donlin mine constructed and operated in a safe, environmentally conscious manner. With consideration to bettering the lives of the residents of the region and all of Alaska and the nation for that matter. Donlin's proposal appears to me to meet that threshold and should be permitted as proposed.

Sincerely,

E. Neil MacKinnon

E. NEIL MACKINNON
1114 GLACIER AVENUE
JUNEAU, AK 99801

JUNEAU AK 998
PM
19 APR
201

USACE
ALASKA DISTRICT
CEPOA-RD-GORDON
P.O. BOX 6898
JBER, AK 99506-0898

99506$0898 B900

From:	Colleen Laraux
To:	donlingoldeis, POA; kris_manke@ykhc.org; Colleen Laraux
Subject:	[EXTERNAL] Donlin Gold DEIS Comment
Date:	Tuesday, May 31, 2016 6:18:39 PM

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, Alaska 99506-0898

Attn: CEPOA-RD-Gordon

Dear Mr. Gordon,

Thank you for allowing me this opportunity to comment on the Donlin Gold Project Draft Environmental Impact Statement (EIS). As a business owner In the Yukon-Kuskokwim Region, the mine represents an opportunity for predictability, stability and growth.

In my present position I am in charge of approximately fifty employees at any given time. I moved to Bethel with a plan to change the way things have been done in the past to something that gives to the community rather than just take. By this I mean the goal I set for myself and my core crew was to train the local work force so when we were done here the Local Alaska Native work force would have the knowledge and skill level to do all of the work in this region in house.

I have worked with Alaska Native people for over twenty years now and am also married to a local Alaska Native. It is my belief that one of the largest problems of the region is the loss of self-worth. As a people Alaska Natives are some of the most proud people in the world, and this is one of the many qualities that has allowed them to survive in this region for over a thousand years. But it is also one of the reasons for the self-destruction that is ever apparent in the region. The Government hand-outs that started as a decent program that was set up to help those in need has progressed, like all Government Programs do, to a level where now the Local Alaska Native people have begun to rely on these special needs programs. Not only is this level of spending not sustainable it is ruining a once proud people.

If Donlin Gold is implemented in the correct manner, which I believe they have shown in the past that it will be, this could be the vehicle that helps save not only the region but could lay the ground work for the entire state. Providing people with quality jobs that pay well will not only renew the Local Alaska Natives faith in themselves as a person it will also be one of the first steps in saving the economy of this region. On top of that the tax revenues generated will help make the State's economy much more stable and could very well be the path to a balanced budget.

SER 20

I

What's more, our area is one of the most expensive places to live because of the exorbitant costs to heat our houses and fuel our cars and equipment. The Donlin Gold Mine project will bring infrastructure to the area for possible fuel transportation

SER 18

SER 18

that would save the residents precious dollars.

SER 11

The other opportunities the project brings can make such a big difference to so many people here and does not preclude, but enhances our subsistence way of life. With good paying jobs, residents can purchase the tools and equipment necessary to hunt and fish while sustaining a valuable part of our culture. I read a resolution from one of the local tribal entities that I to this day cannot figure out what they were trying to say. They said something along the lines that Donlin Gold would lead to more out migration of the local employee's. I can guarantee that this would not be the case from personal experience. If you can pay locals a good living wage where they can

SER 8

afford to live in their home village and still get to partake in all of the subsistence activities they will not only stay there, others that have been driven away will return.

Donlin Gold has taken the necessary steps to seek the thoughts and concerns of the people who live here and has been willing to make changes to the project based on those concerns. In addition, the company plans to use state of the art technology and is seeking hundreds of permits to ensure the protection of our subsistence way of life.

SER 5

The project represents a win-win for our region and our people. We can reap the benefits of good jobs, which will enhance our economy, grow our businesses and enrich our lives. There is much at stake in your positive consideration of the Draft EIS for our people. Your thoughtful examination is appreciated.

Sincerely,

Kris Manke

From: akladye
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Creek Alaska Mining EIS statement
Date: Saturday, April 30, 2016 2:29:31 PM

In all respects this project has impressed me very favorably.

Throughout its development to this stage there has been a consistent emphasis on accommodating the local cultures and good safety practices. I can see this approach in the environmental impact statement and have noted the care with which this document has been prepared. I'm convinced that it is well thought out and an appropriate approach to mining this deposit.

SER 18 The economics of Rural Alaska are always quite thin and changes over the last 5 years has made it both more expensive and harder to maintain their life style out here. This project very likely will provide a major improvement for many people, particularly within this region. My observation is that this formation contains less acid forming chemicals and so I feel the impact of these is not too hard to manage.

Jim Manning, Chevak Alaska
907-858-7058

Tyson Marino
930 N. Hickory St
Palmer AK
99645

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Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska
District
CEPOA-RD-Gordon, P.O. Box 6898
JBER, AK 99506-0898

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To whom it may concern,

NSB 1

Donlin Gold has proven that they are committed to responsibly developing the resources at Donlin Gold to positively impact the local communities, the State of Alaska

Thank you in advance for considering this mine and I hope that you approve.

Thanks,

Tyson Marino
907-715-0690

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April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15

Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

IDIT 1

LAND 1

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Signature

JESS MARQUEZ
Print Name

Smith, Neal

From: Mary Martinez <mmartinez@calistacorp.com>
Sent: Wednesday, April 27, 2016 10:20 AM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Attachments: M.Martinez_Comment to Donlin Draft EIS_April 2016.docx.pdf

Please see attachment.

Thank you,

Mary

Mary Martinez
Land Planner
Calista Corporation
[t] 275-2858|[w] www.calistacorp.com

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''22 CFR Part 125.4 (b) (9) applicable.''

April 26, 2016

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, Alaska 99506-0898

Attn: CEPOA-RD-Gordon

Dear Mr. Gordon:

I am an Alaska Native from the Calista region and I am focused on helping my children meet their full potential through education and relevant enrichment programs that expand their experiences and horizons. Earnings from employment at gold mine in the Calista region could help families like mine in the communities in the Calista region support their children in attaining higher education. Many rural communities do not have access to enrichment camps. Donlin can give students in the region such exposure and provide opportunities to youth at an early age to help them aspire to become educated and trained individuals. Students in elementary grades and high school would be able to connect their studies through tours and internships at the mine with future careers in resource development, environmental management and related fields.

SER 6

Dividends Calista pays to its shareholders from profits earned by the mine could lessen the financial burden of higher education and give more students an opportunity to attend universities and training centers in fields of their choice. More students will be able to earn degrees and skills to contribute to the Calista region's economy and to the work force of Alaska. Our family directly benefited from the Donlin gold project while my husband worked in exploration of the project since the project began. The pay check he brought home supported our family of four children to provide for our living expenses and for after school activities to enhance our children's academic skills.

SVE 1

As for the development of a mine in the Calista region, a mining company today must conduct its operations with full disclosure of plans and must use mechanisms and methodologies in its development process that are regulated by law. A mine must adhere to stringent rules and live under the watchful eyes of agencies and submit mandatory reports to them. By submitting our comments to the Draft EIS, people of the Calista region are participating in the mine process. Directors of our regional corporation, who have studied and learned about mine techniques, have participated in negotiating terms we can accept. Along with the stipulations from environmental agencies, Calista region stakeholders will be an additional eye and voice to ensure mine operations are conducted in the most responsible way. For these reasons, I feel confident to support Alternative 2 of the Draft EIS.

Sincerely,

Mary Martinez

Smith, Neal

From: Craig, Bill
Sent: Friday, April 22, 2016 1:14 PM
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: Donlin Gold Draft EIS comment
Attachments: Donlin Gold Support.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, April 22, 2016 12:45 PM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: Mark Erickson [mailto:marke@massexcavation.com]
Sent: Friday, April 22, 2016 9:48 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Please see attached letter in support of Donlin Gold project.

MASS EXCAVATION, INC.

April 22, 2016

US Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Attn: Mr. Keith Gordon, Project Manager

Re: Donlin Gold Project

Subject: Comments on the Draft EIS

Mr. Gordon-

I wanted to take this opportunity to express my support of the Donlin Gold project and encourage you to continue to work with them and the surrounding region to move this important project forward to development. It is very apparent that the developers have worked diligently to develop a very large project that is sensitive to the environmental impacts it will cause and responsive to the communities and region it will reside in.

Very importantly, the social and economic benefits of this project to the region, state, and to the nation include jobs and business opportunities, revenue sharing for Native corporation shareholders, reduced cost of energy and sustainment of native culture. The immense benefits that will culminate in a region that is challenged economically will contribute dramatically to stability for the peoples that leave there.

The work that has been done to ensure an environmentally responsible development is extensive and illustrates a strong commitment to preserve and protect the surrounding area. The mine design incorporates state of the art technology and best practice measures to ensure responsible control of all mining operations and long term stability after the mine is exhausted. The need for significant power has led to developing a solution to import natural gas as a much cleaner alternative than diesel fuel. The natural gas supply and power generation will extend further into the region benefiting the communities with reduced energy costs and cleaner burning fuel.

SER 12 In addition to direct employment and contracting opportunities associated with Donlin Gold, many indirect business opportunities are anticipated in areas such as logistics, transportation, training, education and health care. The sheer magnitude of the project will improve systems that will benefit the communities by greatly reducing costs for goods and services.

The project also follows through on the purpose of the Alaska Native Claims Settlement Act (ANCSA) by developing the natural resources for the benefit of the Native people of the region. Donlin Gold has greatly benefited the region and its peoples during the research and exploratory phases of the project already. It will continue and expand its benefits as it goes forward to development, construction and operational phases. I strongly encourage the Corps of Engineers to continue to move this project forward prudently in cooperation with the developers and the peoples of the region.

Thank you,

Mark J. Erickson
GM, Mass Excavation, Inc.

From: Jaysen Mathiesen
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Thursday, April 21, 2016 10:37:32 AM

To Whom It may Concern

SER 5

We are an Alaskan construction company and would be in favor of this project moving forward as planned.
Based upon the information this would provide a general economic benefit to the local area as well as on the state level. Donlin Gold has been a very good corporate steward and a responsible neighbor to local area and to the state of Alaska and has conducted extensive studies to develop an environmentally and socially responsible gold mine project. In addition, the economic benefits to the local area and to the state overall will have a positive and significant impact for years to come.

Thank you

Jaysen E. Mathiesen
***M**-Alaska Construction, LLC*
3701 Spenard Road
Anchorage, AK 99503
P (907) 277-1946
F (907) 782-4155

From:	donlingoldeis, POA
To:	Craig, Bill
Subject:	FW: [EXTERNAL] Donlin Gold opinion
Date:	Thursday, February 25, 2016 6:52:46 AM

-----Original Message-----
From: Zoey McCallson [mailto:zoey_mccallson@lksd.org]
Sent: Wednesday, February 17, 2016 9:50 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold opinion

Zoey McCallson

PO Box 2807

Bethel, AK 99559

907-545-3862

Zoey_mccallson@lksd.org <mailto:Zoey_mccallson@lksd.org>

February 17, 2016

U.S. Army Corps of Engineers

Blockedwww.poa.usace.army.mil <Blockedhttp://www.poa.usace.army.mil/>

Keith Gordon, Project Manager

Keith.Q.Gordon@usace.army.mil <mailto:Keith.Q.Gordon@usace.army.mil>

907-753-5710

To Whom It May Concern:

My name is Zoey McCallson and I was born and raised in Bethel Alaska, and here's my viewpoint on the Donlin Gold mine.

SER 27

The most prized possession to a native is their fish; their fish is there gold. Donlin Gold, a mining company, claims they're doing a good thing because they will supply jobs for 3,000 people. There are already 10,000 fishing jobs in the Bristol Bay area, many of whom are locals. If the mine kills the fish 10,000 people will lose their jobs. This will leave many people without money or food; mining in this area is a terrible idea.

TWL 1

I don't support the development of the Donlin Gold mine because it risks environmental pollution, the endangerment of species, and the loss of native traditions.

PHL 18

The mine will cause severe environmental damage to our land. Because the minerals desired are so small, large amounts of ore will be needed to be mined by digging up the land. Much of the ground that will be dug up will be contaminated, if the tailings had even a minor deficiency in it's storage it can spread through the groundwater and contaminate the land and water. This would be tragic for many of our families who survive off of the land. Donlin Gold claims that this is safe and that they will close the mine after 25 years and let things grow back naturally. What they didn't tell us is the contamination will remain active for decades or even centuries after the mine closes.

FISH 9

All the pollution endangers the species that many locals survive off of for subsistence. Tom Quinn, a wildlife professor of the University of Washington, states that contamination in small concentrations is dangerous to salmon. Their senses are weakened leaving them vulnerable, and large amounts of contamination will kill them. He also explained that the water from the stream would need to be taken out, leaving the spawning stream dry. Without a spawning stream we'll have no salmon, I can't imagine a summer without the smell of smoked fish and a freezer full of food for the winter. Salmon are the food source for bears, eagles, whales and much more, the mine will end up killing all of the wildlife.

TWL 1

Animals are also the food source for many native Alaskans and locals, without them many valuable native traditions will be lost. Peter Andrew, a native Alaskan resident, says that losing animals and berries will affect the way of life. They live off of a cycle of fishing, then picking berries, and lastly hunting and repeating the cycle. We wouldn't be who we are today without our yearly traditions of hunting, fishing, and gathering. Mining in the Bristol Bay and Donlin Gold area will affect a sustainable economy for many residents. They depend on natural recourses; their livelihood is at stake.

The development of the Donlin Gold mine risks environmental pollution, the endangerment of species, and the loss of native traditions. Money and gold is worthless compared to fish and other natural recourses. Having money for a short period of time isn't worth losing subsistence and traditions forever.

Sincerely,

Zoey McCallson

DAVID McCARGO
P.O. Box 100767
Anchorage, AK 99510-0767
Tel. 907-563-6450
FAX: Same (Call First)
e-mail: iclaude@alaska.net

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AK REGULATORY

February 29, 2016

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
CEPOA-RD Gordon, P. O. Box 6898
JBER, AK 99608-0898

SUBJECT: Donlin Mine Draft Environmental Impact Statement

Dear Mr. Gordon,

I am submitting the following comments pertaining to the Donlin Mine Draft Environmental Impact Statement:

NATURAL GAS SUPPLY

GAS 6 My understanding is the Operator will purchase its natural gas needs on the open market from Cook Inlet area suppliers. Such a large amount of gas will put pressure on Southcentral gas supplies and prices. It also would further put additional drilling pressure on Cook Inlet and the Kenai Peninsula that will have significant regional social, economic and environmental impacts. Given the State's budget crisis, there is no realistic prospect of stranded gas supplies being moved from the North Slope to alleviate shortages in the Railbelt Corridor.

RECLAMATION

BER 4 The Operator's proposed 'reclamation" plan is highly speculative because such an effort involving a hard rock mine in Alaska has never been undertaken on such a large scale that I am aware of. The only major mining reclamation effort that comes to mind is the Usabelli Mine that is ongoing as the mining takes place. It is also a coal mine. For example, permafrost makes the likelihood of anchoring the tailings dam suspect. The prospect of the Operator monitoring and maintaining the mine site into perpetuity is absurd with no historical precedent. To rely on the State to ensure dam safety would be like asking the fox to watch the hen house given its aggressive approach to developing natural resources with little or no attention to the downsides.

PROJECT LIABILITY

BER 5 Where do the legal responsibilities lay for injurious activities stemming from the project? Do they rest with the Operator and/or will it and the land owners be jointly and severally liable? The

BER 5

costs of a catastrophe spill, long-term heavy metal contamination to mention a couple of possibilities would be enormous, and do the Operator and land owners have the financial resources to address them?

FINANCIAL

BER 3

Barrick Gold operates at a continuing loss, has a declining Cash Flow, has negative Retained Earnings, and a Long-Term debt that is two-thirds of its Total Assets. NovaGold is essentially a penny stock. Both companies business models are solely dependent on a mercurial commodity. Both companies have had a rocky history partly having to do with each other. In my opinion, the partnership does not have the financial wherewithal to make good on potential huge claims. Barrick, being the much larger of the two with world-wide operations has a checkered environmental and human-rights history. The DEIS should flush this out.

MINING RECORD

RME 1

The DEIS should look that the long history of the environmental impacts of hardrock mining both in Alaska and in the rest of the Unites States which is well-documented. Given the plethora of disasters and problems dating to the present, it is hard to accept that the proposed project will be any better than others have been.

MISCELLANEOUS ENVIRONMENTAL CONSIDERATIONS

CLIM 4

Melting permafrost resulting in hydriodic erosion could become a major problem over time. This will be more than a site-specific issue extending to other places where there is infrastructure development. Again, a review of other regional open pit mines would be helpful to include the effectiveness of state and federal regulation. In view of the state fiscal crisis, the state will have diminishing resources to properly monitor the project.

LAND 3

The DEIS acknowledges that there will be unauthorized ORV access along the pipeline and access roads. This infers that they will be used to access adjacent state and BLM lands with no oversight resulting in significant impacts on terrain and wildlife. Unregulated ORV use is commonplace throughout most of Alaska with almost no oversight resulting in enormous environmental degradation and loss of wilderness values. The absence of road access is the only layer of protection outside of some conservation units.

FSR 5

The low-lying, permafrost, impregnated wetland nature of the surrounding area would make clean-up difficult in the event of a major breach or spill. Although the DEIS addresses the risks, it does not address what specific contingency plans and equipment will be put into place.

CUMULATIVE & OFFSITE IMPACTS

LAND 7

Although the DEIS obviously cannot speculate on the long-term fallout of the proposed project,

LAND 7

Donlin Mine DEIS, page 3

it is safe to presume that there will be additional projects large and small as the area is industrially developed and infrastructure put into place such as more mines, oil exploration and development, pipelines, and powerplants. The implication is that the wilderness and rural character of the region will be permanently lost. The DEIS should address the possible long-term scenarios.

What will be the interface between the gas line and the Chuitna Coal Project?

PAA 38

It is difficult to envision that the pertinent agencies will require pipeline, road, and airstrip removal. If anything, they will remain in place. The DEIS should examine the implications. Could the natural gas pipeline be extended to provide gas to local villages or for that matter other mine sites? Would the proposed power plant remain in place to provide power for area villages which would mean more roads and transmission lines, and who knows what else?

BER 5

The DEIS does not speculate what the remedial costs that would be incurred by the public sector if there is a spill, groundwater contamination, loss of subsistence opportunities owing to wildlife and fisheries displacement.

COMMENT PERIOD

NEP 1

I only became aware that the DEIS had been issued when accidentally seeing a news item on KTUU about the Anchorage Hearing. While the Corps is not to be faulted, the proposed project has had relatively little public exposure especially when compared to others most notably Pebble. Even much smaller projects like Pogo and Fort Know have generating much more publicity. While there has been a five month comment period, it would not hurt in the public interest to extend it. This most importantly would give the rural communities that do not have the organizational and technical capabilities more time to digest the huge amount of information contained in the DEIS notwithstanding the horrendous implications of the project that they will have to live with.

In view of the enormity of the project, the huge potential risks, the innumerable offsite impacts, the many unanswered questions, and the lack of a genuine "Need", the No Action Alternative is more me the logical option.

Respectfully yours,

David McCargo

DMcC/dmcc

David McCargo
P. O. Box 100767
Anchorage, AK 99510

29 FEB 2016 PM 1 L

[redacted]
Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
CEPOA-RD Gordon, P. O. Box 6898
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(907) 378-4663 Fax (907) 457-4919

February 15, 2016

U.S. Army Corps of Engineers

Alaska District

CEPOA-RD-Gordon

P.O. Box 6898

JBER, AK 99506-0898

Re: Donlin Gold Project

NSB 1

After reviewing the project methodology I urge you to recommend approval of the project. It appears that Donlin Gold plans to utilize state of the art procedures to minimize environmental impact such as synthetic liner under the tailings impoundment. Use of natural gas will reduce air emissions.

The project is supported by Calista Corp who has a interest in ensuring that the mine is operated responsibly and that they will leave the area in good condition. We believe that Donlin Gold has acted responsibly to address the challenges to maintain a clean mine and all of the downstream water and soil waste.

Sincerely,
Vince Meurlott, P.E.

ALASKA STATE LEGISLATURE

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Alaska State Capitol
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SENATE PRESIDENT KEVIN MEYER

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April 7, 2016

Keith Gordon
U.S. Army Corps of Engineers Alaska District
CEPOA-RD-Gordon
P.O. BOX 6898
JBER, AK 99506-0898

Dear Mr. Gordon:

I am writing to express my support for the proposed Donlin Gold project located in the Yukon-Kuskokwim region, an area with some of the highest rates of unemployment in the United States. The Donlin Gold project is situated on lands selected under the Alaska Native Claims Settlement Act by the Calista Corporation expressly because of the known mineral potential of the area. Development of the project will enable Calista Corporation and The Kuskokwim Corporation, owner of the surface lands, to generate job and business opportunities for their shareholders. In addition to bringing economic activity to rural Alaska, it also will contribute to the diversification of the state's economy.

SER 2

As President of the Alaska State Senate, I am acutely aware that, as Alaska confronts the realities of declining oil production and tighter federal and state budgets, private investment is a critical source of economic development. In addition to the mine site facilities, Donlin Gold proposes to build a 315-mile long pipeline from Cook Inlet to site to deliver natural gas to fuel a power plant that will generate the electricity needed to operate the mine and process facilities. The proposed pipeline not only provides cleaner fuel to the power plant, but also reduces the number of annual barge trips up the Kuskokwim River to supply the mine. Transporting energy sources, whether oil or natural gas, via pipeline is demonstrably a safer, more efficient method of conveyance.

Mining is an integral part of our state's culture and economy. The Donlin Gold project as proposed in Alternative 2 will continue a history of mining in the area that dates back over a century. Alaska was built and continues to grow through the responsible exploitation of its natural resources. I encourage the U.S. Army Corps of Engineers, the Bureau of Land Management, and the Pipeline and Hazardous Materials Safety Administration to expeditiously complete their environmental review of the project and to issue the permits and approvals necessary to authorize development of the Donlin Gold project as proposed in Alternative 2.

Sincerely,

Kevin Meyer

Senator Kevin Meyer
Senate President, Alaska State Legislature

Senate President Kevin Meyer
Alaska State Legislature • Senate District M
Session: Alaska State Capitol • Juneau, Alaska 99801-1182
Interim: 716 W. 4th Ave. • Anchorage, Alaska 99501-2133

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Keith Gordon
U.S. Army Corps of Engineers Alaska District
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April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15 Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to IDIT 1 known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims LAND 1 Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Paul Michaels
Signature

Paul Michaels
Print Name

From: Miller, Mike
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Tuesday, May 24, 2016 9:30:42 AM

Gentlemen/Ladies:

I am writing in favor of Proposed Pipeline Alternate #2 for the following reasons.

- The Donlin Gold project could produce gold for 27.5 years, while providing HIGH paying jobs in a region where few other opportunities exist.
- The State of Alaska Department of Natural Resources enforces stringent regulations overseeing mining activities statewide that effectively protect the environment, wildlife, and human health.
- New mining operations in the area, should they come to fruition, can be of great economic benefit to Alaska and local communities, as well as Alaska Native corporations and shareholders.
- This project will provide responsible economic prospects for this region and for Alaska, while protecting the subsistence resources.

IDIT 2
- The proposed pipeline in Alternative 2 is designed to minimize impacts on the Iditarod National Historic Trail. There would be insignificant impacts to the trail and no impacts to the Iditarod Sled Dog race.
- Construction of the gas pipeline would be sensitive to the timing of the Iditarod and Iron Dog races as well as hunting season.

- The EIS process gives Alaskans and other stakeholders adequate time to fully review the project documents, and to provide input on the plans.

SER 5
- The project will offer long-term opportunities for rural Alaskans to develop skills and to enable them to continue living in rural Alaska and to prosper.
- An estimated 3,000 jobs will be created during the approximate four-year construction phase, and between 600 to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the economy of the region and the state.

- Donlin Gold's project description demonstrates an understanding of environmental concerns, and features vigorous environmental management principles.
- Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources.
- Potential for lower cost energy options to the region exist, such as the proposed natural gas pipeline which will have excess capacity.

TWL 4
- Job opportunities which will likely lead to reduced out-migration, helping to maintain rural schools and culture, including traditional ways of life.

Regards,

Mike

Michael D. Miller
9411 Kylie Circle
Anchorage, AK 99502
907-229-7838
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U.S Army Corps. Of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

April 29, 2016

Dear Sirs,

This letter is being written in support of the Donlan Gold project located in the Yukon Kuskokwim delta.

Donlan Gold has spent years developing a project that is environmentally sound and poses little threat to the Kuskokwim River. Donlan has worked with the villages in the design of the project to assure that the native way of life is not interrupted.

SER 5

The Kuskokwim River area has one of the highest unemployment rates in the country. This project will provide good paying jobs for years to come.

SER 15

I have lived in Juneau, a mining community, for over 40 years. The mines here, both Greens Creek and Kensington, provide many high paying jobs with minimal environmental impact. This allows people a better standard of living and more money stays in the community.

It is for these reasons that I support the construction and operation of the Donlan Gold project.

Sincerely,

Timothy A. Miller
Miller Construction Co., Ltd

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U.S. Army Corps of Engineers – Alaska District
Attn: CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

April 26, 2016

Mr. Keith Gordon and USACOE;

I am writing to comment on the Draft EIS developed by the Corps to "analyze the impacts of issuing permits for an open pit, hardrock gold mine" north of Crooked Creek on the Kuskokwim River, in southwest Alaska.

In order to be brief and succinct, I am providing my thoughts on the key elements of this project in bulleted form below, so that my understanding and informed approval of the many positive aspects of this proposed project, i.e. **Alternative 2** of the Donlin Gold Project is apparent.

- The mining company, Donlin Gold, has endeavored faithfully for over 2 decades to work out a successful and highly detailed mine approach, and preliminary mining plan of operations, that maintains worker safety, tight environmental standards, and incorporates various specific details that meet the desires and preferences of the landowners, The Kuskokwim Corporation (TKC) and Calista.

SER 2 • The jobs generated by both the multi-year construction project and then long-term (> 25 years) operation of this mine will provide a substantial benefit to the residents of the entire Kuskokwim region, as well as virtually all of the other Alaskan Natives because of the distribution of funds through the ANSCA 7 (i) and 7 (j) revenue sharing program.

PAA 4 • Choosing to construct the 315-mile LNG pipeline from Cook Inlet to the mine site is a very good energy AND environmental choice, both because of the reduced level of particulates released to the atmosphere in order to provide the electricity and heat needed to run the mine, and also the resulting possibility that one or more villages in the regions near the alignment of the gasline may choose to tap into the line and use (thrifty and clean!) natural gas for their energy needs.

- It is clearly assured that a number of the Kuskokwim regions' residents will be able to get jobs either directly with Donlin Gold, or with the many companies that will contract with them to meet their needs for supplying and operating the mine. As with Teck at Red Dog, this is a major boon for the economics of this rural area of Alaska. Donlin has a sterling reputation for "hiring local" to date, which will be firmly required to continue by the shareholders of TKC and Calista.

- The new port at Angyaruaq (Jungjuk) and the improvements/expansion at Bethel and Dutch Harbor ports will be a long-term benefit to the mine's neighbors, as well as residents and businesses at each of these more distant, existing port towns.

PAA 3 • With regard to supplying the mine with "new"/more barges traversing the Kuskokwim River, and the Alternative 2 selection of access road siting (instead of Alternative 4; the Birch Tree Crossing Port idea), I agree with the maritime evaluation that favors this arrangement over the longer access road. The increased barge frequency (only one more barge/day, on average) is unlikely to cause subsistence problems any more than the previous decades of river traffic did. "Good practice" on how to move up and down the river has already been defined.

IDIT 2 • Separately, I also feel that the choice to limit the use of Iditarod alignment by avoiding the riskier Dalzell Gorge route (Alt. 6A) is again well evaluated, and a proper choice. (much less colocation with the Iditarod route, with Alter. 2)

PAA 46 • Using the dry stack tailings plan (Alternative 5A) throughout the mine life is neither necessary nor preferable for these circumstances. Releasing the tailings dam at the time of closure is good, and an appropriate choice for long-term stability once the mine's life has been completed, and the tailings will be covered with vegetation.

- The benefits of this mine will extend beyond the local region, and yield some net positives to every single Alaskan resident and taxpayer.
-

In closing I will again note that I favor the selection of Alternative 2 as the Corps moves through its review of the proposed mine program and comments received, and then develops the Final EIS for this project. The Donlin Gold plan has been well thought out and based on solid research and environmental baseline data since 1996. Marvelous efforts toward impact avoidance, minimization and mitigation have been deliberated and adopted in developing the Alternative 2 mine plan, and the extensive public involvement by stakeholders at dozens of public hearings all over the region have been skillfully executed.

Good luck, and please move along promptly, because it is time to move ahead and reach a Record of Decision and start construction.

Clark Milne

Clark Milne, PE
1119 Coppet Street
Fairbanks, AK 99709
milne@mosquitonet.com

From:	Debbie Moderow
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Tuesday, May 31, 2016 7:21:24 PM

To whom it may concern:

I'm writing to voice my opposition to Donlin Gold's project.

SVE 6 As a 37 year Alaskan resident, who has spent a lot of time in Wyoming, I have witnessed the devastating and lasting effects from open pit mining. The long term negative ramifications on the water quality, the fisheries, as well as on the subsistence tradition in the Kuskokwim area will be sacrificed for short term economical gain.

IDIT 6 In addition, the historic Iditarod Trail is one of Alaska's treasures that must be protected in its original form. As an Iditarod finisher and long term supporter of the historic trail, I have an intimate familiarity with the landscape as well as its history.

Donnie Gold's project has multiple disadvantages that far outweigh potential benefits. Please consider protecting our state's most treasured resources instead of handing Alaska's pristine land and water resources, traditional lifestyles, and an iconic historic trail over to development. It's time to learn the hard lessons from other states and their projects— and conserve Alaska's unique wild places for future generations.

Thank you, Debbie Moderow

From:	Doug Molyneaux
To:	donlingoldeis, POA
Cc:	abittner@blm.gov; steve.nanney@dot.gov; jen.mark@epamail.epa.gov; jeff.bruno@alaska.gov; jennifer_j_spegon@fws.gov
Subject:	[EXTERNAL] Donlin Gold DEIS Comments
Date:	Sunday, May 29, 2016 2:37:42 PM
Attachments:	Donlin Comments-Molyneaux.pdf

To All:

Attached are my comments regarding the Donlin Gold Draft Environmental Impact Statement.

Doug Molyneaux

Douglas B. Molyneaux
P.O. Box 233624
Anchorage, AK 99523
dmolyneaux@gci.net

US Army Corps of Engineers
Sheila Newman / Keith Gordon, Project Manager
PO Box 6898
JBER, Alaska, 99506-0898
POA.donlingoldeis@usace.army.mil

Re: Donlin Gold Project Draft EIS

May 31, 2016

Ms. Newman / Mr. Gordon:

This document contains my personal comments regarding the Donlin Gold Project Draft Environmental Impact Statement (DEIS). These comments are also relevant to the 404 Permit applications, and to the 810 determination by the Bureau of Land Management (BLM). My comments are based on review of the DEIS, various related documents, and my 21 years of experience as the senior Kuskokwim Area Fisheries Research Biologist with the Alaska Department of Fish and Game, Commercial Fisheries Division (1989-2010).

Overall, I concur with findings under the Section 810 Analysis (DEIS Appendix N) of the BLM that the proposed actions under Alternatives 2-6 all may significantly restrict subsistence uses for communities reliant on subsistence resources in the Kuskokwim River. Furthermore, I find that the Section 810 Analysis understates the risk to subsistence users due to incomplete or inadequate information in the DEIS. Rather than "may significantly restrict" subsistence uses, a more accurate description is that the proposed actions "will significantly restrict" subsistence uses.

ANIL 4

FISH 8

ISSUE: RAINBOW SMELT

There is exceedingly little known about rainbow smelt in the Kuskokwim River. Information about location of spawning, time of spawning, larval residency, importance to ecosystem function, and use as a subsistence resource are all very limited and largely anecdotal. What is known is that many of these life history features vary from year to year, sometimes markedly. Information about annual population abundance, or even an index of annual abundance, is non-existent. Still this little fish that returns to the river for just a few weeks every year is one of the first abundant sources of fresh fish for area residents living in communities from the mouth of the Kuskokwim River upstream to about Chuathbaluk. In addition, rainbow smelt provide an important subsistence resource throughout the winter for coastal communities, as depicted in The Delta

FISH 8

Discovery February 2016 cover page photo below. It is likely that the smelt population will incur a major level of impact as a result of the proposed barge traffic and that this will significantly restrict subsistence use of smelt populations long-term and possibly to the extent of extirpating the species as a viable source of subsistence harvest. These impacts will occur both for inriver subsistence user and those from coastal communities along Kuskokwim Bay.

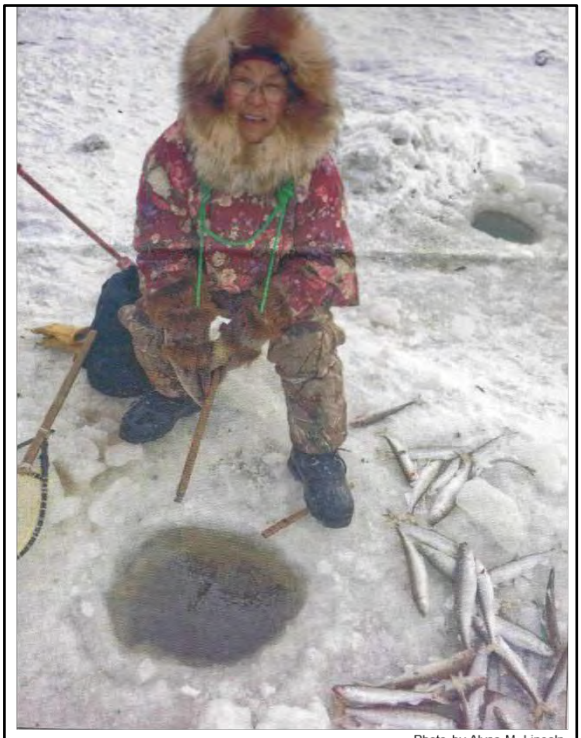

Photo by Alyse M. Lincoln

It's winter ice fishing season on the Qukaqliq River and folks from the coastal village of Kipnuk have been out jigging for these tasty smelt. Last Monday Fannie Samson was busy with her bountiful catch of uptaqugat [rainbow smelt].

The DEIS explains that the hydraulic forces created by tug propellers produce prop wash that can scour sediments in the river bed as well as along the shoreline (DEIS p 3.13-142) and that these can negatively impact smelt due to injury or mortality to incubating eggs and larval fish. It should be noted that the entire Kuskokwim River smelt population spawns within the proposed barging corridor of the mainstem Kuskokwim River. Statements in the DEIS suggest methods to minimize or avoid impacts of prop wash (DEIS p 3.13-50), but authors concede that *"it is unlikely that impacts to incubating rainbow smelt eggs could have been avoided by altering the line of travel of barge traffic", and that "Similar impacts to other resident fish species that could spawn in the mainstem channel also would be at risk."* (DEIS p 13-149). Furthermore, the DEIS states that *"medium to high level of injury or mortality to incubating [smelt] eggs could have resulted from the propeller scour of passing tug traffic…"* (DEIS p 3.13-149). Both of these statements are in reference to a very limited area were rainbow smelt investigations were conducted in 2014 and 2015 (Owl Ridge 2014a and 2015a). The two years of baseline surveys conducted by Owl Ridge Natural Resource Consultants, Inc. (Owl ridge 2014a and 2015a) are the most comprehensive investigations yet done on Kuskokwim River smelt, and they are to be commended on their ground breaking work. But the challenges of trying to make observations of these fish in the opaque waters of the Kuskokwim River, coupled with the limited sample size of two years, leaves much in question and falls short in characterizing the full risk of proposed Donlin Gold mine barging activities to smelt and the smelt subsistence fishery.

Examples of Underestimation of Impact

Based on the two years of surveys (Owl Ridge 2014a and 2015a), the DEIS indicates that rainbow smelt spawning occurs in late May and suggest measures to reduce impacts from prop wash would be required until mid-June (DEIS p 3.13-149). However as shown in Table 1, historically the first smelt of the year reported in Bethel has ranged

from May 21 to June 7 (Francisco, et al. 1993). Consequently, spawning in the middle Kuskokwim area likely ranges from late May to mid-June, and incubating eggs (based on a 21-d incubation period) and larval smelt are likely present and at risk from the prop wash as late as the first week of July - weeks longer than that suggested by the two years of Owl Ridge studies.

- *The DEIS needs to extend the time period to mid-July when impact reduction measures are required to better safeguard rainbow smelt spawning, egg incubation, and larval smelt outmigration.*

The Owl Ridge investigations also suggest that smelt spawn in the general vicinity of Lower Kalskag (rm 161) and Upper Kalskag (rm 163), implying a very limited corridor where impact reduction measures would be needed. However, Brown 1985 reports that the annual upstream extend of smelt spawning ranges from Tuluksak (rm 119) to Kalskag (rm 163), plus anecdotal reports claim that in some years smelt may spawn as far upstream as Aniak (rm 191). Consequently, the length of river corridor where avoidance measures are required is far greater than that implied by the two years investigated by Owl Ridge.

- *The DEIS needs extend the length of the barging corridor where impact reduction measures are required to better safeguard rainbow smelt spawning, egg incubation, and larval smelt outmigration.*

The DEIS also describes smelt mostly spawning along the sides of the mainstem Kuskokwim River at a mean spawning depth of 8.5 feet in 2014 and 14.5 feet in 2015 (DEIS p 3.13-149), and suggest the negative impact of prop wash can be avoided by limiting barge traffic to the thalweg. However, review of the Owl Ridge reports show abundant spawning occurring within or near the thalweg (Owl Ridge 2014a and 2015a), plus in many sections of river were smelt are likely to spawn (Tuluksak to Aniak) the thalweg may at times be less than 6 feet in depth and so subject to prop wash scouring even under the optimistic DEIS models that limited vessel draft to 3 feet (DEIS Figures 3.13-9, -10, -11, and -12). It should be noted that actual vessel draft is estimated to be up to 7.5 feet, so the depth of prop-wash impacts are much more extensive than suggested in the model results illustrated in Figures 3.13-9, -10, -11, and -12, notwithstanding the suggested precautionary steps tug pilots are expected to execute with unerring precision. This strategy also fails to take into account the inevitability of barges needing to move into shallower water to avoid fisherman drifting gillnets or to avoid boat traffic, including boats that are a drift due to mechanical breakdown – a common occurrence based on my experience on the Kuskokwim River.

The DEIS states that the barge operations are design so as not to require river dredging (DEIS p 3.13-29). However, prop wash, by default, will have the effect of dredging, and will negatively effects smelt spawning and egg incubation. The DEIS must acknowledge the effect of prop wash as a form of dredging and consider the consequently risks to fish populations, particularly rainbow smelt.

FISH 8

- *As noted in the DEIS itself, injury and mortality of incubating smelt eggs and larval smelt is unavoidable and will have negative impacts to the rainbow smelt population and to the subsistence fishery on smelt; furthermore, over time these negative impacts may be substantial and to the point of extirpating smelt as a viable subsistence harvest resource.*
- *As noted in the Section 810 Analysis (DEIS Appendix N, p 11), effects will be intensified during periods of low water when barge rafts are uncoupled for towing individually or with lighter loads, which markedly increases the number of barge round trips and increase impacts.*
- *In reference to the point above, lacking in the DEIS are details about the facilities and impacts of locations where barges would be uncoupled before and after the segments river corridor of concern.*

In summary, the prop wash has a high risk of causing long-term habitat alteration (i.e., life of the project and up to 100 years), plus there is high risk of incidents of mortality or injury to eggs and larval smelt that could have population-level effects. These are major impact levels based on definitions used in Table 3.13-24 and 3.13.25 of the DEIS. Furthermore, because there is no mechanism to monitor smelt population abundance, definitive proof of harm may only be evident once the population has been extirpated as a viable source of subsistence harvest.

FISH 6

ISSUE: STRANDING OF SALMON SMOLT

An evaluation of the impacts of barge traffic to potential injury or mortality of outmigrating salmon smolt is described in DEIS p 3.13-150. A survey of potential risk was conducted in May 15 and June 22, 2015 by Owl Ridge Natural Resource Consultants, Inc. in the vicinity of Birch Tree Crossing and Upper Kalskag (Owl Ridge 2015b), and they concluded: "*Based on the size of outmigrating smolt and the habitat use patterns identified for outmigrating salmon smolt and rearing juveniles, the potential for impacts to salmon populations in the Kuskokwim River from strandings caused by barge wakes and mortalities from propeller strikes is anticipated to be minimal and would persist for only the outmigration period between break-up through mid to late June."* They support their findings based on a smolt outmigration study done in the Kwethluk River (Burril et al. 2010) and a pilot study in Kuskokwim Bay (Hillgruber and Zimmerman 2007).

Incomplete and Inadequate Information

The Kwethluk River study was one of the first investigations of smolt outmigration in a Kuskokwim River tributary (Burril et al. 2010), but it has some shortfalls as used in the DEIS. First, the Kwethluk River is located in the very lower Kuskokwim drainage (rm 82), so possibly not representative of the smolt outmigration pattern for the overall Kuskokwim River, and certainly not for the barging corridor of the mainstem Kuskokwim River. Second, the annual end date of the Kwethluk study was constrained by budget and competing staff commitments, so the documentation of the latter portion of smolt outmigration is incomplete (personal communication, Sean Burril, USGS).

FISH 6

Application of the Kuskokwim Bay study too needs to be tempered. This was a two year pilot study and plagued by unexpected challenges of operating in the shallow waters of Kuskokwim Bay (personal communication, Zimmerman, USGS).

The Kuskokwim River lacks comprehensive investigations into the timing of salmon smolt outmigration. The nearest surrogate is a study being done in the lower Yukon River (personal communication, Katherine Howard, ADF&G). Preliminary findings from the first 2 years of the Yukon study show timing of smolt outmigration extending well into July (Figure 1 and 2), plus there is evidence of differences in timing between stock, such as Chinook spawning in upper vs. lower river tributaries.

- *More investigation is needed into the potential for stranding of salmon smolt by barge traffic before any reliable conclusions can be made about risk. Furthermore, the investigations should include entire period of annual smolt outmigration, and include sites representative of the entire barging corridor.*

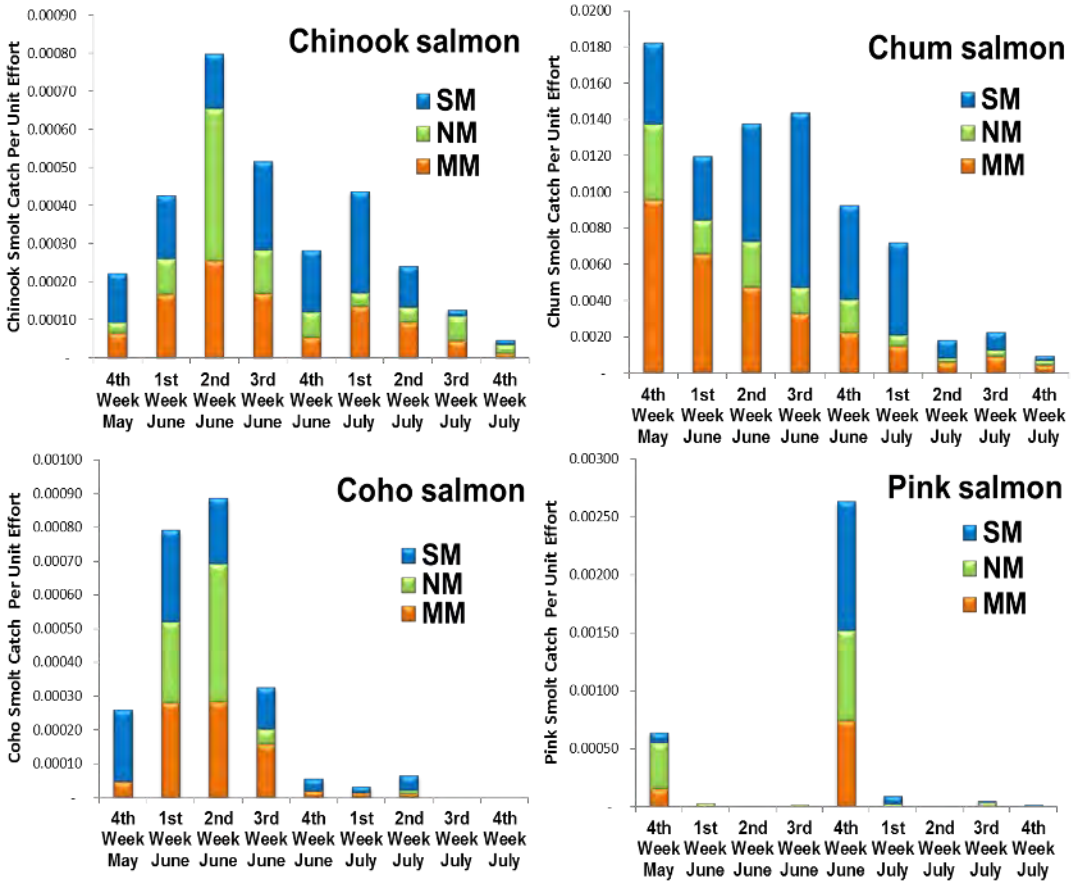

Figure 1. Timing of salmon smolt outmigration in the South Mouth (SM), North Mouth (NM), and Middle Mouth (MM) of the lower Yukon River in 2014. (Source: personal communication, Dr. Kathrine Howard, ADF&G, Anchorage)

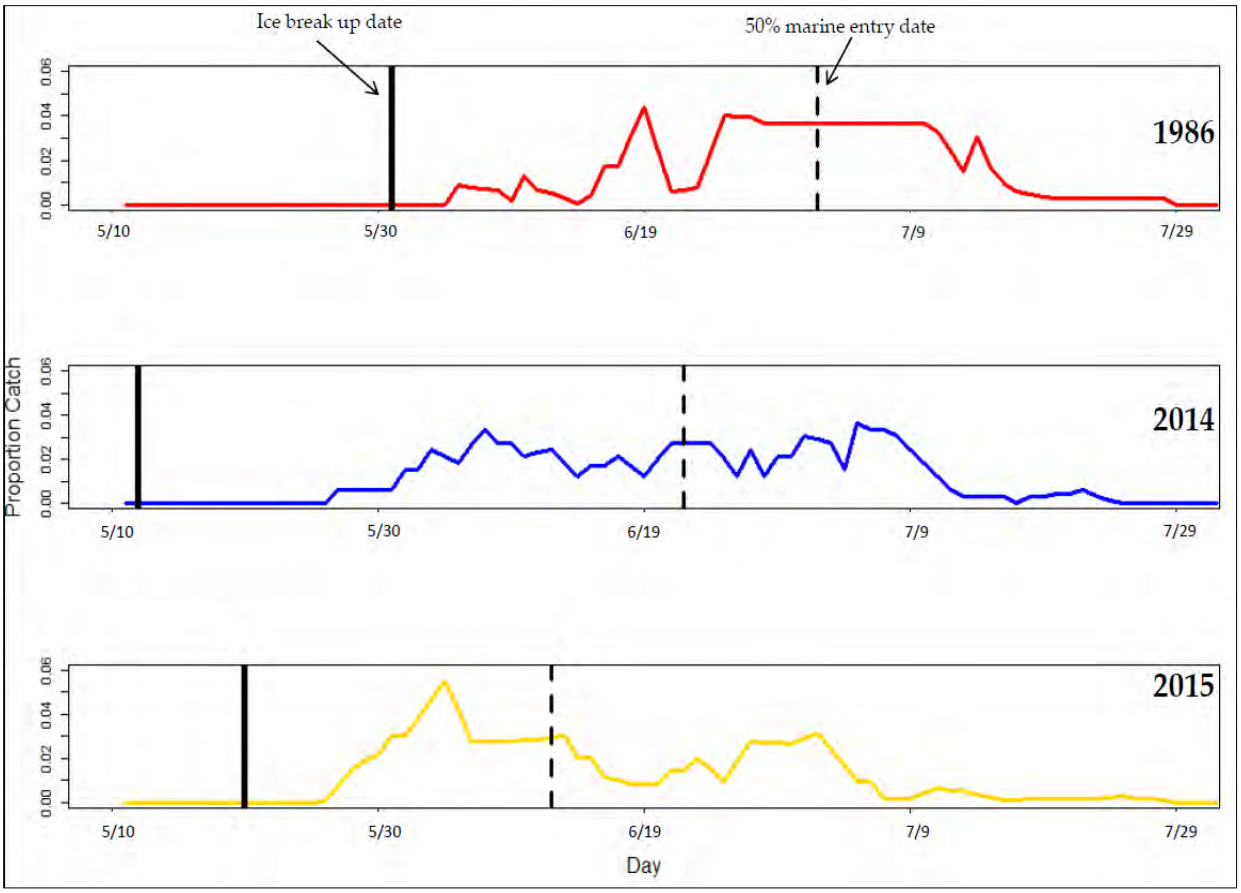

Figure 2. Timing of Chinook salmon smolt outmigration in the lower Yukon River in 1986, 2014, and 2015. (Source: personal communication, Dr. Kathrine Howard, ADF&G, Anchorage)

FISH 6

Finally, the methods described in Owl Ridge 2015b focus on stranding potential in two "pinch points." However, stranding risk exists along the entire Kuskokwim River corridor used by barges. Consequently, the findings reported by Owl Ridge are inadequate for supporting their conclusion of "minimal impact". A more thorough approach should be required to assess this risk, one that adopts methods similar to those used in the upper Yukon River to assess the risk of stranding juvenile salmon by the catamaran Yukon Queen II (EDI Environmental Dynamics Inc. 2007, ESSA Technologies Ltd. 2008).

- *Require a more scientifically rigorous investigation of stranding risk along the entire barging corridor of the Kuskokwim River.*

ISSUE: CUMULATIVE EFFECTS

Within the DEIS it is explained that "*the purpose of the cumulative impact analysis is to identify any of the proposed project impacts that, when combined with impacts from other past, present, and reasonably foreseeable future actions (RFFAs), may become cumulatively*

significant" (DEIS Section 4.1). And that, "*Cumulative effects are defined in the Council on Environmental Quality's (CEQ) guidance, Considering Cumulative Effects under the National Environmental Policy Act (DIRS 103162-EQ 1997, all) as: the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions" (40 CFR 1508.7).* Within this definition, there are some critical omissions in the DEIS.

CLA 32

Expansion of Mining Activity

Lacking in the DEIS is reference to the cumulative effects resulting from expansion of mining activity in the region, which is likely given the various infrastructure expansions described throughout the DEIS that will make it more economically feasible to exploit other mineral deposits in the region. Given historical mining activities in places such as the neighboring George River and Takotna River drainages, it is reasonable to assume that mining activity will be expanded into these and other areas within the Kuskokwim Mountain mineral belt, so these "*reasonably foreseeable future actions*" should be accounted for in the Cumulative Effects section of the DEIS.

- *The DEIS needs to include in the Cumulative Effects section a full investigation and disclosure of the likely expansion of mining activity beyond that proposed in the DEIS.*

TRAN 2

Bethel Port Facility

The DEIS has very little reference to the Bethel Port Facility expansion. In fact, DEIS Table 3.9-8 states that *"the proposed facility is no longer part of the proposed action."* I question whether this is a realistic assumption. Is it reasonable to expect the mine to operate without use of the proposed Bethel Port Facility expansions? If not, then the port expansion is linked to the mine development and details about that expansion and resulting risk assessment must be included in the DEIS. Discussions outside of the DEIS that the Bethel Port Facility expansion is expected to proceed independent of the mine appears unfounded based on the modest increases in human population within the Bethel Census Area in recent decades (Figure 3). Figures 4 and 5 illustrate the proposed Bethel Port Facility expansion to enable it to handle the increased barge sizes intended for use with the Donlin Mine. Note that the unloading configuration essentially blocks the entire river channel at Bethel. The proposed new bulkhead, which will extend 50 to 150 feet into the channel, will alter river currents and possibly result in the enlargement of Oscarville Slough and put at risk to community of Oscarville. This linked activity clearly needs to be

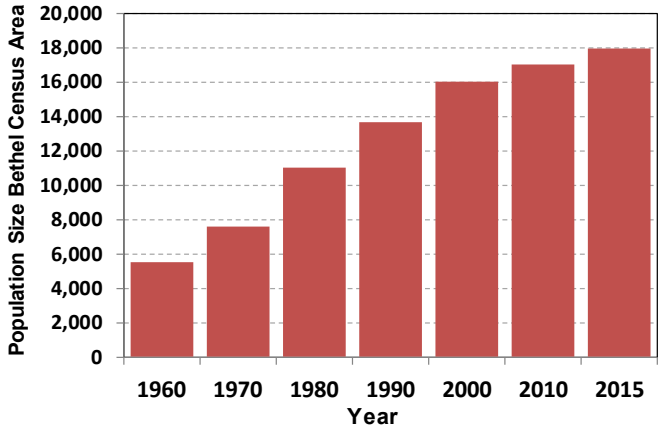

Figure 3. Historical human population growth in the Bethel Census Area.
Sources: https://en.wikipedia.org/wiki/Bethel_Census_Area,_Alaska

TRAN 2

described in detail within the Donlin Gold Project DEIS.

- *The DEIS needs to include in the Cumulative Effects section a full description of the proposed Bethel Port Facility as a connected action with detailed analysis of how this facility will impact water current and erosion patterns, the risk to communities, and disruption to subsistence fishing activities.*

ISSUE: SPILL SCENERIOS and WATER TREATMENT IN PERPITUITY

HZM 2

Section 810 Analysis of the DEIS describes 9 scenarios where spills of hazardous materials pose significant risk to subsistence resources throughout the broad regional footprint of activities associated with the proposed mine (DEIS Appendix N), but again, the risks are understated. Missing from these scenarios is the potential for failures in the system for collecting and treating hazardous water from the mine site. Such water would discharge into Crooked Creek and then to the mainstem Kuskokwim River, putting at long-term risk all subsistence fishing activities downstream of the mine site. The potential sources of such discharges include human and mechanical failures at the water treatment facility, under estimation of periods when the quantity of water requiring treatment exceed the capacity of the water treatment facility, and shortfalls in the collection of seepage from the pit lake and tailings facility due to failure of the liner. These risks are magnified by the fact that water treatment will be required "*in perpetuity*", a term that is not well defined. The likelihood of some sort of devastating failure over time is high based on the track record of other large sulfide mines (Kuipers et al. 2006 and Maest et al. 2005). As one recent example, at Barrick Gold's Veladero mine in Argentina over a million liters of cyanide solution was leaked in September 2015 into the Potrerillos River (https://www.rt.com/news/316455-barrick-gold-mining-spill-argentina/).The Veladero mine leak was a result of mechanical and human error: a valve that failed and a sliding gate left open.

- *The DEIS needs to include a full assessment and full plan for long-term waste treatment.*

CLA 6

- *Use of the phrase "in perpetuity"* (DEIS p 2.3-57) *is not adequately defined. Is the expected time scale 20 years, 200 years, 2000 years, or forever? Using this vaguely defined term in even a draft document intended to solicit public comment could be considered misleading to the public by confusing the issue of just how long the mine area will remain a risk to the health and well-being of the people and subsistence resources on which they depend. Also, given the size of the DEIS, and the fact that most reviewers are likely to only focus on specific sections, this term should be more clearly defined in each section where it is used.*

BER 7

- *Finally, need to require adequate bonding to cover the expected "in perpetuity" timespan, and describe contingencies should actual need fall short of the expected timespan. Further, much of the bonding needs to be upfront as a contingency should the owners go bankrupt or otherwise default before the expected end date of mining operations.*

A project that requires unerring water treatment for hundreds of years is too high a risk to the broader public interest. As described in a position paper on perpetual water treatment for mines by David Chambers (2007, http://www.csp2.org/files/reports/Perpetual%20Treatment%20Paper.pdf), if the mine cannot be designed in a manner to preclude the need for long-term water treatment, then that alone should be sufficient grounds to deny a permit.

WAQ 8 • *The mine should be designed in a manner that precludes the need for long-term water treatment; otherwise, the permit should be denied*

ISSUE: TAILINGS DAM DESIGN

DAM 4 A comment letter with concerns about the tailings dam design was submitted to the US Army Corps of Engineers by Earthworks on behalf of many organizations and individuals (Appendix A). I will not reiterate the details of the letter, but strongly encourage adoption of the recommendations, which are:

1) Incorporate the model results of a tailings failure that involves a partial tailings spill of 20-25% of the tailings dam capacity to more accurately understand the risks, and thoroughly evaluate the long-term risks of mercury and selenium loading to fisheries from a tailings spill.

2) Include full consideration of life cycle costs including the risk costs of failure, direct and indirect, and other externalities to provide a more complete economic picture.

3) Adopt the recommendations of the Mount Polley expert panel to prioritize public health and safety over economics as the driving factor in determining the preferred alternative.

4) Incorporate a regulatory requirement for an Independent Tailings Review Board.

DAM 6 *5) Provide a comparison of the probability of and impact of failure of the operating pond in the Dry Stack alternative relative to the probability and impact of failure of different sized spills at the proposed wet slurry tailings impoundment. This would provide a more thorough analysis of the two mine alternatives.*

DAM 8 *6) Include analysis of blind earthquakes and earthquakes on currently unknown faults in estimates of peak ground acceleration and other seismic impacts that might be experienced by Donlin facilities.*

ISSUE: OTHER

CLIM 1 • *Climate Change and Affected Environments (DEIS Chapter 3) should be better integrated per "Integrating Climate Change into the NEPA Process, BLM, April 2014). Need to address current trends in climate change and address how projected conditions over the life of monitoring "in perpetuity" will be affected by climate change including atmosphere, water (surface, ground, and wetlands), permafrost, vegetation, and social aspects.*

- *Wildlife Impacts section (DEIS 3.12 p 1-2) suggests small potential for contamination of local water sources with toxic materials; however, considering the long-time scale ("i.e., into perpetuity" there is a strong argument that potential for contamination over time is very high to fish, wildlife, plants, and the people who use these resources.*

Sincerely,

Douglas B. Molyneaux

Douglas B. Molyneaux

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Owl Ridge. 2015a. Final Report: Rainbow smelt spawning survey, Kuskokwim River, Alaska 2014-2015. August 2015. Anchorage, Alaska. 43 p + Appendices.

Owl Ridge. 2015b. Kuskokwim River Juvenile Salmon Investigation: 2014-2015. Anchorage, Alaska.

Whitmore, C., et al. 2008. Annual management report for the subsistence and commercial fisheries of the Kuskokwim area, 2004. Alaska Department of Fish and Game, Fisheries Management Report No. 08-25, Anchorage. (river miles)

Table 1: First reported smelt in the Kuskokwim River at Bethel, 1965-1992.

Year	Month	Day
1965	May	25
1966	June	6
1967	May	25
1968		
1969		
1970	May	27
1971	June	7
1972	June	6
1973	May	31
1974	May	25
1975	May	29
1976		
1977	June	2
1978	May	22
1979		
1980	May	22
1981	May	6
1982	June	3
1983	June	1
1984	May	27
1985	June	4
1986	May	28
1987	May	31
1988		
1989	May	28
1990		
1991	May	21
1992	June	1

(source: Francisco, et al. 1993.)

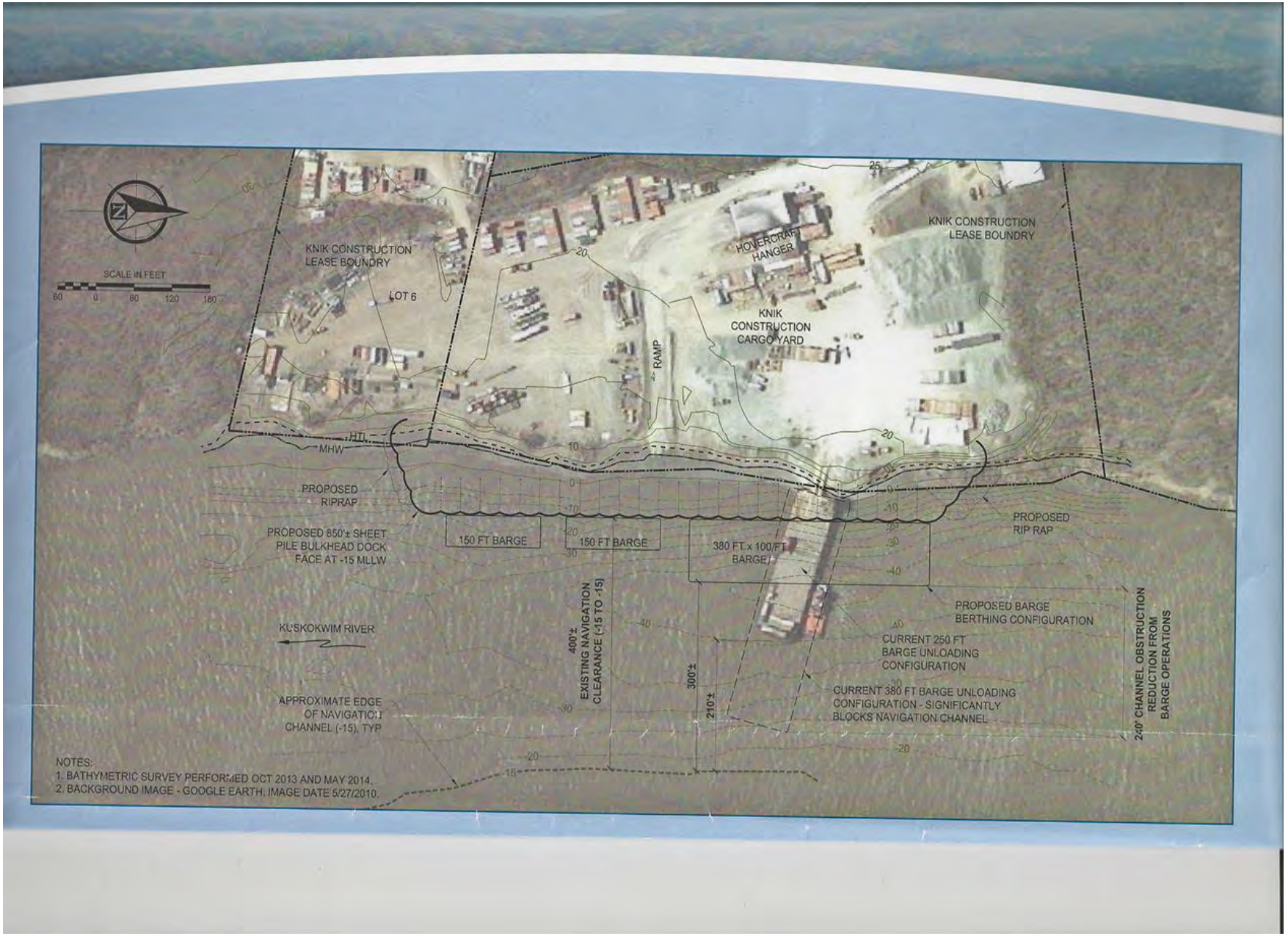

Figure 4. Draft schematic of Bethel Port Facility expansion as proposed for support of Donlin Gold mine. (source: poster www.DonlinGold.com)

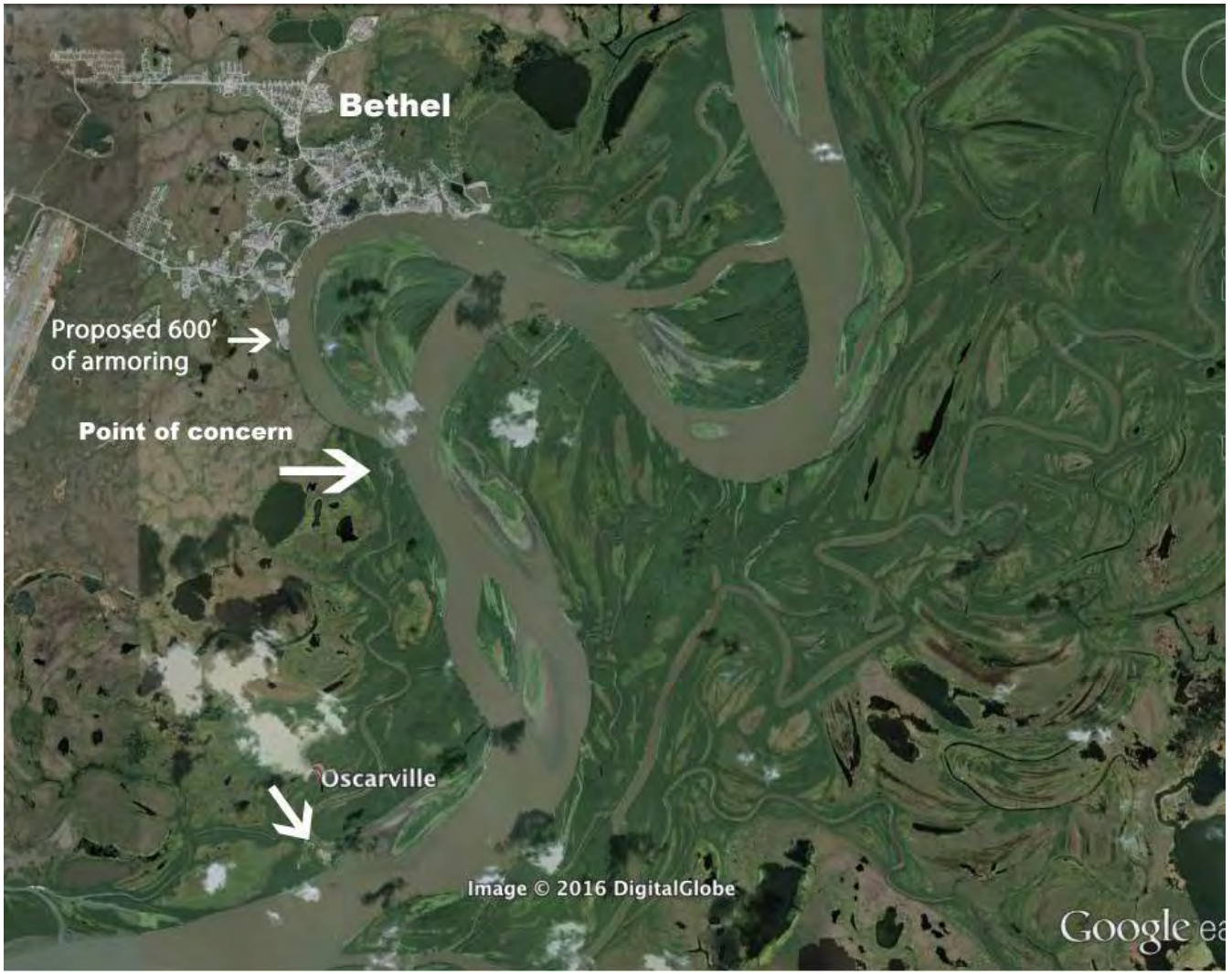

Figure 5. Aerial view of the Kuskokwim River near Bethel depicting the location of the proposed Bethel Port Facility expansion armoring, and the point of erosion concern with the associated Oscarville slough that could be inadvertently enlarged by changing river currents, thereby posing a risk to the community of Oscarville. (source: poster www.DonlinGold.com)

Appendix A.

Due April 30, 2016

US Army Corps of Engineers
Keith Gordon, Project Manager
PO Box 6898
JBER, Alaska, 99506-0898

Dear Mr. Gordon,

Re: tailings dam design at proposed Donlin Mine

We are writing on behalf of the Village Council(s) listed below in response to the tailings dam designs outlined in the Draft Environmental Impact Statement (DEIS) for the proposed Donlin gold mine.

There have been numerous catastrophic tailings dam failures in recent years, and new research has determined that tailings dam failures globally are increasing in severity and rate, driven by the use of larger and higher tailings dams to accommodate the waste generated by mining increasingly lower grade deposits.[1] The two following examples of modern mine failures demonstrate just how severe the consequences can be to public health and safety, fish and water, and the economies that rely on these resources for their health and well-being. In addition to the acute impacts resulting from the immediate effects of a tailings dam failure, chronic long-term impacts can result from non-recoverable tailings that result in irremediable effects.

Mount Polley, BC

On August 4, 2014, a tailings dam failure occurred in British Columbia at the Mt. Polley Mine, where an estimated 25 million cubic meters of tailings were released into Hazeltine Creek and Quesnel Lake – salmon habitat and a tributary of the Fraser River. The spill occurred at a modern mine, built in 1997. The tailings dam, which failed during mine operations, lasted for less than 20 years. Originally designed as a centerline construction dam, it was later allowed to construct an additional raise using an entirely upstream construction.[2] Mine safety experts and media articles have called the spill one of the biggest environmental disasters in modern Canadian history.[3]

[1] Chambers, David M., and Newland Bowker, Lindsey. "The risk, public liability and economics of tailings storage facility failures," July 21, 2015. Available at: http://csp2.org/files/reports/Bowker%20%26%20Chambers%20-%20Risk-Public%20Liability-Economics%20of%20Tailings%20Storage%20Facility%20Failures%20%E2%80%93%2023Jul15.pdf

[2] Independent Expert Engineering Investigation and Review Panel: Report on Mount Polley Tailings Storage Facility Breach, January 30, 2015. Available at: https://www.mountpolleyreviewpanel.ca/sites/default/files/report/ReportonMountPolleyTailingsStorageFacilityBreach.pdf

[3] https://www.salmonbeyondborders.org/uploads/3/9/0/1/39018435/enviro_disaster_cbc.pdf

A member of BC First Nation observes the inundation of Hazeltine Creek by mine tailings from Mount Polley mine.

Mine tailings flow from tailings dam failure at Mount Polley Mine.

Samarco, Brazil

On November 5, 2015, a major tailings dam burst at the Samarco Mine in Brazil, sending 150 million tons of tailings slurry and contaminated water into the Rio Doce. The tailings buried an entire village, killing at least seventeen people.[4] The spill migrated down the Rio Doce, killing fish, destroying river banks, and eventually reaching the Atlantic Ocean over 200 miles away. Hundreds of thousands of people have been affected – their drinking water sources destroyed and their agricultural operations heavily compromised.

Fish kill from the Sanmarco tailings dam failure.

The mine is owned by a joint partnership between mining giants Vale and BHP Billiton, and best available data indicates the tailings dam was constructed in 2009.[5] A lawsuit between the Brazil government and the mine puts the damages related to the dam disaster at roughly $4.8 billion.[6]

[4] http://www.cnbc.com/2016/01/21/samarco-brazil-move-closer-on-48b-dam-disaster-settlement.html
[5] http://blogs.agu.org/landslideblog/2015/11/10/fundao-dam/
[6] http://www.cnbc.com/2016/01/21/samarco-brazil-move-closer-on-48b-dam-disaster-settlement.html

Tailings Dam Expert Panel

As a result of the Mount Polley tailings dam failure, the BC government convened a panel of independent technical experts to investigate the cause of the failure and provide recommendations for how to reduce the potential for catastrophic failures in the future.[7] The panel made a number of key recommendations, including:

- ❖ Using Best Available Technology to fundamentally shift tailings storage away from tailings ponds that store water to dry tailings, including recommendations to:
- Eliminate surface water from the impoundment,
- Promote unsaturated conditions in the tailings with drainage provisions, and
- Achieve dilatant conditions (setting to a solid) throughout the tailings deposit by compaction.

According to the Mount Polley expert panel, "Improving technology to ensure against failures requires eliminating water both on and in the tailings: water on the surface, and water contained in the interparticle voids."[8] Only this can provide the kind of redundancy that prevents catastrophic releases.

U.S. Tailings Dam Failures

Tailings dam failures are an issue at U.S. mines as well. A recent analysis of U.S. copper mines operating in 2010, representing 89% of U.S. copper production, found that 28% had experienced partial or full tailings dam failures.[9] Given these statistics, partial and/or total tailings dam failures should be considered a reasonably foreseeable outcome in the NEPA context, particularly since tailings dams become a permanent feature of the landscape, after mining ceases.

Previous research pointed out that most tailings dam failures occur at operating mines, and that 39% of the tailings dam failures worldwide occur in the United States, significantly more than in any other country (Rico, et. al., 2008a, p. 848). A recent Alaska example of a tailings release involves the overtopping of the Nixon Fork dam in 2012.[10]

Donlin Tailings Dam Design

The expert panel's recommendations have significant implications for the proposed Donlin tailings dam design. Donlin Gold is proposing a tailings storage facility that allows for the storage of water along with tailings, or "wet" tailings. Thus creating the potential for catastrophic conditions if a failure occurs during operations. The proposed tailings

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[7] Independent Expert Engineering Investigation and Review Panel: Report on Mount Polley Tailings Storage Facility Breach, January 30, 2015. Available at: https://www.mountpolleyreviewpanel.ca/sites/default/files/report/ReportonMountPolleyTailingsStorageFacilityBreach.pdf

[8] Id.

[9] Earthworks, U.S. Copper Porphyry Mines Report: the Track Record of Water Quality Impacts Resulting from Pipeline Spills, Tailings Failures and Water Collection and Treatment Failures. 2012. Available at: https://cfpub.epa.gov/ncea/bristolbay/recordisplay.cfm?deid=182065

[10] Alaska Department of Natural Resources, "Warning for Violation of Certificate of Approval to Operate a Dam Nixon Fork Tailings Dam," March 19, 2012.

facility would encompass an area of 2,351 acres with a total capacity of approximately 335,000 acre-feet (413 million cubic meters) of mill tailings, decant water, and stormwater. Total tailings are estimated at 568 million tons to be placed behind a single dam, with a final height of 464 feet. A pond would develop on top of the tailings. The mine tailings would contain contaminants such as arsenic and mercury.

Partial Tailings Dam Failure – Donlin Mine

If the tailings dam fails during mine operations, highly polluted water and/or tailings will be released. The Draft Environmental Impact Statement (DEIS) analyzed the effects of a partial tailings dam failure that releases just 0.5 percent (2.6 million cubic yards) of the tailings storage facility capacity. Under this scenario, tailings would stop at Crooked Creek but contaminated mine wastewater would continue to the Kuskokwim. The DEIS predicts that a spill in the summer would result in surface water impacts above water quality standards for arsenic and antimony extending from the Anaconda and Crooked Creek drainages to the Kuskokwim confluence.[11] Arsenic and antimony would likely persist above water quality standards in the Crooked Creek drainage after mine closure for an indefinite period of time. Drinking water in Crooked Creek and other communities closest to the mine site could be adversely impacted if a release infiltrated groundwater.[12]

The DEIS states that mitigation measures are not likely to address the complete removal of all tailings deposited in the Crooked Creek drainage. Since dissolved arsenic and antimony concentrations above standards could potentially persist on a seasonal basis after mine site closure, the intensity of impacts is considered high. A summer release could potentially result in permanent adverse impacts to surface water quality resulting from deposition of large quantities of non-recoverable tailings.

The DEIS also evaluated a tailings dam failure that only releases tailings water. Under this scenario, wastewater would reach the Kuskokwim and arsenic and mercury concentrations in the water would be above water quality standards all the way to the mouth of the Kuskokwim River.[13] However, the DEIS concludes that chemical impacts to surface water quality from a water only release scenario are comparatively less than those of tailings and water mixture because the water only release would have less lasting impacts as the spill becomes diluted by river water. [14]

The DEIS severely underestimates the risks of a tailings dam failure by analyzing a release of just 0.5 percent, rather than 20-40% release that is typically experienced.[15] This should be done to provide a more accurate understanding of the potential impacts of a tailings dam breach.

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[11] U.S. Army Corps of Engineers, Draft Environmental Impact Statement (DEIS), Donlin, November 2015, page 3.24-91.
[12] Id., page 3.24-203.
[13] Id., page 3.24-93.
[14] Id., page 3.24-94.
[15] Klohn Crippen Berger, "Estimation of Tailings Dam Break Discharges," August 26, 2011. Available at http://www.infomine.com/publications/docs/Dalpatram2011.pdf

Risks to the Kuskokwim

The Kuskokwim River is especially vulnerable to the risks of a tailings dam failure at the proposed Donlin Gold mine. The proposed tailings facility is located near the top of the headwater creeks flowing in Crooked Creek, less than 15 miles from its confluence with the Kuskokwim. The Kuskokwim River serves as a migration corridor for resident and anadromous fish species and provides diverse, year-round habitat for various life stages of some of these species. Due to the diversity and seasonal abundance of these species, the river supports subsistence, commercial, and sport fisheries for the region.

The Kuskokwim River king salmon subsistence fishery is the largest in Alaska (Carroll and Patton 2010; Merritt 2001). In some communities, fishes of all species have contributed as much as 85 percent of the total pounds of the annual fish and wildlife harvested, with salmon comprising 53 percent (Brazil et al. 2013). As reported by ADF&G, the Kuskokwim drainage contains 38 communities and approximately 4,600 households within the river's lower, central, and upper regions. Of these, more than 1,500 households currently subsistence fish with additional households involved in fish processing.

The risks to the Kuskokwim watershed from a potential failure of the Donlin tailings dam include acute and chronic effects to fish populations from metals pollution (e.g., mercury), sediment and increased turbidity; the burial and elimination of fish habitat from tailings deposition; scouring and destruction of stream banks from the wave of tailings and water released from the dam failure; and long-term contamination of stream sediment from mercury and selenium.

Alternatives Tailings Dam Designs:

The Draft EIS includes an alternative to the company's wet tailings dam design proposal - a dry stack facility. Water would be squeezed out of the tailings and sent to an operating pond. "Dry" (19% moisture) tailings would be laid down in lifts and compacted. The operating pond would be separate from the tails by a 218-foot high dam. This alternative would prevent a catastrophic tailings spill during operations, but could still result in a spill of toxic process water from the operating pond that stores the water that is separated from the tailings. The EIS should provide a comparison of the probability of and impact of failure of the operating pond. This would provide a more thorough analysis of the two mine alternatives.

Operator Error

One of the most significant risks identified by the Mount Polley expert panel relates to the role of human error in technological failures. This has already been a substantial problem at another Alaska mine managed by Nova Gold, the company proposing the Donlin Gold Project.

At the Rock Creek gold mine near Nome, which was owned and operated by Nova Gold, problems with the design and management of the tailings impoundment are documented in

a 2012 memo by David Chambers Ph. D.[16] At this mine, tailings water almost overtopped the tailings dam, and the dam itself was not designed to impound water, only tailings solids.

A substantially higher volume of seepage than anticipated in the design of the tailings impoundment was observed after the actual operating and construction in 2007 and 2008. In order to prevent overtopping of the dam, the water balance model appeared to be dependent on the successive construction of the dam, and continuous mining and milling operations to manage the water. There was no spillway in the design configuration of the dam at any operating stage before closure. The water balance model showed that Stage II construction was required to prevent the dam from overtopping.

ADNR–Dam Safety said that without Stage II construction or other mitigation, the risk of exceeding the operating limitations of the Commissioning Dam was extremely high, and was influenced by the fresh groundwater component of the seepage, as well as precipitation, with either amount relatively uncertain at this point.

Dam Safety issued a Notice of Violation on December12, 2008. (Notice of Violation of Certificates of Approval, Rock Creek Tailings Storage Facility Dam (AK00309), Department of Natural Resources, Division of Mining, Land and Water, Dam Safety and Construction Unit, December 12, 2008) After the second shutdown in two months, Nova Gold decided to close down the project for an indefinite period of time.[17]

Seismic Uncertainty

The site proposed for the Donlin Mine is an area where the risk of large earthquakes has only been minimally studied by geologists. Accurately assessing earthquake risk is difficult, and in an area where so little is known, engineering constraints should incorporate a large margin for error. The DEIS does not consider earthquakes on faults that have not been mapped, nor on blind faults that do not rupture the earth surface. For this reason, an earthquake might occur closer to the mine than assumed. Additionally, blind faulting in the area beneath the mine could cause tilting or other deformation of the earth surface that is not considered in the DEIS. Given the geologic history of the extension that led to the mineralized deposits targeted by the Donlin proposal, active tectonic deformation at the mine site should not be discounted. Uncertainty about seismic hazard compounds other uncertainties related to tailings dam failure.

Conclusion:

Given the increased rate of tailings dam failures globally, and the significance of the downstream resource, tailings dam safety is of paramount concern at the proposed Donlin

[16] David Chambers, Ph. D., Center or Science in Public Participation, Rock Creek Mine Problems, April 2012. Available at:
http://www.groundtruthtrekking.org/Documents/Rock%20Creek%20Mine%20Problems%20%20Apr12.pdf
http://www.groundtruthtrekking.org/Documents/Rock%20Creek%20Mine%20Problems%20-%20Apr12.pdf
[17] http://www.adn.com/article/20081124/novagold-forced-suspend-operation-rock-creek-mine

gold mine. We respectfully call upon agencies and governments involved with the Donlin DEIS to:

1) Incorporate the model results of a tailings failure that involves a partial tailings spill of 20-25% of the tailings dam capacity to more accurately understand the risks, and thoroughly evaluate the long-term risks of mercury and selenium loading to fisheries from a tailings spill.

2) Include full consideration of life cycle costs including the risk costs of failure, direct and indirect, and other externalities to provide a more complete economic picture.

3) Adopt the recommendations of the Mount Polley expert panel to prioritize public health and safety over economics as the driving factor in determining the preferred alternative.

4) Incorporate a regulatory requirement for an Independent Tailings Review Board.

5) Provide a comparison of the probability of and impact of failure of the operating pond in the Dry Stack alternative relative to the probability and impact of failure of different-sized spills at the proposed wet slurry tailings impoundment. This would provide a more thorough analysis of the two mine alternatives.

6) Include analysis of blind earthquakes and earthquakes on currently unknown faults in estimates of peak ground acceleration and other seismic impacts that might be experienced by Donlin facilities.

Sincerely,

Signature

Village Council

Address

Signature

Village Council

Address

Signature
Village Council
Address

Signature
Village Council
Address

CC:

Bureau of Land Management
Alan Bittner, Field Manager, Anchorage Field Office
abittner@blm.gov

Environmental Protection Agency
Mark Jen, NEPA Project Coordinator
jen.mark@epamail.epa.gov

Pipeline and Hazardous Materials Safety Administration
Steve Nanney, Project Manager
steve.nanney@dot.gov

US Fish and Wildlife Service
Jennifer Spegon, Ecological Services
jennifer_j_spegon@fws.gov

Alaska Office of Project Management and Permitting
Jeff Bruno, OPMP Large Project Coordinator
jeff.bruno@alaska.gov

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: Donlin Gold Draft EIS comment
Date: Monday, April 04, 2016 12:56:32 PM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, April 04, 2016 12:06 PM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: leisha monet [mailto:leishafm62@hotmail.com]
Sent: Friday, April 01, 2016 7:21 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Cc: leisha monet <leishafm62@hotmail.com>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

HZM 2 I object to the risk of environmental harm due to the unnecessary risk of mining for gold in Alaska, for having an open area of poison which would be fall-out from the mining process and capable of getting into the environment from the containment which isn't full proof.

SVE 2 I object to a pipeline of natural gas to run the mine; again, the risk isn't worth the potential damage to the environment, to the animals of land and water, to the humans themselves. I object to daily risks to the waters by barges transporting diesel fuel for the gold mine. I find it appalling that anyone would risk the incredible beauty of Alaska and it's people, lands, waters, and animals/wildlife for the purpose of mining for gold. A lake of poison which would have to be monitored for decades, so much risk of damage for an item we don't need to live just like drilling for oil and fracking for gas. I think the wild areas need to be left alone and not risked for man's enrichment of an item that is only valuable to humans and those who will obtain the item would be unable to replace what would be lost in the effort to get the gold. The mess left is unnecessary. The whole endeavor is just greed. Don't do it.

Leisha Monet

Sent from Mail <Blockedhttps://go.microsoft.com/fwlink/?LinkId=550986> for Windows 10

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

Donlin Gold found Jobs. Was a good thing for the unemployed with family to support. Im single and I worked for the mine as sorter, packer, and helper for Driller. And know alot of others who benefited from that. but I didn't really know how the mine was going to be mined ~~that~~ when I found out its going to be a pit mine, that fresh water is used with chemicals, like ascid to seperate the gold from other minerals and it'll take a whole lot of water, chemicals to get the gold out, using water, either from under ground or creeks, maybe even from river can we or will, it last for 23 yrs. I'm sure the pit, itself will be past the under ground water supply. and once the Gold is out what next clean-up? LIKE I say I'm single & have no kids of my own Im ~~concerned~~ talking for your kids, kids.

James Morgan
ANIAK

SVE 4

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

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April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15

Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

IDIT 1

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

LAND 1

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Christopher Moses
Signature

Christopher Moses
Print Name

Huslia
City & State of Residence

USACE
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To Whom it May Concern:
U.S. Army Corps of Engineers:

SER 5 I would like to comment what & why this Project is important to Me & also the People of Western Alaska.

This Project is Providing Jobs for the People. Due to Lack of Jobs in the villages. People here in Western Alaska are Struggling to get by; food, gasoline, Stove oil are just a few of the Economic Problems here. Donlin Gold Provides Jobs for People in which they can pay for bills & provide for their families. This

PHL 10 will hopefully put an end to all the Suicides that's been happening. Struggling with Money, Paying Bills, no Jobs, puts a lot of People into depression, causing Suicides as the only Answer to ending problems.

SER 5 These young Adults that did not Proceed with their education would be able to learn a trade at Donlin Gold. They would be able to work & take time off for Subsistence. The opening of Donlin Gold would Provide Thousands of jobs for the

People of Alaska. This is my comment for the U.S. Corps. of Engineers. Thank you for your time.

Eric Mack
Box 252
Akiachuk, AK 99554

Mr Eric Moses
PO Box 252
Alakanuk, AK 99554

U.S Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Smith, Neal

From: Mary Jo Mrochinski <maryjomro@hotmail.com>
Sent: Monday, April 25, 2016 4:58 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Project

April 25, 2016

To Whom It May Concern,

NSB 1

As a resident of the State of Alaska, I am in support of the mining project at Donlin Gold. With the opportunity to potentially employ thousands of Alaskans, we need to keep mining projects such as this on course for responsible and sustainable development to fuel our state and global economy.

It would be foolhardy for us to imagine that Alaska can exist without resource development, and we have proven success in mining programs already in operation throughout the state. I urge you to allow the Donlin project to move forward, with a plan for environmentally responsible resource development.

Thank you for your consideration.

Mary Jo Mrochinski
11324 Discovery View Dr. #210
Anchorage, Alaska 99515

From:	Michelle Toohey
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Please see public comment letter for Donlin Gold Draft EIS attached
Date:	Tuesday, May 31, 2016 4:28:23 PM
Attachments:	0196_001.pdf

--
Michelle Toohey
907-229-7855

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May 25, 2106

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, Alaska 99506-0898

Attn: CEPOA-RD-Gordon

Dear Mr. Gordon,

I am a private business owner who built my company starting in 1995 with just one small client and zero employees into a thriving agency that is the state's leader in creative advertising and exceptional account services, representing both Alaska-owned companies and multi-national corporations doing business in the state.

There is no way I could have done that without Alaska's robust natural resource industry activities. They are the lifeblood of our economy. It is with that unique perspective I bring to express my strong support for Alternative 2 in the Draft EIS for the Donlin Gold Mine Project. I believe it's a project that will be conducted in an environmentally responsible manner with respect for the land, fish and game the residents of the Yukon-Kuskokwim region are so heavily dependent. The project
SER 11 will bring and a way to sustain their way of life by providing opportunities with good paying jobs that will allow then to pay for the fuel, equipment and tools needed for subsistence activities.

SER 18 In addition, the infrastructure the project includes, such as the natural gas pipeline, will allow the region the potential to bring in fuel less expensively. In a region that is the poorest in our state and the most expensive to live, such an opportunity is invaluable. We cannot afford to pass up the thousands of good paying jobs the project will bring.

The Calista Corporation is the ANCSA Corporation that represents the region whose shareholders have the responsibility to protect residents' subsistence way of life, while finding them opportunities for economic growth. The Donlin Gold Project provides an opportunity for both.

Some people are just learning about the Donlin Gold project, but for the people of the region, the project is nothing new. They have worked with the companies involved in the project for twenty years. In that time, Donlin Gold has held many meetings with shareholders, has listened to their concerns and has made substantial changes to the project as a result.

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The project has been decades in coming allowing time for due diligence in planning for construction, production and closure. Please approve the Draft EIs in your consideration for the benefit of Alaska's people.

Sincerely,

Laurie Fagnani
President

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers in postmark before the **May 31, 2016** deadline.

Signed
Cathy Munis

This is an important project for our state, providing excellent jobs and many economic benefits.

The project has developed a solid reputation for environmental safeguards and should move forward.

SER 5

Cathy Munis
State Capitol 501
Juneau AK 99801.

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Alaska District
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JUN 02 2016
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REPRESENTATIVE CATHY MUÑOZ

USACE
RECEIVED
APR 2 7 2016
AK REGULATORY

U.S Army Corp of Engineers
Alaska District
CEPOA-RD Gordon
P.O. Box 6898
JBER, AK 99506-0898

April 21, 2016

NSB 1

Please accept my support for the Donlin Gold mine project in the Yukon Kuskowim region of Alaska.

This project represents an opportunity for the responsible development of a mining operation that adopts the latest breakthroughs in environmental protection. Donlin has twenty years of environmental research and proposes a state-of-the-art tailings storage facility. They are also committed to meet all applicable water quality standards. The use of natural gas for the primary power source will reduce barge activities on the Kuskokwim River. Donlin is committed to the local resident's subsistence way of life.

My community has two mining operations, the Kensington and Greens Creek. These two operations have been integral to a healthy and diverse local economy. Donlin will also offer a significant positive impact on the region where it is located. They will be the biggest economic development project in the YK area. I am impressed with their commitment to local hire.

I am in full support of this project moving forward and appreciate your consideration of my comments.

Sincerely,

Cathy Muñoz
Representative, House District 34

STATE CAPITOL • JUNEAU, ALASKA 99801-1182 • (907) 465-3744 • FAX (907) 465-2273
REPRESENTATIVE.CATHY.MUNOZ@AKLEG.GOV

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: Donlin Gold Draft EIS Comment
Date: Thursday, March 31, 2016 10:18:45 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Thursday, March 31, 2016 10:11 AM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS Comment

-----Original Message-----
From: David Myers [mailto:dmyers@stgincorporated.com]
Sent: Wednesday, March 30, 2016 1:18 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS Comment

I, David Myers, having managed rural infrastructure projects throughout Alaska for over 15 years and being a life-long Alaskan, understand the significant benefits and opportunities the Donlin Gold mine would bring to our state, especially to the poorest region, the Yukon-Kuskokwim Delta. I strongly support the responsible development of this mine, particularly Donlin Gold's "Alternative 2" approach to this development.

Under the Alaska Native Claims Settlement Act, Calista Regional Corporation (Calista) selected the mineral rights at Donlin Gold, The Kuskokwim Corporation (TKC) selected the surface estate, both in efforts to benefit shareholders from the development and production of the mineral resources. This economic opportunity for shareholders and descendants of Calista is precisely the purpose behind Congress' grant of entitlement of these lands to Calista and TKC.

There are many social and economic benefits of this project to the region, state, and to the nation, including:

* Through the ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations and shareholders.

SER 11 * The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the Yukon-Kuskokwim (YK) region and fund traditional and subsistence activities.

* The potential for lower cost energy options to the region as the proposed natural gas pipeline will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YK region.

SER 5 An estimated 3,000 jobs will be created during the approximate 3-year construction phase, and up to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the economy of the region and the state, especially in a region that experiences some of the highest unemployment rates. This will likely lead to reduced out-migration, helping to maintain rural schools and culture, including a traditional way of life.

An example to compare the positive potential benefits of a project like this is the Red Dog Mine in Northwest Alaska.

Through the exploration stages, Donlin has shown a strong commitment to local hire and for supporting

communities and cultures in the region. A project like this truly is a rare opportunity to improve the local economy where few other opportunities exist.

If developed, I believe it will be done in a way that creates opportunity for local employment and economic growth, while protecting the subsistence resources and culture of the region, and protecting the environment.

I support the rigorous permitting process that has already permitted the six large mines under the review of NEPA and the scientifically-based process which includes over 60 major state and federal permits and authorizations. Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources. Donlin's project description demonstrates an understanding of environmental concerns, and features vigorous environmental management principles.

Thank you for the opportunity to comment on this important Issue.

David Myers

Director of Business Development

STG Incorporated/Alaska Crane

11710 So. Gambell St.

Anchorage, AK 99515

907.348.4218 direct

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"22 CFR Part 125.4 (b) (9) applicable."

From: Lila Moto
To: donlingoldeis, POA
Cc: Lance Miller
Subject: [EXTERNAL] Donlin Support Letter
Date: Tuesday, April 26, 2016 3:43:55 PM
Attachments: April 2016 NRC Donlin.pdf

Hi Mr. Gordon:

Attached is the Donlin support letter from Wayne Westlake, President/CEO of NANA Regional Corporation.

I am available for questions via email or at 907.442.8123.

Lila Moto | Senior Executive Assistant to the President
NANA Regional Corporation, Inc. | P. O. Box 49 Kotzebue, AK 99752
Direct 907 442 8123 | **Fax** 907 442 2863
Toll Free 1 800 478 3301 **or** 907 442 3301 (NRC Main Number)
Lila.Moto@nana.com

NANA

April 19, 2016

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
COPOA-RD-Gordon, P.O. Box 6898
JBER, AK 99506-0898

RE: Comments for the Donlin Gold Project EIS

Dear Mr. Gordon:

At NANA Regional Corporation (NANA) , our mission is to improve the quality of life for our more than 13,800 Iñupiat shareholders by maximizing economic growth, protecting and enhancing our lands, and promoting healthy communities with decisions, and behaviors guided by our Iñupiat Illitquisiat, our traditional value system.

In many ways, the Inupiat have always been Arctic developers, using what we could to survive in the harsh and unforgiving land. We live innovatively; creating tools and mechanisms for survival.

After the Alaska Native Claims Settlement Act, NANA applied these same principles of innovation to the business world. This can best be seen in the creation and continued operational success of the Red Dog Mine. For twenty-seven years, Red Dog, one of the world's largest zinc mines, has stood as a model of responsible resource development, founded on the principles of consensus, cooperation, and mutual respect between a mining company and the Iñupiat people of Northwest Alaska.

To date, NANA Regional Corporation has received more than $1.3 billion in revenue from the mine, of which approximately >$820 million of which has been shared with other Alaska Native corporations across the state through the 7(i) sharing provisions of ANCSA. The Red Dog Mine is an economic engine for the NANA region and the rest of Alaska. Residents of Northwest Alaska, the Mat-Su Valley, Anchorage, Fairbanks, Juneau and other areas of the state benefit from Red Dog operations through high-paying mining jobs, corporate dividends, social and cultural programs and charitable contributions. In addition, the Northwest Arctic Borough, the region's home-rule government, has received more than $156 million as payment in lieu of taxes since Red Dog production began.

Clearly, Red Dog has had a tremendous economic impact on the region and the State and the life of the mine is expected to continue to operate into 2031. After nearly 30 years of enjoying the benefits that have come with the development of the Red Dog Mine, NANA strongly supports the continuation of the Donlin Gold Project EIS. This project has the potential to create substantial opportunities in a region of Alaska faced by devastating social and economic challenges by families and communities.

SER 18

If developed, Donlin would bring significant job opportunities to the Southwest region and throughout Alaska, as well as the development of infrastructure such as power generation plant, water treatment plant, access roads, housing, two ports, a natural gas pipeline and an airstrip, which would allow for local businesses to supply services and materials to the operation.

SER 2

The development of the Donlin Gold Project would contribute to a stronger and more diverse Alaska economy, while positively impacting all Alaska Native Corporations in Alaska through the ANCSA 7(i) revenue sharing.

NANA believes that the EIS reflects the socioeconomic impact that the development of the Donlin project would bring. Finally, NANA supports and encourages the Corps to permit Alternative 2, the Applicant's Proposed Action.

Thank you for the opportunity to provide comments on this important matter.

Sincerely,

Wayne Westlake

Wayne Westlake
President/CEO

NANA Regional Corporation, Inc. • P.O. Box 49, Kotzebue, Alaska, 99752 • T: (907) 442-3301, (800) 478-3301 • F:(907) 442-4161 •
nana.com/regional

Smith, Neal

From: mark leary <napaimute@gci.net>
Sent: Wednesday, April 27, 2016 8:49 AM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To Whom It May Concern:

This is the first part of a two part statement the Native Village of Napaimute will be submitting. This part is based on long term observations of the changes in the region, our concern over the current direction we are heading and our vision for a better future for our young People.

Part two will be more science based and address in more detail some specific environmental concerns we have regarding the Project.

Part 1:

We have been involved with the development of the Donlin Creek Project since its inception all those years ago. Throughout this long process we have strived to maintain a balanced view point on all of the issues surrounding this potential large-scale natural resource development coming to our region. We have made trips to open-pit mines both at our own expense and at the invitation of Donlin's developers. We have attended dozens of Donlin-related meetings throughout the years and visited the Project Site several times.

Nobody ever mentions that there is already a large open-pit gold mine operating in Alaska, on a tributary of the Chena River which flows right through Alaska's second largest city – Fairbanks, which flows into the Tanana, which flows into the mighty Yukon. The Fort Knox mine has safely operated for two decades and is barely noticeable. We understand that there are significant differences between Ft. Knox and what a Donlin Creek open pit mine would be, but still it demonstrates how large scale resource development can be done with little or no noticeable impact to the environment at this time.

After years of involvement with the development of the Donlin Project, with the public release of the Donlin EIS it is has been some what frustrating to watch all the "Johnny-Come-Latelys" jump on the band wagon in opposition to the Project. Many of them have no true understanding of the issues – especially the environmental ones.

Much of the most vocal & eloquent opposition comes in fact from relatively wealthy people with good jobs and fine homes with very limited experience in the region beyond their residences in Bethel..

Many of them have no vision for our future – the future of the region.

They have no understanding of what it's like to be a twenty-something young man living in a village in the middle of winter with little to no opportunity for anything except a dope pipe or a bottle of R & R whiskey. No jobs, no money for gas and good equipment to go out hunting or trapping. The illegal sale of alcohol and drugs is probably the second biggest factor in the quasi-economy of our region after government spending.

Where is our region going to be in 20 years or 50 years without some true economic development?

Our population is growing at third world country levels. Over half of our People are under the age of 25 and this percentage is growing. We have people in their 30's that are grandparents already! What are we going to have for all these young People?

More over-capacity prisons, more over-flowing cemeteries?

People have been complaining about their subsistence way of life being threatened by the development of Donlin Creek. Let me tell you that in a lifetime of traveling up and down this River and as person that still travels up and down it more than most – the country is empty. Especially the Middle and Upper Kuskokwim – the part of our region that would be most effected by the development of Donlin Creek.

There is no one out there anymore – not on an extended basis like they used to. There is still a lot of subsistence activity going on but most of it consists of short day trips close to home. The modes of transportation, tools, and equipment we have in these modern times has made subsistence hunting, fishing, and gathering so much easier. Oh, but they also take more money! And once you've completed your seasonal rounds of subsistence activities with vastly more effectiveness and efficiency than it took in traditional times - what do you do with all that spare time?

What are our young People going to have without some major economic development? Not everyone can work for YKHC, AVCP, or the school districts. And they'll have no money to go hunting, fishing, trapping, or gathering. So they continue to rely increasingly on public assistance programs. Public assistance is becoming an integral part of our Region's culture. It is also an enabler/enhancer of our more negative social aspects: unwed mothers becoming pregnant over and over again so they can get more assistance, fathers with no responsibility, free money for alcohol and drugs (yes people have figured out how to use public assistance for this), significant health problems and obesity from all the junk food that is bought with public assistance money, high crime, suicide, the list goes on and on.

But if you ask any young person along the River today what they want most. Their answer isn't subsistence.

It's a JOB! Give a young person a job – an opportunity – and you change their life.

With opportunity, a young person can be even more true Native – independent, self-sufficient, have more pride and self-esteem, be more of a Nukalpiaq (good hunter/provider) – the very core of our culture in this region.

Instead of being poor and dependent on government support. The definition of being Native is becoming more and more confused with the definition of poverty.

We may not want Donlin Creek but we need it. We can't go on like this – all we're doing is creating a big ghetto with millions of acres of empty unused country around it.

Allow for the development of just a few thousand acres to bring economic benefit to the greater Region – there will still be vast areas of untouched land and water that can be enjoyed by the People as they hunt, gather, and fish for food while at the same time having the economic means to do it even more effectively. And there will still be vast areas of land and water that will NEVER feel the impacts (negative or positive) of an open pit mine on a small tributary of the Middle Kuskokwim. Some People who live hundreds of miles from

Donlin talk like everything about their lives will be ruined. We bet they won't even notice a thing much like the People living along the Yukon aren't even aware of the Ft. Knox mine far away on a distant tributary.

Regarding the specific issues covered in the Draft EIS:

Barge traffic: not an issue. Our administrator grew up on barges on the Kuskokwim River and was a captain for 10 years. The River is a big place. A couple of barges a day is nothing. People forget the immense amount of barge traffic we had in the 1980's when the State was flush with oil money and splashed it all over our region paying for the construction of new schools, multi-purpose buildings, clinics, fire stations, and just about any other thing a community asked for. In addition to the greater volume of freight/fuel barge traffic there was also a viable commercial fishery going on in the 1980's that included significant large vessel traffic – especially in the Lower River. With several fish processors operating in Bethel and 800 commercial fisherman there was a lot of large vessel activity on the River. Somewhere we have a picture of 14 freight barges, large fish processing ships, Japanese tramp steamers, and assorted tenders lined up in front of Bethel at one time. There was also a constant stream of barges hauling hauling gravel from the middle to lower Kuskokwim. Up until recently every rock on every road, runway, and building foundation pad in the lower River came down by barge from the Kalskag- Aniak area. Sometimes these barges were drafting as much as 10 feet!

The best thing though would be the implementation of those LNG trucks – just a better alternative in so many ways – including reduced barge traffic – since the public perception is that this a big issue in this Donlin EIS process.

The Port Site: We've always favored the Birch Tree Crossing Alternative for several reasons.

1. The River from Birch Tree downstream to Bethel is relatively easy for barges to navigate at just about any River level. Upstream of Birch Tree there are several tricky spots which have more potential for barging problems.
2. The other reason we've favored Birch Tree is because in almost any year you can have a safe, reliable ice road from Bethel to Birch Tree. Even in a mild winter like the one we're experiencing now you get get 60-90 days of ice road trucking – this could be an important transportation alternative if summer River conditions are extreme and limiting. A safe, maintained ice road would also bring great economic/social benefit to the People of the region.
3. We also like the idea of the 80 mile road from Birch Tree to Donlin – the first major road in our region that could be a real asset when the mine closes. The road would also open up other mineralized areas for development and perhaps even provide a transportation connection to the Yukon River someday.
4. The road might also have the potential to serve as the route for any extension of the natural gas pipeline to the rest of the region.

PAA 8

PAA 23

Dry Stack Tailings – we prefer this alternative. Any process that further reduces the amount of water that needs to be monitored and treated "in perpetuity" and reduces risk to the watershed has to be a good thing.

Natural Gas Pipeline – not an issue – already a well established practice throughout the world – including Alaska – with the added benefit of the potential to extend and supply natural gas to the lower Kuskokwim and beyond.

AIQ 1

Air Quality – mercury emissions have been one of our greater environmental concerns, it seems to have been addressed, but those entities responsible for issuing permits for the Project must ensure that it is.

Hazardous Materials and Waste Management: the transport and handling of hazardous materials isn't an issue – there are well-developed almost universal safety systems in place for this issue. Many toxic, hazardous materials are safely transported throughout our State in general and Region in particular everyday. On a tour of the Golden Sunlight Ore Processing Facility in Montana years ago our administrator stuck his hand in the cyanide solution. His hand still works just fine today.

WAQ 8

Water Quality – this is perhaps the biggest concern for everyone who lives along the River. It seems to have been addressed adequately but we would like a clearer more understandable plan for treatment of water in "perpetuity" including financial planning to support this on going work. We don't ever want to worry that our River is polluted and that its not safe to eat what we get from it.

DAM 3

We think it would be good to be able to demonstrate what the true effects would be in the unlikelihood of a catastrophic release of contaminated water into the Kuskokwim. Over the years we have observed man-made and natural contaminations of the River and see how quickly they are diluted and their effects flushed out in a relatively short period of time.

It's ironic that no one says much about a sewer lagoon in Bethel that is being used at seven times the capacity it was designed for being discharged regularly into the Kuskokwim River. Where's the water quality there?

The Kuskokwim River is a large river with a lot of water moving through the watershed. Crooked Creek isn't even the half way point of the Kuskokwim's length. There would still be over half of the River's water coming down uncontaminated to further dilute the already quickly disseminated contaminated water.

This may be over simplifying it but in our minds it would be like releasing 1,000,000 gallons of dry powdered red Kool Aid into the River at Crooked Creek. How long would the water stay red downstream? It might hurt a few fish in the immediate area for a short time, but a majority of of the main stem of the Kuskokwim would feel minimal effects if any at all. And again there would be vast areas of the watershed that would have no negative effects.

The other issues identified and analyzed aren't worth spending too much more time discussing. Things like marine mammals, bald eagles, wetlands etc. Again look at our region as whole – it's a vast area – most of it will never be touched by natural resource development and will remain as it has throughout the millennia.

Our region has been famous for opposing natural resource development yet always open to more low-risk/no-risk government spending. In the 1970's and 80's regional leaders opposed oil & gas exploration. Now they would welcome it!

Another example of our region's strong resistance to change that we remember is when they were first proposing to use a hovercraft to deliver mail and freight from Bethel to our outlying villages. There was great opposition to this. Many People publicly spoke against the use of the hovercraft fearing that it would scare away fish and game and damage other subsistence resources.

Now the hovercraft is an accepted part of everyday life in the Lower Kuskokwim. No harm done.

SVE 1

There are risks associated with the development of Donlin Creek into a world class open pit gold mine, but great efforts have been taken in the planning for this Project to minimize these risks. And yes, there will be a relatively small area of the Kuskokwim Watershed that will never be the same, but this is a risk and a limited

SVE 1

change in the natural environment that we need to take – for the economic, social, and even cultural future of our young People.

Thank you.

The Native Village of Napaimute
P.O. Box 1301
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Visit Napaimute on the web: www.napaimute.org

From: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Sent: Thursday, February 25, 2016 6:58 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Napaimute resolution requesting extension of public comment period
Attachments: 2-18 RES 16-02 (DEIS EXTENSION).pdf

-----Original Message-----
From: Dan Gillikin [mailto:dangillikin@gmail.com]
Sent: Thursday, February 18, 2016 9:18 AM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>; donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>; abittner@blm.com; lopez@udall.gov; mark leary <napaimute@gci.net>
Subject: [EXTERNAL] Napaimute resolution requesting extension of public comment period

My Traditional Council is formally requesting that the public comment period for the Donlin Gold DEIS be extended an additional six months. Please see attached resolution 16-02. If you require any clarification please feel free to contact me.

Regards,

Dan Gillikin
Environmental Director
Native Village of Napaimute
Aniak Alaska

907-545-0564

P. O. Box 1301
Bethel, AK. 99559
Ph: (907)543-2887(Bet.) / (907)222-5058 or 222-6084 (Nap.)
Fx: (907) 543-2892
Email: napaimute@gci.net
Website: www.napaimute.org

Resolution No. 16-02

A Resolution To Formally Request That The Army Corps of Engineers (ACOE) Extend The Public Comment Period for the Donlin Gold Draft Environmental Impact Statement (DEIS) By An Additional Six (6) Months Beyond The Current Comment Deadline Of April 30th, 2016. NEP 1

WHEREAS, the Napaimute Traditional Council is the federally recognized tribal governing body for The Native Village of Napaimute, and;

WHEREAS, the Napaimute Traditional Council represents the interests of the tribal members of The Native Village of Napaimute, and;

WHEREAS, the Napaimute Traditional Council believes that given the scale and scope of the proposed Donlin Gold project, the sheer volume and technical nature of the issues and alternatives analyzed in the DEIS: and conflicting Agency conclusions on the impact to subsistence uses that additional time is required for public review of the document to allow for meaningful comments to the ACOE by the public on the DEIS;

WHEREAS, Federal Agencies are required to make efforts to provide meaningful public involvement in their NEPA process (CEQ NEPA Regulations, 40 C.F.R. §§ 1501.4(b), 1506.6(b));

WHEREAS, the Napaimute Traditional Council does not feel that the current public participation efforts to-date, or scheduled prior to the April 30th deadline will meet the requirements of "providing **meaningful** public involvement", for reasons stated above;

WHEREAS, the proposed project **will** directly affect our Tribal Members along with other Kuskokwim Stakeholders for generations to come, potentially in perpetuity;

NOW THEREFORE BE IT RESOLVED, that the Napaimute Traditional Council is formally requesting that the ACOE extend the public comment period six (6) months beyond the current deadline of April 30th, 2016, and that the ACOE schedule additional outreach with the affected communities and Tribes during this extended period for the purpose of soliciting **meaningful** public comments on the DEIS;

AND FURTHERMORE BE IT RESOLVED, that the Environmental Director for the Native Village of Napaimute has been in contact with the U.S. Institute for Environmental Conflict Resolution to inquire as to what services they can provide to facilitate our request, and given the controversy surrounding the proposed project we would encourage your Agency to do likewise.

CERTIFICATION:

This resolution was adopted at a meeting in which a quorum of the Native Village of Napaimute Traditional Council was present. Passed and approved on the 17st day of February 2016 with a vote of 5 Yes, 0 No, and 0 Abstain.

Devron Hellings February 17, 2016

Devron K. Hellings, President **Date**

02.17.2016

Shelly P. Leary, Secretary **Date**

From: Isaacs, Jon
To: DonlinEISAR; Bellion, Tara
Subject: FW: [EXTERNAL] Comments on Donlin DEIS from Napaimute
Date: Tuesday, May 31, 2016 11:29:56 AM
Attachments: Comments_Napaimute_DEIS.pdf

-----Original Message-----
From: Newman, Sheila M POA [mailto:Sheila.M.Newman@usace.army.mil]
Sent: Tuesday, May 31, 2016 11:08 AM
To: Brewer, Jason D POA
Cc: Isaacs, Jon
Subject: FW: [EXTERNAL] Comments on Donlin DEIS from Napaimute

-----Original Message-----
From: Campellone, Estrella F POA
Sent: Tuesday, May 31, 2016 10:58 AM
To: dangillikin@gmail.com; Newman, Sheila M POA <Sheila.M.Newman@usace.army.mil>
Cc: Andraschko, Amanda M POA <Amanda.M.Andraschko@usace.army.mil>; dangillikin@gmail.com
Subject: FW: [EXTERNAL] Comments on Donlin DEIS from Napaimute

Hi Dan,
I am forwarding your comments to Ms. Sheila Newman, she is Keith's supervisor and in charge of Donlin after Keith's departure.
Thanks,
Estrella
-----Original Message-----
From: Dan Gillikin [mailto:dangillikin@gmail.com]
Sent: Tuesday, May 31, 2016 10:34 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>; Campellone, Estrella F POA <Estrella.F.Campellone@usace.army.mil>; Andraschko, Amanda M POA <Amanda.M.Andraschko@usace.army.mil>
Subject: [EXTERNAL] Comments on Donlin DEIS from Napaimute

Not precisely sure with Keith departing who this should be addressed to, if somebody would please confirm receipt I would very much appreciate it.

If folks would like discussion or clarification on the comment please feel free to contact me at the number below, or respond to this email address.

Regards,

--

Dan Gillikin
Environmental Director
Native Village of Napaimute

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Fax: 1-855-270-2002

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Website: www.napaimute.org

Subject: Public Comments and Assessment of the Donlin DEIS

From: The Native Village of Napaimute
Traditional Council (Council)

To: Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
CEPOA–RD–Gordon
P.O. Box 6898
JBER, AK, 99506–0898

Dear Mr. Gordon,

The Council wishes to extend their gratitude to you and your staff for all their hard work on the Donlin Gold DEIS and recognizes the challenges associated with taking on a project of such enormity and consequence. We appreciate this opportunity to comment on the DEIS and look forward to continuing to work with the ACOE as we move into the next phase of the process.

The Council supports the responsible development and use of our natural resources to provide sustainable economic opportunity for our members and neighbors throughout the region. It is in that vein that we offer the following comments and recommendations to assist us with making a balanced decision on the proposed project, which best serves, all our interest.

It is our understanding that the fundamental purpose of the NEPA is to:

> *"Provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment."*

And, that the alternatives presented should:

> *"Present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public."*

In several critical assessments found in the DEIS we feel the ACOE fell short of providing a "full and fair discussion" on significant environmental impacts, or adequate information to allow for making a "reasoned choice" among the alternatives presented.

The following are specific areas of concern encountered after review of the DEIS that we believe warrant additional study and/or discussion by the ACOE under NEPA guidelines, and should be addressed in a revised DEIS or in the final EIS:

GRD 4

1. **Hydrological modeling**: The uncertainty associated with this model related to the permeability "K Factor" (low K = low permeability, high K = high permeability) of the substrates and bedrock underlying Crooked Creek is significant, specifically in the lower reaches. This modeling provides the foundation for subsequent assessments evaluating impacts to aquatic habitats, species, and fisheries.

FISH 3

2. **Modeled groundwater depletion and its effects on aquatic habitat**: This evaluation is based on an integrated model (surface and ground water) which does not specifically evaluate the scenario of a high K Factor during baseflows conditions.

FISH 2

3. **Salmon productivity:** The analysis is based on the proportion of salmon escaping past the weir on Crooked Creek relative to established salmon escapement goals for tributaries of the Kuskokwim River. The values presented in the DEIS cite incorrectly the number of established tributary escapement goals and therefore presumably also the aggregated numbers. Additionally, the presumption that this type of comparison (proportional abundance) is the only representative measure of salmon productivity does not reflect the best available science or current fisheries management practices and policy.

FISH 11

4. **Essential Fish Habitat (EFH):** The EFH assessment was prepared by a private contractor who is required to consult with the NMFS. One of the requirements is that the EFH assessment must include the federal agency's view of the effects (not the contractor's) of the proposed action. No such assessment was included in the EFH assessment, or the DEIS. The methodology used in the assessment did not take into consideration the high K scenario. Individual stream reaches were evaluated separately without consideration of cumulative effects. The conclusions of minor to no effects to EFH are flawed and directly contradict other assessments with no explanations provided.

LAND 7

5. **Cumulative Effects Assessment:** The cumulative effects assessment in the DEIS does not adequately address active mining claims near the proposed project. Approximately 100 sq miles of active claims occur along a 100 mile long, by 20 mile wide corridor extending from the proposed mine site to Takotna: including active Donlin claims in the George River watershed, less than 50 miles to the NE. Future development of these claims either by Donlin or some other Claimant is a reasonably foreseeable future action, or possibly even a connected action if the infrastructure developed by Donlin for the proposed mine is utilized in anyway.

SUB 21

6. **Subsistence:** The DEIS present two assessments of the impacts to subsistence; the ACOE assessment with a conclusion of only minor impacts, and the BLM 810 analysis which concludes that there will be significant restrictions to subsistence uses. The DEIS fails to provide any explanation of, or discussion on the two contradictory findings.

GRD 4

Hydrogeology Modeling

Groundwater hydrology is described in Chapter 3, section. 3.6 in the DEIS. The existing conditions and associated impacts for each of the alternatives is based on modeling well, bore hole, surface hydrology, and geologic data collected at various locations throughout the proposed project site, primarily at a local scale. The purpose of the hydrological modeling is stated on page 3.6-13 in the DEIS:

> *A three-dimensional mathematical model of the groundwater flow system in the vicinity of the proposed mine pit and process facilities area has been constructed by BGC (2011d, h, i, 2014g, c) in order to accomplish the following primary goals:*
>
> - *Better understand pre-mining groundwater flow through the region;*
> - *Plan mine dewatering facilities;*
> - *Estimate the potential effects of the proposed mine on flow in local surface water, in particular Crooked Creek;*
> - *Estimate the effects of proposed tailings storage on groundwater flow;*
> - *Estimate the amount of groundwater that would be collected by the proposed tailings storage facility (TSF) underdrain and seepage collection systems; and*
> - *Estimate the amount of time it would take for the pit lake to fill after mining.*

Under NEPA requirements the ACOE is required to ensure the scientific integrity of all discussions and analyses presented in the DEIS, providing a "full and fair" discussion on the environmental effects of any proposed actions. Given that the hydrological modeling and more specifically the groundwater model is a fundamental component to evaluate the effects of many of the major aspects of the project, getting it "right" is imperative.

The DEIS states on page 3.6-25, emphasis added:

> *"The effects of pit dewatering on Crooked Creek are largest in the winter when streamflow is most supported by groundwater as baseflow. The base case groundwater model that simulates the mine scenario (see Section 3.6.1.4) predicts that some flow of Crooked Creek would be diverted to the pit dewatering system through stream leakage and groundwater flow. Sensitivity analysis simulations (see discussion below in this section) suggest that* ***prediction of the amount of streamflow depletion is difficult****."*

Furthermore the DEIS goes on to state on page 3.6-30, emphasis added:

> *"Using the integrated modeling approach, and examining the 10th percentile low flow and high hydraulic conductivity scenario, Crooked Creek is expected to go dry above American Creek during the low flow season (Table 3.5-26 in Section 3.5, Surface Water Hydrology). Under this scenario and compared to the low flow base-case hydraulic conductivity scenario, the maximum summertime predicted reduction in flow increases from 26 percent to 61 percent and the annual average predicted reduction in flow increases from 22 percent to 46 percent.* ***This verifies that the hydraulic conductivity of the bedrock aquifer is an important parameter of the model****.* ***Use of the base case results, even though they remain probable, should include consideration that other potential outcomes of the model, some quite different, are plausible. This is because bedrock hydraulic conductivity tends to vary from place to place by about three orders of magnitude and model projections based on a single realization of these values at or near the mean values have significant uncertainty.***

GRD 4

> *Similarly, a second sensitivity analysis was conducted that simulates hydraulic conductivity zones associated with known faults.* ***Observations in the areas of the faults have not indicated that these faults exhibit high hydraulic conductivity and the base case model did not assign values to faults any different than the surrounding rock.*** *Conceptually, this scenario evaluates the situation where faults subcrop beneath Crooked Creek and extend for some distance away from the creek.* ***Similarly to the high-hydraulic conductivity analysis described above, the calibration worsens under this scenario****.* ***The maximum percent reduction in flow of Crooked Creek at Station CCBO during wintertime increases from 30 percent to 83 percent of flow under this scenario.*** *The maximum summertime reduction in flow increases from 9 percent to 16 percent and the maximum average reduction in flow increases from 20 percent to 49 percent."*

Based on the sensitivity analysis, and the uncertainty associated with modeling groundwater flux throughout the project site the DEIS concludes on page 3.6-30, emphasis added:

> *"Together, these scenarios demonstrate that the model results showing impacts to Crooked Creek should be regarded as uncertain and that the analysis of project effects should include scenarios other than the base case (e.g., the sensitivity analyses described above).* ***Should most or all of the water (at least during winter) in Crooked Creek be diverted by groundwater conditions similar to these sensitivity analysis scenarios, the loss of streamflow and creek habitat could be of high magnitude and extend to a more***

GRD 4

regional distance downstream (but still limited by the mouth of Crooked Creek). *The effect would be long-term, lasting as long as the dewatering system is active during mine operations and with gradually declining impacts, through the closure period as the groundwater system recharges."*

Despite the precautions mentioned by the analysts that developed the groundwater model the DEIS summarizes the impacts to groundwater hydrology in Table 3.6-4, as minor to moderate. This conclusion appears to be arrived at by only considering the dewatering that will potentially occur around the open pit site, i.e. at a local scale. However, the model authors clearly state that under a low flow, high hydrologic conductivity (*High* K) scenario the effect could be observed at a more regional scale, possibly extending to the mouth of Crooked Creek.

GRD 9

Rationale provided in the DEIS to explain why the ACOE chose to consider the precautionary recommendation for some of the impacts i.e. magnitude or intensity, but not others, i.e. the scope of the dewatering being limited to just around the pit site as described on page 3.6-42 is unclear, but addressed in the footnote at the bottom of Table 3.6-4 which states:

> *"The summary impact rating accounts for impact reducing design features proposed by Donlin Gold and Standard Permit Conditions and BMPs that would be required. It does not account for additional mitigation or monitoring and adaptive management measures the Corps is considering."*

Given the stated uncertainty in the groundwater model a reviewer is not able to determine if, and or how these "design features, standard permit conditions, and BMP's "would mitigate impacts to groundwater hydrology, and to what degree. The ACOE proposed further mitigation to address this data gap, specifically on page 3.6- 44-45 the ACOE suggested:

GRD 12

> *"As a result of the recognized uncertainty of model results, the groundwater flow model should be reexamined 3 years after the commencement of pit dewatering to minimize uncertainty about dewatering effects, with a 5-year review frequency thereafter, or when noteworthy unexpected conditions are encountered. Unexpected conditions should be used to revise projections and adjust management plans as needed. As required by permit conditions, relevant groundwater data such as production rates and water table levels) should be collected as mining progresses to facilitate model revisions;"*

Again, it is unclear how requiring additional monitoring and adaptive management practices would mitigate groundwater impacts. Presumably a revised model with less uncertainty would provide a better understanding of the groundwater flux throughout the project site and the impacts from proposed actions. However, given the possibility that the magnitude and scope of impacts could be significantly greater than those presented in the DEIS (as suggested by some subject matter experts, Myers Memo 2016) it is uncertain that simply modifying management plans would be sufficient mitigation. It is more likely that should significant differences in groundwater flux be revealed that corresponding significant changes to the project design would also be required to mitigate the impacts. Without adequate consideration of this potential in the DEIS or FEIS, the decision to approve permitting of the project by the ACOE based on the current understanding of groundwater flux would appear to be pre-decisional.

The technical aspects of the groundwater model are complex, and in reality, the validity of the model can only be fairly evaluated by subject matter experts. The numeric model was prepared by an independent contractor and provided to the ACOE for inclusion in the DEIS, stating in the DEIS that the modeling met industry standard. However, given the stated uncertainty in the model and the fundamental role it plays in the evaluation of impacts and consideration of alternatives a third party independent peer review of the model should have been conducted and provided in the FEIS, or a supplemental DEIS.

GRD 16

To our knowledge only one such review by a qualified expert has been conducted, by a Dr. Tom Myers under commission by the Northern Alaska Environmental Center. Dr. Myers Technical Memorandum "*Review of the Draft Environmental Impact Statement for the Donlin Gold Project"* provides a comprehensive review of the numerical groundwater model. His comments regarding the model presented on page 28-43 of the memo are incorporated by reference into this document, and included as an appendix.

It is our belief to provide a "full and fair" discussion on the environmental effects of the proposed actions, and allow the reviewer to make a "reasoned choice" among alternatives the ACOE must conduct, and provide the results from an independent peer review of the numerical groundwater model used in the DEIS, prior to the release of the FEIS.

Ground and Surface Water Depletion and its Effects on Aquatic Habitats

The assessment of impacts to aquatic habitats begins on page 3.13-81 of the DEIS. The section on assessment of changes in streamflow and its effects is unnecessarily confusing. The information was analyzed and presented in such a way that did not allow for direct comparison of the estimated reductions in habitat (Table 3.13-27 and 28) to the descriptions beginning on page 3.13-93, or the summary impacts shown in Table 3.13-30. This confusion results from the different assumptions about the degree of dewatering used in the various analyses. An example of this incongruence from the DEIS (page 3.13-96) is illustrated below, emphasis added:

> *"As shown in Table 3.13-28, the number of off-channel units and corresponding areas connected to the main channel relative to estimates of total off-channel habitat surface area were calculated for* ***baseflow conditions minus 16 percent****, at baseflow, and at increasing levels of flow representing 25, 50, 75, and 100 percent of bankfull stage (OtterTail 2012e)."*

FISH 3

And, from page 3.13-94:

> *"During Year 20 of operations, the maximum winter flow reductions in stream reaches near the mine site and in lower Crooked Creek would vary from:*
>
> *85-100 percent in March* ***based on a low flow year and High K scenario****; flows would be reduced by* ***85 percent*** *at Crevice Creek,* ***40 percent*** *below Getmuna Creek, and* ***31 percent*** *below Bell Creek."*

Additionally the DEIS goes on to summarize the impacts of reduced streamflow and Mainstem Aquatic Habitats and states that the analysis presents the "most conservative case". This clearly is not the case, since the DEIS then goes on to say the *High* K scenario was not considered in the analysis which, as shown above would represent the most conservative case, page 3.13-98, emphasis added:

FISH 3

> *"Estimates of Crooked Creek habitat loss were predicted based on Year 20, monthly 10-year low flow projections (Table 3.13-27). As described in the sections below, estimates for summer and winter low-flow scenarios provide a* ***high-end (most conservative case)*** *estimate of potential aquatic habitat loss as a result of proposed project operations (however,* ***they did not predict habitat losses corresponding to High K scenario flow reductions****)."*

This use of different assumptions occurred consistently throughout most of the analysis presented in section 3.13 of the DEIS. This results in summary impact (Table 3.13-30) conclusions that run the full range of possibilities, i.e. from negligible to major for the same components at the same locations, which is effectively meaningless without proper context. This then leaves it up to the reviewer to decide which scenario is most appropriate to use, but (as discussed previously) the DEIS provides no basis of direct comparison between scenarios.

The issues discussed in the previous section regarding the uncertainty associated with the groundwater model are obviously the major contributing factor to the previous discussion. We believe that until those issues are satisfactorily resolved, and a reanalysis and conclusions (based on consistent assumptions) are provided a rational evaluation of the potential impacts to fish and aquatic resources is not possible.

Salmon Productivity

The assessment of streamflow reductions in Crooked Creek and its tributaries on salmon productivity (beginning on page 3.13-108) is conceptually inadequate. In addition to suffering from the same issues raised in the previous two sections: it also limits the scope of the analysis to only the abundance of Crooked Creek salmon populations(s) within the context of the overall Kuskokwim Basin salmon population(s).

FISH 2

It is recognized by fisheries scientists that salmon "productivity" is not strictly a numbers game, but that biological diversity also plays a critical role in the long term sustainability of fish populations, and is inherent in any assessment of "productivity". Lichatowich and Williams said it best in their 2015 report to the Bering Sea Fisherman's Association titled: *A Rationale For Place-Based Salmon Management:*

> *"Genetic diversity, life history diversity, and population diversity are ways salmonids respond to their complex and connected habitats. Those factors are the basis of salmonid productivity and contribute to the ability of salmonids to cope with environmental variation that is typical of freshwater and marine environments."*

Furthermore, in a combined analysis for Chinook salmon in the AYK region, particularly the Kuskokwim, McPhee et al. (2009), Waples (2009), and Utter et al. (2009) recommended that Chinook salmon to be managed at a local population level to preserve biological diversity.

Sustained productivity of salmon has been shown to be possible only if genetic diversity and population structure are maintained (NRC 1996; Hilborn et al. 2003). Only a few studies specific to the genetic diversity of Kuskokwim Chinook salmon have been conducted, and none included the Crooked Creek population. One of the conclusions reached by researchers, Templin, et al. (2004) when looking at the genetic diversity of Kuskokwim salmon was:

> *"Significant population structure exists among populations of Chinook salmon from the Kuskokwim Management Area. In particular, populations spawning upriver of the confluence with the Holitna River are particularly genetically divergent, both within and between populations."*

In another study, Olsen et al. (2004) evaluating the effective population sizes of Kuskokwim River tributaries with small populations of Chinook salmon writes:

> *"Maintaining genetic diversity is necessary for maintaining healthy, viable populations. This tenet of conservation is most relevant for populations that are small or are experiencing significant declines in abundance. Small populations are of particular concern because loss of genetic diversity is inversely proportional to population abundance. In this context, abundance refers to the effective size of the population (Ne), not the census size (N),*
FISH 2 *and theory suggests genetic diversity is lost at a rate equal to 1/(2Ne) per generation. Thus, the Ne is an important indicator of the genetic health and viability of a population. Conservation guidelines have been established from theoretical studies that suggest isolated populations having an Ne below 500 (50) are at risk of significant long-term (short-term) loss of genetic diversity. These threshold values of 500 and 50 provide a yardstick with which to evaluate Ne estimates."*

The Olsen study further goes on to provide *Ne/N* ratios that can be used as surrogates when genetic information is not available to estimate the effective population size for Chinook populations where demographic information is available. Olsen calculated the average *Ne/N* ratio to be (0.28 ± 0.12) assuming a 1:1 sex ratio, no immigration, and random variation in reproductive success. For discussion purposes if we apply Olsen's surrogate ratio to the average Chinook escapement reported in the DEIS (59 Chinook), we can estimate an effective population size *(Ne)* at 16.5 fish. This means that the population is actually losing genetic diversity at the rate of the *Ne* population size (16.5), and not the census size of *N* (59). Estimating the genetic loss per generation (using the formula provided above) we can arrive at approximately 3.0 % per generation for a *Ne* (16.5), and 0.8 % for a census size of *N* (59).

Assuming an average generation time for Kuskokwim Chinook to be 5 years, we can then get a rough idea of the rate at which the genetic diversity of Crooked Creek Chinook salmon may be lost over time under current conditions, Table 1.

Table 1. Estimated Loss of Genetic Diversity for Crooked Creek Chinook over Time

	Size	Loss over 1 gen or 5 yr.	Loss over 4 gen or 20 yr.	Loss over 10 gen or 50 yr.	Loss over 20 gen or 100 yr.
N (census size)	59	0.8%	3.2%	8%	16%
Ne (effective size)	16.5	3.0%	12%	30%	60%

The purpose of the previous exercise and discussion was not to precisely attempt to quantify the biological diversity of Crooked Creek salmon but simply to demonstrate their possible vulnerability, and that while these populations may be small in the overall context of the Kuskokwim, they are important as reservoirs of genetic diversity. Fisheries Managers and Biologists on the Kuskokwim River recognize the importance of this fact, and are currently (or attempting to) employ strategies to preserve biological diversity. These strategies are well documented in studies evaluating what has been termed the "portfolio effect" (Schindler et al. 2010) and how it contributes to long term productivity and provides for sustainable yield.

FISH 2

Fundamentally the assessment as presented in the DEIS suggest that the proportion of Crooked Creek salmon to the overall Kuskokwim Basin salmon returns is so minor that the loss of some, or potentially all the salmon would be inconsequential to "productivity". The DEIS summaries on page 3.13-124 all mine site area impacts to salmon as:

> *"Potential impacts from anticipated flow reductions in Crooked Creek would be minor relative to broader populations of fish in the Kuskokwim River. "*

For reasons previously stated, a conclusion that only considers this broader context is not an accepted principle of fisheries management, conservation, and contrary to specific direction provided in policy. For example despite **not** being mentioned in the DEIS Regulatory Framework section on page 3.13-4: the State of Alaska Policy for the Management of Sustainable Salmon Fisheries (5 AAC 39.222) provides detailed and clear direction on the management and conservation of salmon. Any future assessment should contain a thorough discussion on the principles found in the Sustainable Salmon Fisheries Policy, and how any proposed activities will comply with the direction contained within it.

Essential Fish Habitat Assessment

The Essential Fish Habitat Assessment (EFH) was prepared by a private contractor and provided to the ACOE for inclusion in the DEIS, as Appendix Q, page 1 states the following:

> *"Section 305(b)(2) of the MSFCMA requires federal agencies to consult with National Marine Fisheries Service (NMFS) on all actions or proposed actions authorized, funded, or undertaken by the agencies that might adversely affect EFH.*
>
> *The EFH Guidelines, 50 Code of Federal Regulation (CFR) 600.05 – 600.930, outline procedures that federal agencies must follow to satisfy MSFCMA consultation requirements. Federal agencies must provide the NMFS with an EFH Assessment if the federal action may adversely affect EFH. An EFH assessment is to include the following contents (50 CFR 600.920(e)): 1) a description of the action, 2) an analysis of the*

LEG 5

potential effects of the action on EFH and managed species, 3) the federal agency's view of the effects of the action, and 4) proposed mitigation, if necessary."

LEG 5 As specified above the ACOE is required to submit the EFH report to the NMFS for review and consultation, no record of that occurring is included in Chapter 6: Consolation and Coordination of the DEIS. Additionally no "federal agency's view" (also stipulated above), from either the ACOE, or the NMFS is included in the EFH assessment. The oversight agency's (NMFS) views on the assessment would be invaluable at determining the validity of the EFH assessment, and their comments should have been included in the DEIS, as required by 50 CFR 600.920(e)): 3.

Fundamentally, the EFH assessment is wholly inadequate because it does not take into consideration in its assessments of impacts to Crooked Creek the potential of increased dewatering of the *High* K scenario, previously discussed. Additionally, the EFH assessment evaluates impacts only within the broader context of Kuskokwim returns, stating on page 32 of the EFH assessment:

"While salmon escapement values for the entire Kuskokwim River system are not available, because all tributaries are not surveyed or enumerated, annual ADF&G Chinook salmon escapement goals for all 14 monitored tributaries combined were 25,050 to 59,730 (aggregate escapement goal range) (Conitz et al., 2012). By comparison, the average 2008 to 2012 Chinook salmon escapement at the Crooked Creek weir represents between 0.1% and 0.2% of the total escapement goal range for all 14 Kuskokwim River stocks for which escapement goals have been established."

The statement above is factually incorrect. The Kuskokwim River currently has only 3 established Chinook escapement goals on tributaries with weirs, which provide estimate of total escapement, a fourth goal for the Tuluksak River was dropped in 2010. In 2013 a Basin Wide
FISH 11 goal of 65,000-120,000 was also established. A total of 12 aerial index sites are surveyed intermittently, 7 of which have established escapement goals, and these however are only proportional indices of the total escapement. The remaining three goals referred to above are not for tributaries of the Kuskokwim River, but instead for Kuskokwim Bay.

Recognizing, if such a comparison were to be made it would be more appropriate to use the established Basin Wide escapement goal range of 65,000-120,000, in context with the Crooked Creek average escapement of 59 Chinook. This gives a range of less than one tenth of one percent that Crooked Creek Chinook contribute to the overall Chinook escapement goal for the Kuskokwim: even lower than what is reported in the EFH assessment. Hopefully the previous point serves to illustrate that using only abundance estimates in such a broad context should not be the only factor considered when evaluating impacts to fisheries, reasons previously discussed.

In the EFH assessment the mention of the removal of beaver dams from Crooked Creek as mitigation, page 44 is not only short-sided, but illustrates a lack of understanding by the authors preparing the assessment regarding salmon/beaver/riverine ecology. It is recommended prior to any type of stream manipulation proposed as mitigation that a limiting factor analysis of spawning, rearing, and overwintering habitat be conducted for each species of salmon.

Cumulative Effects Assessment

As stated on page 4-1 of the cumulative effects assessment:

> *"the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions" (40 CFR 1508.7)."*

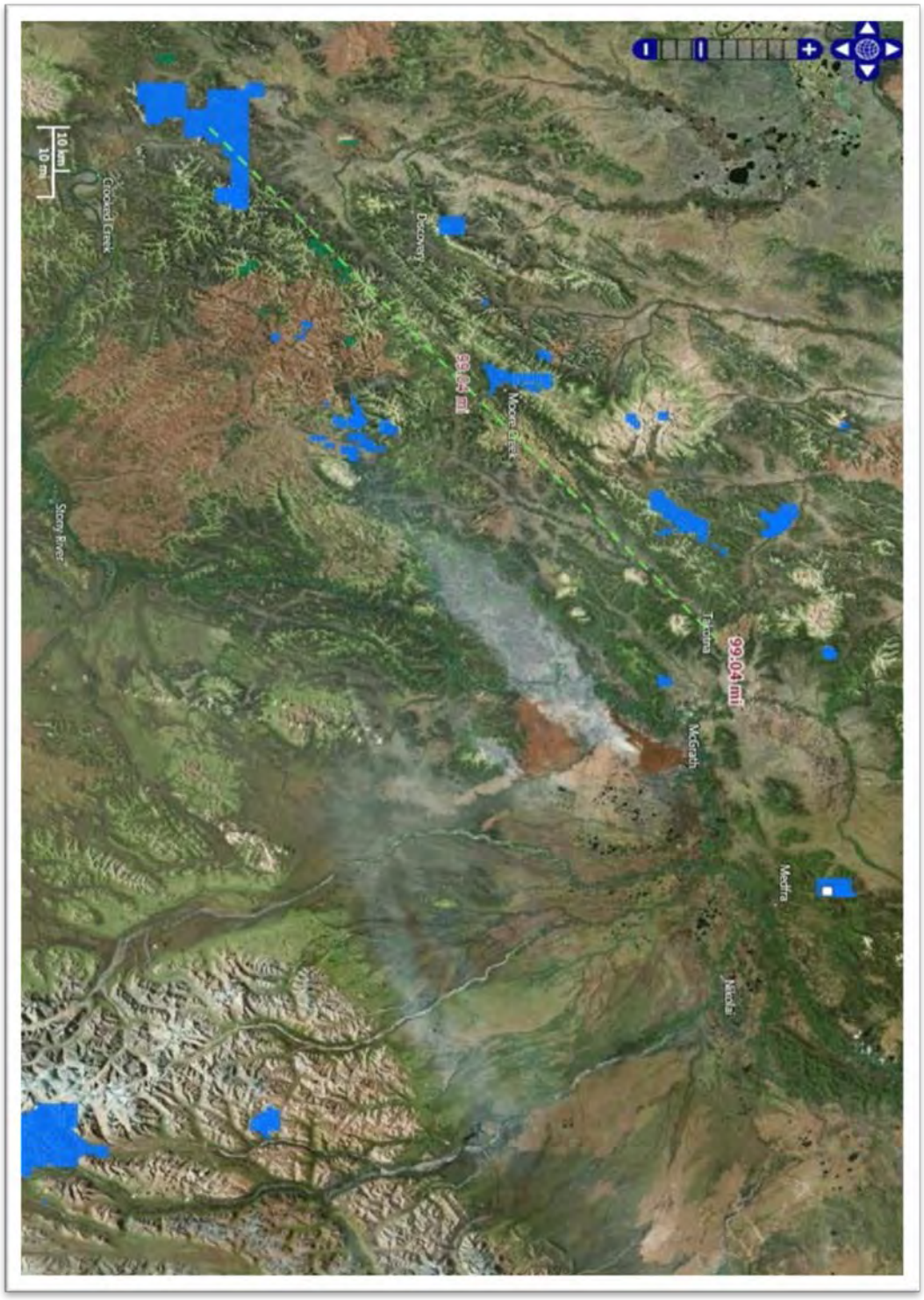
LAND 7 The cumulative effects assessment in the DEIS does not adequately address active mining claims near the proposed project, Figure 1, and considered them to be small scale placer mining operation or exploration activity. Approximately 100 sq miles of active claims occur along a 100 mile long, by 20 mile wide corridor extending from the proposed mine site to Takotna: including active Donlin claims in the George River watershed, less than 50 miles to the NE.

Future development of these claims either by Donlin or some other Claimant is a reasonably foreseeable future action, or possibly even a connected action if the infrastructure developed by Donlin for the proposed mine is utilized in anyway. A revised assessment should be conducted that is inclusive of the potential development of these claims and to what degree the Donlin project would/ or would not facilitate their development.

Subsistence

SUB 21 The DEIS present two assessments of the impacts to subsistence; the ACOE assessment with a conclusion of only minor impacts, and the BLM 810 analysis which concludes that there will be significant restrictions to subsistence uses. The DEIS fails to provide any explanation of, or discussion on the two contradictory findings. The result is that the DEIS does not allow the reviewer to make a "reasoned choice" among alternative.

Figure 1. Active mining claims near the proposed Donlin Project.



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FISH 2

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TECHNICAL MEMORANDUM
REVIEW OF THE DRAFT SUPPLEMENT ENVIRONMENTAL IMPACT STATEMENT FOR THE DONLIN GOLD PROJECT

May 11, 2016
Minor Revisions, May 26, 2016

Prepared for: Northern Alaska Environmental Center

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1.0 INTRODUCTION

Donlin Gold, LLC (Donlin) has proposed to construct the Dolin Gold Project in the Kuskokwim watershed in southwest Alaska. The U.S. Army Corps of Engineers (Corps) is the lead agency for the preparation of the draft environmental impact statement (DEIS). The proposed project includes a large open pit mine with transportation facilities to a port at Bethel Alaska, and a natural gas pipeline from Cook Inlet.

This technical memorandum reviews the DEIS and supporting documents with an emphasis on hydrogeology at the mine sites. The emphasis is on the effects of mine dewatering, pit lake development, treatment of contact water (rainfall or snowmelt that has contacted lands disturbed by mining), and seepage from tailings and waste rock facilities reaching the streams. Dewatering effects include the effects on stream baseflow. This review does not include transportation facilities, port development, or the natural gas pipeline.

My background includes a PhD and MS in hydrology/hydrogeology from the University of Nevada, Reno and a BS in civil engineering from the University of Colorado. I have 35 years of employment experience in consulting, academics and government, with about 20 years specific to mining and energy development hydrogeology. My specialties include numerical modeling and contaminant transport. I have published 17 peer-reviewed journal articles with five articles since 2009 concerning groundwater modeling, contaminant transport, and aquifer water balance. My CV is attached to this review.

2.0 SUMMARY OF MAJOR IMPACTS OF THE PROPOSED PROJECT AND ERRORS WITH THE DEIS ANALYSIS

GRD 1

Development of the proposed mining project would affect the hydrogeology in the mine site area in the following ways.

Mine dewatering will substantially lower the groundwater table near the pit and in surrounding bedrock. Although errors in the conceptual flow model and numerical groundwater model cause the DEIS to under-predict the dewatering impacts, dewatering to keep the pit dry would intercept groundwater flowing toward a stream where it would be become baseflow. Dewatering will reduce streamflows by up to 10 and 30 % during summer and winter, respectively, according to the DEIS. Various uncertainties acknowledged in the DEIS could increase the flow loss from the creek.

HYD 7

Mine construction affects surface runoff in many ways, including the pit intercepting surface runoff in American Creek, thereby preventing it from reaching the stream and the tailings impoundment covering 70% of the Anaconda Creek drainage which prevents a large proportion

HYD 7

of that streams' flow from discharging to Crooked Creek. Ancillary mine facilities such as freshwater reservoirs divert or use surface water runoff which can affect both high and low streamflow rates. Together these effects could lower flows in the creek even more than just by dewatering, with some estimates being as high as 100 percent loss during winter baseflow periods.

WAQ 10

The mine would require approximately 17,438 gpm for processing which would be discharged to the tailings impoundment during operations. Water for the process plant comes from various places, including freshwater reservoirs, contact water reservoirs, and dewatering wells. Excess water would be discharged to Crooked Creek with treatment, so failures in the collection and treatment system would discharge contaminants to and degrade Crooked Creek. During operations, expected discharge from the water treatment plant is 1268 gpm with 786 gpm from mine dewatering and the remainder from underdrains and contact water reservoirs. All sources are subject to much uncertainty meaning that periodic high flows could overwhelm the treatment system. For example, if the bedrock has a significantly higher conductivity, the dewatering rates could be much higher because it would pull water from further away and allow recharge to enter the bedrock from the shallow aquifer faster. Heterogeneity in the bedrock including with the faults could cause periodic high dewatering amounts. The DEIS does not plan for the probability that the treatment facilities will be periodically exceeded by dewatering water or other contact water requiring treatment before discharge.

CLIM 8

The pit lake would recover during mine closure to a point where it would overflow its rim, if allowed, into Crooked Creek. The pit lake water quality would be very poor, according to pit lake modeling, due to waste rock seepage into the pit and acid generating rock around the pit and backfilled into the pit. Donlin would start pumping pit lake water when it reaches 33 feet below the rim to treat and discharge into Crooked Creek. At this point, most of the flow losses from Crooked Creek would cease. However, there are uncertainties not considered in the DEIS that could cause the pit lake to fill and overwhelm the pump and treat system. A spill could devastate Crooked Creek. Climate change could increase precipitation by up to 25% on average but there would also be more frequent very large events, which is not considered in the DEIS. This pump and treat system would be required forever so all possible combinations of weather will eventually occur.

GRD 1

The DEIS relies on the mine dewatering system and the pit lake to draw groundwater including seepage from the waste rock dump and prevent it contaminating downgradient groundwater or discharging to Crooked Creek. However, there is a significant probability that a perched aquifer will form in the shallow aquifer as dewatering lowers the groundwater table. This will short-circuit seepage from the waste rock dump to Crooked Creek. I describe the details in the next few paragraphs concerning the numerical groundwater model. Drawdown occurs under the

GRD 1

tailings impoundment but it will not draw groundwater to the pit because drawdown does not eliminate the ridge in the groundwater table between the tailings and the pit. Seepage escaping the underdrain will flow through the colluvium under Anaconda Creek and either discharge into Anaconda Creek or into the alluvium around and ultimately into Crooked Creek.

DAM 3

The DEIS does not consider the impacts of catastrophic failure, such as would occur with a tailings dam failure. The analysis should consider the probable maximum flood occurring in the watershed because the facility will be there forever. The DEIS should present hydraulic routing of a reasonable portion of the half million tons of tailings down Anaconda Creek and Crooked Creek to show the potential damages.

GRD 4

Most of the DEIS predictions are from a numerical groundwater model. Two aspects of the numerical groundwater model severely bias the predicted impacts of dewatering. The bias is that simulated dewatering does not spread far from the mine pit and affects stream flows much less than it probably will.

- The conceptualization of the bedrock away from the mine pit has very low conductivity, lower than measured in most pump tests and lower than would be expected by considering the scale effects of small-scale test and regional scale models. It is treated as undifferentiated bedrock, meaning treated as one single mass, with a conductivity an order of magnitude less than most of the bedrock simulated within the pit area. This low conductivity prevents the spread of drawdown from the pit into the bedrock, thereby limiting how far the effects can spread. The low conductivity is not justified by observed pump test values or by scale effects which would cause the conductivity to be higher than determined from small-scale pump tests. This prevents the simulated drawdown from affecting overlying streams and wetlands.
- The alluvium around Crooked Creek is simulated with a very high conductivity and very low storativity. Low conductivity bedrock and colluvium surrounds the alluvium. This effectively isolates the alluvium and Crooked Creek from impacts of dewatering. The low storage coefficient allows the alluvium to release very little water for a change in water levels in the alluvium while the very high conductivity limits the change in head. This explains why dewatering drawdown effectively hits a wall at the creek.

GRD 1

The numerical modeling also fails to consider that a perched aquifer could develop in the shallow aquifer. This is partly due to the large difference between bedrock and shallow aquifer conductivity. As simulated drawdown lowers the water table from the shallow groundwater into the bedrock, it is likely that an unsaturated zone would form between a saturated zone in the shallow aquifer and bedrock. Seepage from the waste rock facility would discharge to Crooked Creek rather than be drawn to the pit lake, as relied upon in the DEIS. Drawdown

GRD 1 would occur in the bedrock and pull contaminants toward the pit lake, but perched zones in the shallow aquifer would provide a saturated pathway for contaminants to reach Crooked Creek. The numerical model fails to simulate this because the model cannot simulate such as system. The only potential mitigation would be a liner beneath the waste rock with a leak capture system.

PAA 9 The option for the tailings facility that best prevents seepage from degrading Crooked Creek is dry stack tailing with both a liner and impervious cover to minimize potential seepage with time after closure. This is necessary because the tailings are outside of the pit capture zone and seepage would drain to the streams.

PAA 14 The TSF should have a 100-mil liner rather than a 60-mil liner to make leaks would be less likely. The TSF should have an impervious cover to prevent percolation through the tailings from mounding on the liner, which would increase head on the liner and the leak rates and potentially cause instability problems.

HYD 9 Donlin should consider removing the Snow Gulch Reservoir from the plan to avoid impacts to that tributary watershed.

PAA 27 They should also leave a buffer between the pit and the Crooked Creek alluvium to decrease the connection with the alluvium and decrease the amount of water potentially drawn from the creek.

3.0 DEIS ALTERNATIVES

The DEIS describes five alternatives, including no action (alternative 1), the proposed action (alternative 2,) (mine layout shown in Figure 1), two alternatives that alter the pipeline and transportation routes but leave the mine plan basically as proposed under alternative 2 (alternatives 3 and 4), and an alternative that would alter the mine plan to use dry stack tailings rather (alternative 5) than a slurry system. Dry stack tailings alternative 5 has two options. Option 1 would not be lined but there would be an underdrain to remove seepage. Option 2 would have a liner. There would be eight freshwater wells for domestic and sanitary uses, and up to 35 pit perimeter wells and 80 in-pit dewatering wells (DEIS, p 2-9).

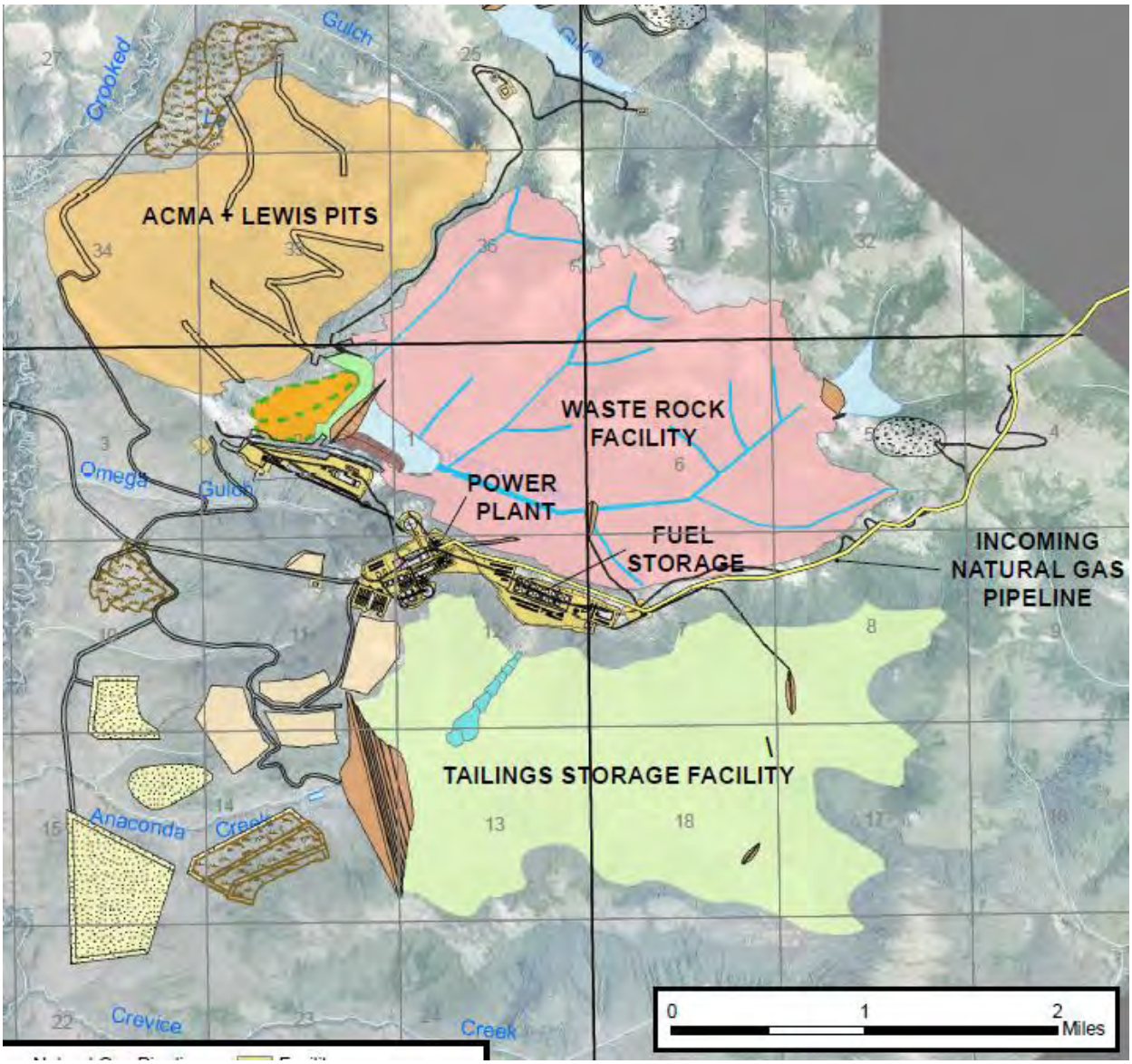


Figure 1: Alternative 2 general mine layout - DEIS Figure 2.3-1

3.1 Recommended Additional Alternative

PAA 27

A primary impact of this proposed mine is the impacts mine dewatering and pit lake formation could have on stream flows. As will be discussed in section 9.0, the properties of the bedrock separating the proposed pit from the alluvium under Crooked Creek have some control over the amount of surface water drawn from the stream into the groundwater. Several amendments should be made to Alternative 2 or should be added to an existing alternative and considered as a new alternative.

PAA 27
- The DEIS should include a setback alternative which requires the pit excavation not intersect the Crooked Creek alluvium. There should be a minimum setback from the creek of several hundred feet to protect stream flows. The exact distance could be determined based on additional understanding of the bedrock properties.

PAA 14
- The waste rock facility (WRF) that would be constructed over the American Creek should have a drain through it to allow streamflow to pass without being captured in an upper contact water pond. Below the WRF, there should be a channel created to allow it to pass the proposed pit

HYD 9
- Snow Gulch Reservoir should be removed if not really needed. See section 7.3 below.

3.2 Adaptive Management and Monitoring

The Corps calls for adaptive management activities pertaining to groundwater hydrology. Donlin should assess monitoring data especially with respect to drawdown to assess whether the groundwater monitoring regime is adequate. Donlin should assess whether drawdown has extended beyond the monitoring system.

- If drawdown at the most distant wells from the mine has become significant, new monitoring wells should be installed. This should be assessed at least every three years during operations.

GRD 12
The groundwater model would be reexamined after three years of pit dewatering to "minimize uncertainty about dewatering effects" (DEIS, p 3.6-44; DEIS, Table 5.7-1). This should include verification of the original model to assess the accuracy of the DEIS predictions.

- If they differ substantially, then new modeling and new NEPA analysis should be completed based on new predictions. A substantial difference is difficult to establish in advance, but would probably include the dewatering pumping rate being off by 100% (pumping twice the expected amount), having drawdown at a monitoring well twice that predicted, or having Crooked Creek lose flow along an unexpected rate or more than expected.
- New modeling should include new ideas of the conceptual flow model in the area. Two obvious considerations are the modeling of the bedrock as a porous media without considering fractures and the distribution of recharge throughout the area.

CLIM 10
The Corps indicates that climate change should be considered in future modeling (DEIS, p 3.6-45, DEIS Table 5.7-1 #3). Long-term climatic observations at the site should be compared with climate model predictions to assess the accuracy of the predictions with respect to Donlin.

CLIM 10

- Climate change effects on the project should be included with each model update and use the most current precipitation forecasts from global climate models. If the simulations predict substantially different potential future conditions, the Corps should complete supplementary NEPA analysis to disclose to the public the potential changes and to allow the public to provide additional comment.

4.0 MINE DEWATERING

Mine dewatering is the process of removing groundwater for the purpose of lowering the water table, or causing drawdown, to keep the mine pit dry. At Donlin, the company would use pit perimeter wells, in-pit wells, and horizontal drains in the pit wall. The water table would be drawn down near the Donlin pit as much as 1400 feet.

The lateral extent that drawdown expands to depends on recharge because recharge replaces groundwater as it is removed. Dewatering removes water out to the extent of an influence zone where the dewatering pumpage equals the sum of recharge that is captured and streamflow induced to recharge. Drawdown will expand until it has captured an amount of recharge and streamflow equal to the pumping rate needed to lower the water table at the mine. At the point where dewatering pumpage equals recharge, the groundwater pumping will approach steady state. Dewatering affects larger areas in dry regions because the recharge is low and smaller areas in wet regions because of the much higher recharge.

GRD 17

The bedrock hydrogeology controls the dewatering rate and affects how rapidly the drawdown expands. This effectively means conductivity (K), the ease with which groundwater flows through a porous media. All else being equal, more water will be pulled more quickly from further away with a high K value. This means the drawdown cone would approach its maximum extent more quickly with a high K.

4.1 Recharge

Groundwater recharge equals 5.5 in/y or 28 percent of average annual precipitation (DEIS, p 3.6-11). The DEIS does not provide a reference for this estimate, but the numerical model report (BGC 2014c) references BGC (2011b) as the source of the recharge estimate. That document mentions recharge only in an appendix which is a memorandum regarding “Potable Water Supply Assessment”; it states: “[a]verage annual recharge in the mine area was assumed to be 139 mm/y, based on the feasibility calibration of the numerical groundwater flow model (BGC 2007c)”. The reference section does not have a BGC 2007c, but BGC 2007g is “Numerical Hydrogeologic Model Results ad Pit Dewatering Design, Final Report”.

Recharge is usually estimated in a conceptual model report, but the most recent conceptual model report for Donlin, BGC (2014g), does not derive recharge. The amount used for this project, 5.5 in/y, is not unreasonable, based on my experience, although it is higher as a proportion of annual precipitation than most areas. Because snowmelt is a slow process the estimate is not unreasonable.

- It is important for the DEIS to have an accurate description of recharge, one of the most important hydrogeologic parameters, and how it was determined.

GRD 17 Recharge equals groundwater discharge from a basin which is at steady state (Myers 2016, Cherkauer 2004). Usually, groundwater discharge is stream baseflow. For the Crooked Creek watershed, recharge would equal baseflow at the mouth of the basin expressed as a depth, in inches, over the watershed. It could be estimated for smaller tributary basins if such detail is desirable but the accuracy may decrease if groundwater tributary areas do not exactly match topographic boundaries. In the Crooked Creek watershed, there could be two forms of baseflow because discharge from alluvial/colluvial aquifers should differ from discharge from bedrock aquifers. Shallow aquifers could effectively drain more quickly than the bedrock aquifers which should provide the late-winter baseflow. If the actual amount of recharge reaching bedrock is small, the drawdown in bedrock should expand more than it appears to and have a much larger effect on winter than on late summer flows (DEIS, Figure 3.6-8).

Recharge affects the DEIS predictions by its effects on groundwater model simulations, as reviewed below in section 9.3. In general, higher recharge means higher discharge and calibrating a model using higher groundwater flux rates would lead to higher estimated K values. Together, high recharge and high K could lead to higher dewatering estimates.

GRD 1 The modeled bedrock K is very low and that of the shallow aquifer, either colluvium or alluvium is much higher, as I describe below, so some of the recharge probably moves through the surficial aquifer to the nearest stream under natural conditions. Depending on the connection between the shallow and bedrock aquifer, dewatering of the bedrock might not pull all of the groundwater from the shallow aquifer into the bedrock which means that the shallow aquifer might remain saturated and continue discharging to the streams. While this might limit the effect of dewatering it also would affect the transport of contaminants from the TSF and WRF to the streams. Isotope data indicates that the age of groundwater varies from 21 to 56 years and that deeper water is older which generally follows the groundwater recharge path.

GRD 1 The DEIS notes that prediction of the impacts due to dewatering are very uncertain. "Sensitivity analysis simulations (see discussion below in this section) suggest that prediction of the amount of streamflow depletion is difficult." (DEIS, p 3.6-25) This refers to sensitivity of

GRD 1 the model predictions to both recharge and bedrock properties. I review model sensitivity in section 9.7.

4.2 Bedrock Hydrogeology

Most pit excavation will be in bedrock, so bedrock will control groundwater flow to the pit and, through connections with streams, control how dewatering affects groundwater baseflow. The DEIS (Table 3.6-2) reports bedrock K varies over about four orders of magnitude at each depth level for three different levels, upper (<330 ft), middle (330 – 660 feet depth), and lower (>660

GRD 2 ft depth). The K ranges are 0.006-14, 0.0009-0.9, and 0.0003-0.2 ft/d, respectively.

The gap analysis for hydrogeologic data acknowledges that scale could affect the hydrogeologic properties in the modeling (BGC 2013b). In general, the K of a formation increases with the scale of the volume being considered. This generally means that a single-well pump test or slug test yields a lower K estimate than a several day pump test with monitoring wells, with lab tests and groundwater modeling K estimates also considered on a similar scale relationship. The gap analysis suggests that BGC complete larger scale pump tests. As noted below in section 9.0, the numerical model did not account for scale effects.

The conceptual model report identifies up to 18 faults crossing the open pit zone (BGC 2014g). Little is known about the faults from a hydrogeologic perspective and they are not even mapped outside of the pit area. The bedrock hydrogeology treats the bedrock as a porous media meaning that the faults are not considered individually, either as flow barriers or conduits. Drawing 2 (BGC 2014g) shows mapped thrust faults mostly crossing the pit in a general east-west direction, but the mapping does not extend much beyond the pit. There is no indication of whether the fault layout in the pit is representative of faults beyond the pit. BGC (2014g, p 19) suggests that there is no indication of a trend of K with respect to the proximity to faults, but Drawing 26 does not show sufficient tests in the area with faults to

GRD 3 support this claim. Thrust faults can have high permeability damage zones. Therefore, if faults intersected by the pit have long-scale high permeability damage zones, dewatering effects could extend for a long distance beyond the pit and the predicted drawdown cone.

- The DEIS does not adequately disclose the properties of the faults that intersect the pit. The DEIS also does not propose monitoring or adaptive management for dealing with a fault system that extends drawdown far from the pit or causes much higher dewatering than expected. Model sensitivity analysis without actually simulating the faults is insufficient planning for the faults.

GRD 3

- If there is sufficient data, the DEIS should provide a plot of K versus distance from a faults to estimate whether there is a trend. There should also be more pump testing completed in the pit area among the faults to collect sufficient data for analysis.

5.0 PIT LAKE FORMATION

After mining ceases, mine dewatering would stop and groundwater would begin to flow into the mine. The open pit would fill in 50 to 55 years with groundwater inflow, surface runoff, and water from the TSF (DEIS, p 2-40), although other reports have estimated other times up to 60 years (Lorax 2012). TSF water would be pumped to the pit lake whenever it does not meet standards (DEIS, p 2-40); at the beginning of closure, about 30,000 acre-feet (af) of tailings water would be pumped into the pit so simulations of pit lake development start with an initial volume. The pit initially would be a hydrologic sink for regional groundwater but would eventually fill to a point where it would discharge into Crooked Creek, except that when the water level is 33 feet below the crest, the mine would begin pumping and discharging the water. This would be required in perpetuity to prevent the pit lake from overtopping its banks (Id.). Treatment sludge would be dumped into the pit lake (Id.).

GRD 6

Inflow to the pit lake is groundwater and runoff from various sources. The pit lake essentially would exist forever so the planning must account for all potential inflows and climate change. BGC (2015l) considers some of the extreme conditions the pit would experience in future, specifically "the ability of the pit lake to handle storm events during the post-closure period" (BGC 2015l, p 1). The average discharge to Crooked Creek, if not treated would average 2812 gallons per minute (gpm) and the treatment plant would be able to treat at rates up to 7486 gpm (Id.) with an operating period of six months per year. More inflow would require a longer annual operating period. To provide freeboard (not designed for any specific return interval), treatment of the pit lake would begin when the pit lake is 33 feet below its crest (Id.). There would be a spillway in the southwest corner of the pit near Crooked Creek designed to accommodate the probable maximum flood of 11,301 cfs (with flood routing through the pit lake, the actual discharge rate would be less). At water level elevation 328 (33 feet below the crest), the pit lake volume would be 376,170 af and at the crest of 359 feet above mean sea level (amsl) the volume would be 405,360 af (BGC 2015l, p 2). The watershed area above the outlet would be 5122 acres (Id.), although much of that would be the pit lake, and the estimated average annual runoff is 4700 af/y (Id.). At this rate it would require six years to fill the pit over the upper 33 feet, or 29,190 af (Id.). Presumably the difference would be made up by groundwater inflow.

5.1 Pit Lake Water Quality

The DEIS discloses that the pit lake "water quality … will not meet applicable water quality criteria without treatment" (DEIS, p 3.6-35). The DEIS and supporting documents complete substantial modeling of the pit lake water quality and show that it would be very poor. Details of that modeling are not reviewed here because there are huge uncertainties that lead to the precise predictions being inaccurate (Maest et al. 2005). The models are accurate enough to provide general trends of pit lake quality. DEIS Table 3.7-36 shows that the water quality of the surface layers of the pit lake would exceed standards for aluminum, antimony, arsenic, cadmium, copper, iron, lead, manganese, molybdenum, selenium, and mercury with pH being lower than standard (DEIS, p 3.7-129). Seepage inflows to the pit lake from PAG waste rock and from the tailings impoundment are extremely poor with sulfate inflow being as high as 180,000 mg/l (compare to a standard of 250 mg/l) (DEIS, Table 3.7-37). The modeling does depend on the pit lake remaining stratified because the pit lake quality at depth is extremely poor.

GRD 6

The predictions are accurate enough to plan around two aspects of the pit lake. Groundwater outflow from the pit lake would contaminate surrounding groundwater and discharges from the pit lake to surface water would contaminate Crooked Creek, in violation of standards and discharge permits.

5.2 Pit Lake Discharge Control

The plan is to use lake level management, basically pumping, to maintain the lake level at 10 to 30 feet below the level of Crooked Creek (Id.). The pumped water would be treated and discharged to Crooked Creek (Id.). The long-term treatment of water pumped from the pit lake, to prevent it overflowing, would be at 2911 gpm (BGC 2014b, Figure 5-4). This is pumping and treating in perpetuity. After closure and complete pit lake development[1], the groundwater inflow rate will probably not vary as much as it could during dewatering. However, the higher bedrock K scenario leads to substantially more groundwater inflow into the long term. The long-term pump and treat requirement could be much higher than specified here as a long-term average due to higher groundwater inflows. Runoff and precipitation entering the pit lake would cause short term variability.

WAQ 10

BGC estimates the volume of the probable maximum precipitation over the watershed is 5030 af in 24 hours, which is about one sixth of the freeboard (Id.). Treatment capacity in six months

[1] Many pit lakes only approach full development if evaporation exceeds inflow, mostly of groundwater. These terminal pit lakes usually have only evaporation as an outflow. The Donlin pit lake will reach full conditions because it will fill to its rim if pumping did not establish an outflow. The pit lake as a whole would therefore not be subject to significant evapoconcentration as a pit lake with evaporation as its exclusive outflow.

is 5920 af (Id.). BGC's conclusion is that the pit lake would have no difficulty holding large volumes of runoff for treatment in the future.

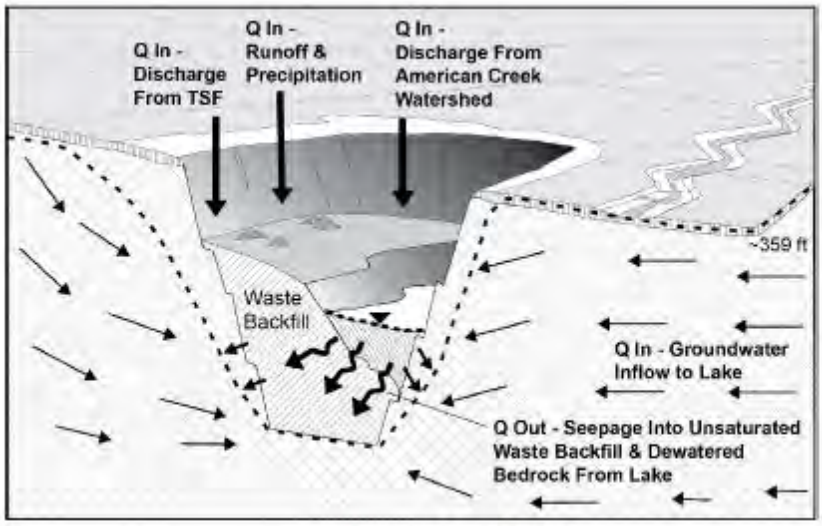
WAQ 10

This is essentially a treatment in perpetuity plan. The calibrated groundwater model predicted the pit lake would fill in 52 years while two sensitivity analyses predicted 26 and 39 years for a wet climate and more conductive bedrock scenario, respectively. The wet climate scenario had increased recharge and streamflow rates by a factor of two and the more conductive bedrock scenario has increased bedrock K by a factor of five. Both scenarios filled the lake faster because they provided more water more quickly than the calibrated model scenario. After the pit is full, groundwater presumably continues to flow toward it from all directions (Id.).

5.3 Groundwater Flows

GRD 6

The DEIS discloses that pit lake water would discharge to surrounding groundwater both initially and in the long term (DEIS, p 3.6-35), as described in Figure 2. This is partly due to the placement of unsaturated backfill in the pit and to the fact that as the pit lake fills water from the pit lake will resaturate the surrounding bedrock. This differs from many pit lake systems which fill primarily by groundwater inflow, but at Donlin the bedrock K is low and does not recover immediately. Figure 3 shows simulated groundwater inflow and outflow at Donlin.



GRD 6

Figure 2: Snapshot of a portion of DEIS Figure 3.6-9 showing the model of pit lake inflow and outflow.

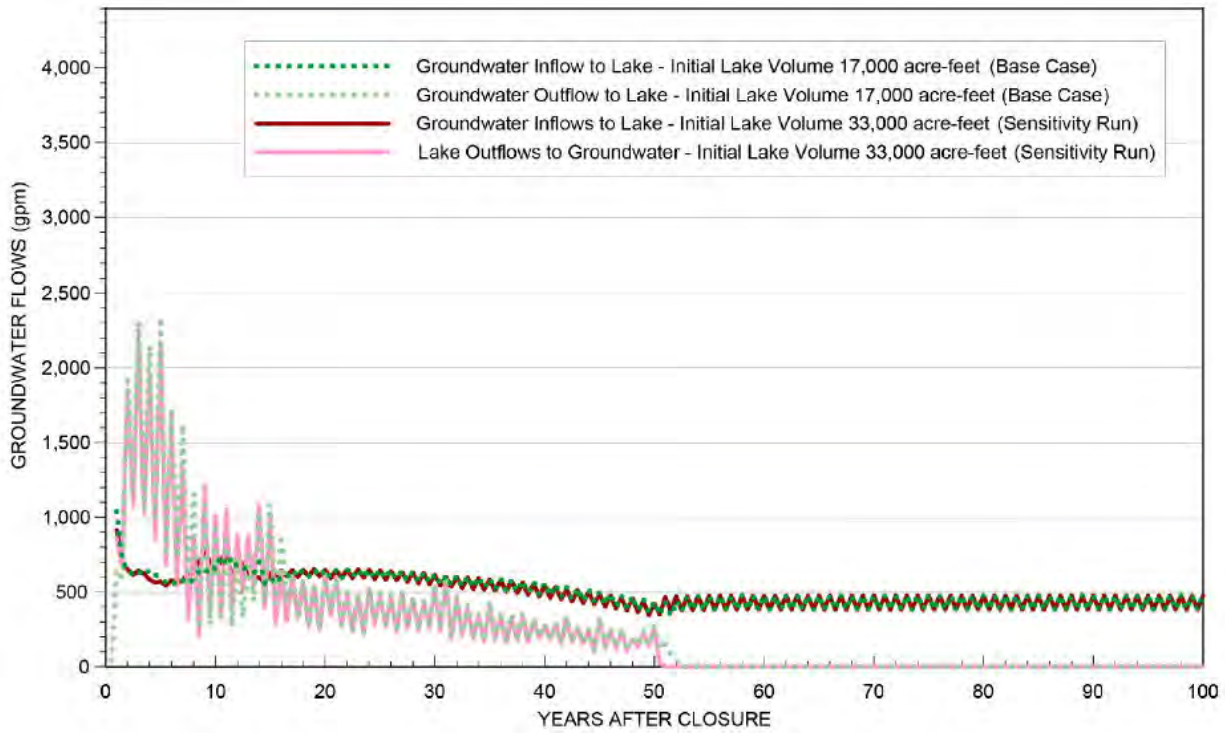


Figure 3: Snapshot of a portion of DEIS Figure 3.6-10 showing simulated groundwater inflow to and outflow from the pit lake as the pit fills with water.

GRD 6

Partially backfilling the pit causes an interesting system of groundwater inflow/outflow at the pit lake. The backfill would be unsaturated at the beginning of pit lake formation and therefore has to be wetted as part of the pit lake formation by groundwater outflow from the pit lake to the backfill (DEIS, p 3.6-35) (Figure 2). BGC (2014c) describes the groundwater/pit lake relationship:

> Results of the post-closure simulation show that the pit lake is predicted to fill to its managed maximum stage (i.e., 331 ft amsl or 101 m amsl) approximately 60 years after closure (Drawing 48). During the first 8 years after closure, pit lake water is predicted to seep out of the lake into the dewatered bedrock and into the pore space of the waste rock placed as backfill within the pit (see Figure 4-4). Predicted lake outflow during this period declines from approximately 2,860 gpm to 1,100 gpm (15,600 m3/d to 6,000 m3/d; Drawing 49). From Year 8 to 60 after closure, lake seepage or outflow is simulated to decline from 1,100 gpm to 0 gpm (6,000 m3/d to 0 m3/d) as groundwater elevations rise toward stable levels. Once the pit lake fills and groundwater elevations stabilize around the pit lake, seepage from the lake is predicted to cease. Thereafter, groundwater fluctuations are in response to seasonal changes and seasonal management of the lake stage. The managed lake stage results in a slight hydraulic gradient oriented toward the open pit, making the pit a groundwater sink. (BGC 2014c, p 45)

It is difficult to visualize how so much water leaves the pit lake and enters the surrounding groundwater (Figure 3), considering how the water table is hundreds of feet higher than the pit lake level (Figure 4). However, the modeling shows a significant outflow that is controlled partly by seasonal pit lake level changes. The net groundwater flow to the pit lake is very small (Figure 3) and the fact that discharge from the pit lake continues until the pit lake is almost full suggests pathways exist for flow to leave the pit lake and not return. This could occur at various depths depending on the details of the potentiometric surface.

GRD 6

The groundwater contours at the end of mining suggest one possible pathway for contaminants to leave the pit and possibly enter surface water (Figure 4). Southwest of the pit the groundwater contours are much lower than northeast of the pit due to the general slope of groundwater in the area. If the pit lake fills faster than the surrounding groundwater table, as indicated by Figures 2 and 3, it is possible that the pit lake creates pressure in deeper bedrock that causes an upward gradient to the creek away from the pit. Pit lake water could flow through deeper bedrock layers then upward toward the surface due to higher pressure conditions in deep bedrock.

- The DEIS or BGC (2014c) should present a detailed analysis of the potentiometric surface at depth near the pit lake to estimate where groundwater discharging from the pit lake would go. (The particle tracking diagrams in BGC (2014c) are not useful because they are apparently for single model layers whereas actual contaminants would change layers.)
- The DEIS or BCG (2014c) should present potentiometric surface maps for each model layer to assess whether outflow is possible from some depths in the pit lake.

GRD 6

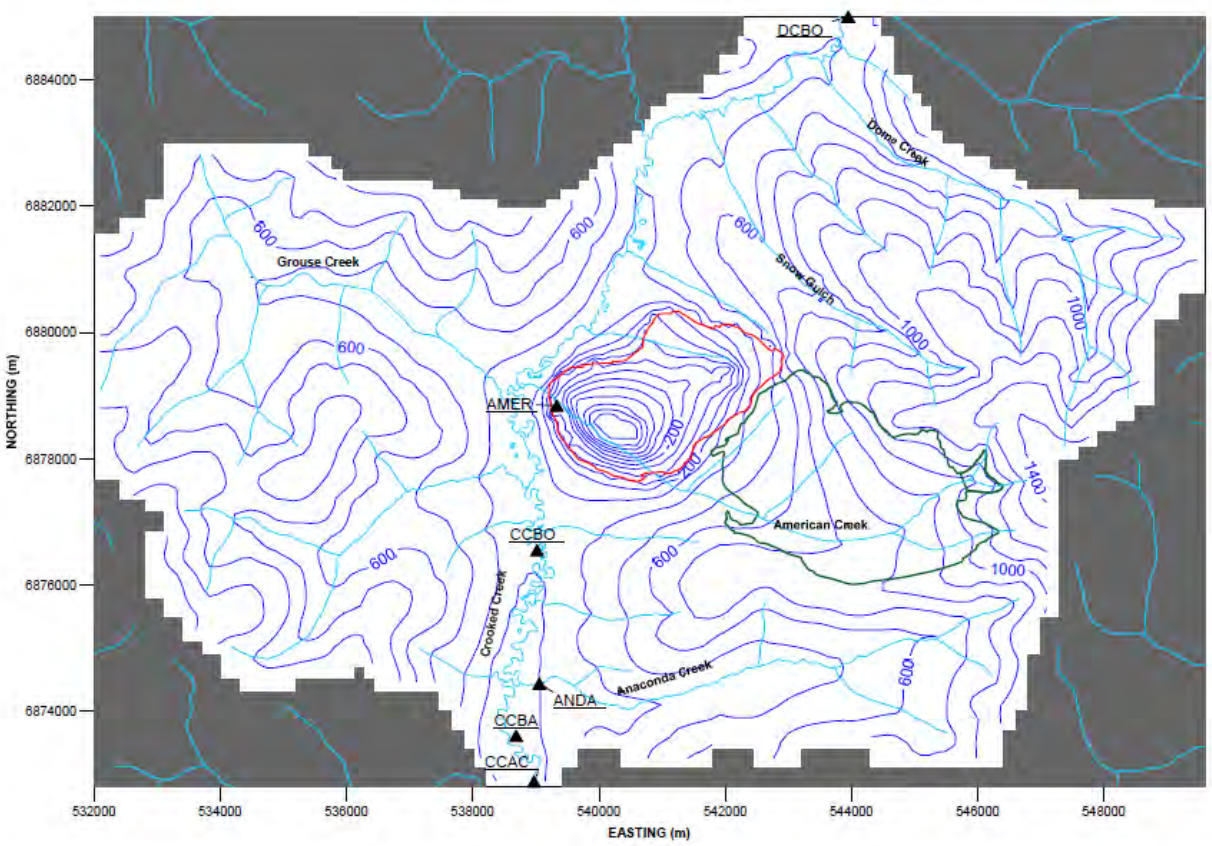


Figure 4: Snapshot of Drawing 39 (BGC 2014c) showing simulated groundwater contours at the end of mining.

5.4 Climate Change Impact on Pit Lake Planning

CLIM 8

The DEIS must plan for significant climate change into the future, as it appears to acknowledge (DEIS, p 3.26-2), due to the necessity of pumping and treating the pit lake water in perpetuity. Increased precipitation in this part of the Alaska must be considered because it could vastly increase the inflows to the pit. If they occur over a short-term period, it would seem likely that the potential for spills from the pit would increase.

However, the modeling does not include climate change. The design water balance is based on a deterministic data set of precipitation running from 1940 to 2010. Climate change will increase precipitation up to 25% over the next 80 years (DEIS, section 3.23), but as discussed above, the increase would be highly variable. It is critical to consider the potential inflow to the pit lake with not just an increased average flow but with a much increased variance to account for large inflow events occurring during a wet period.

CLIM 8

- Pit lake water balance simulations should include stochastically simulated precipitation events to account for the increased frequency of what are currently low frequency events.
- Pit lake simulations with climate change should also include simulations with higher groundwater inflow that could result from higher bedrock K or high-K faults and fractures.

Combined with the fact that groundwater inflow could be much higher (see section 9.0), the freeboard analyzed in BGC (2015l) is not as sufficient as suggested.

- The DEIS should disclose whether the closure treatment plant would be able to operate up to 12 months a year in all kinds of weather.
- The DEIS should plan for treatment on future conditions with climate change rather than being just based on the current climate statistics.

6.0 IMPACTS ON STREAM FLOWS

6.1 Pit Construction

Pit construction affects streamflow in two ways. First, dewatering to keep the pit dry would intercept groundwater flowing toward a stream where it would be become baseflow. Dewatering will reduce streamflows by up to 10 and 30 % during summer and winter, respectively (BGC 2014c, Drawing 44). Figure 5 shows reductions in groundwater discharges to various Crooked Creek tributaries caused by dewatering (BGC 2014c, p 40). The impact of dewatering decreases with distance from the stream.

HYD 7

Second, mine construction affects surface runoff in many ways, many having to do with mine water management described in Section 7.0. The pit would intercept surface runoff in American Creek, thereby preventing it from reaching the stream (BGC 2015h). The tailings impoundment would cover about 70% of the Anaconda Creek drainage (DEIS, p 3.5-77) which removes a large proportion of that streams' flow from discharging to Crooked Creek; much of that flow is diverted to mine water management as tailings water or as captured by the tailings underdrain. Ancillary mine facilities also divert or use surface water runoff which can affect both high and low streamflow rates.

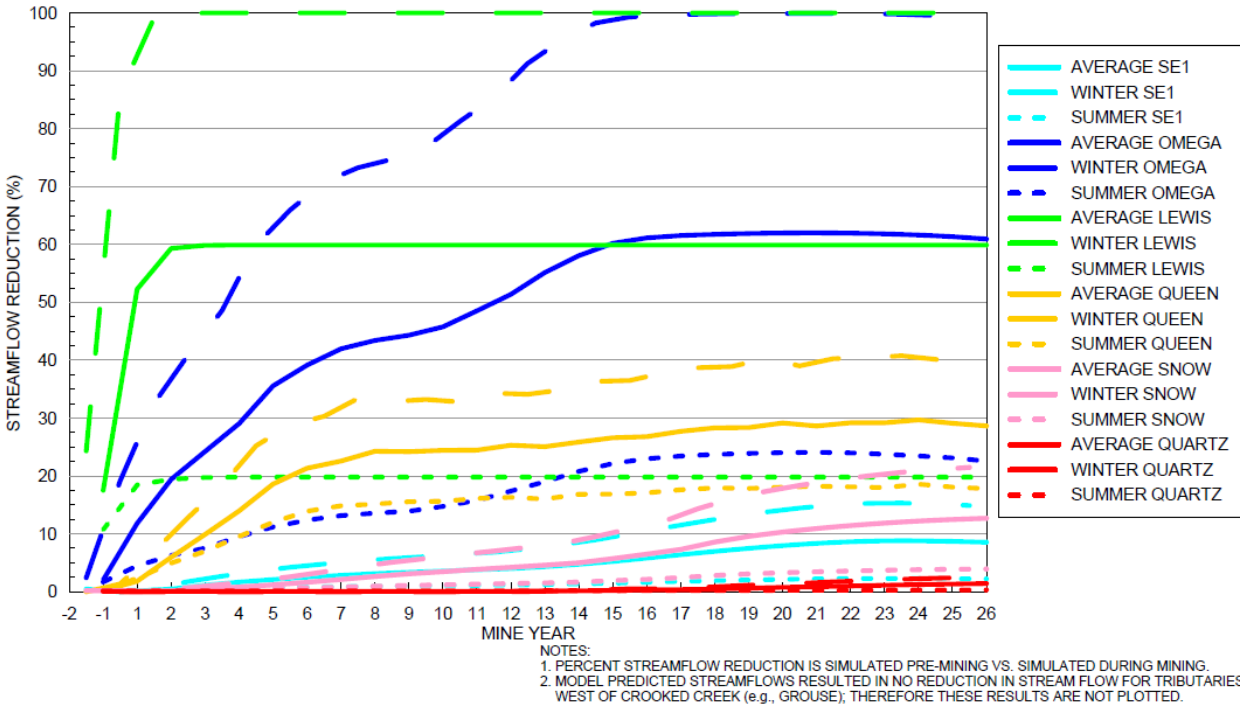


Figure 5: Snapshot of Drawing 45 (BGC 2014c) showing reductions in flow from various Crooked Creek tributaries due to mine dewatering.

HYD 7

Together, dewatering and mine water management cause very substantial changes in streamflows in Crooked Creek and its tributaries. The DEIS separates the discussion of impacts which can be very confusing. For example, the description of flow losses to Anaconda Creek (DEIS, p 3.5-76 - -77) does not address a loss to mine dewatering, but the summary of loss in DEIS Table 3.5-26 does include dewatering (as shown by the variation in losses for the high-K scenario which is a mine dewatering scenario in the groundwater model (BGC 2014c)). The DEIS apparently considers all impacts to Crooked Creek including cumulative impacts from the tributaries, which includes dewatering impacts (Figure 5). The failure to assign flow losses to specific activities increases the difficulty of considering mitigation.

- The DEIS should tabulate all of the predicted streamflow losses in the same table so that their magnitude can be compared

There is a lot of uncertainty around the predicted losses to Crooked Creek and other features.

MIT 31

Effects on Crooked Creek flow could vary widely depending on season, precipitation conditions, bedrock hydraulic K, phase of mine operations, and distance from the mine. For example, Crooked Creek flow below the mine site near Crevice Creek would be

MIT 31

reduced by 20 percent in winter under average precipitation and K conditions, and by 26 percent in dry conditions, during late operations (year 20 onward). The greatest flow reduction experienced near the mouth of Crooked Creek (at Bell Creek about 8 miles downstream of the mine) is projected to be 4 to 10 percent under the above conditions. In the event that K is higher than expected, 45 to 100 percent of Crooked Creek flow could be reduced in winter near the mine site under average to dry precipitation conditions, with much of the flow restored below Crevice Creek (16 to 40 percent reductions) due to tributary inflows. (DEIS, p 3.5-2)

Year 20 may be the year of maximum impact on Crooked Creek stream flows because the pit footprint would be at its maximum extent which would make for the greatest capture of runoff by the pit and because pit dewatering captures its maximum rate in year 20 (DEIS, p 3.5-82). Flow losses from Crooked Creek are as high as 100% (during year 20 at the confluence with American Creek for the high bedrock K, low precipitation scenario, DEIS Table 3.5-26), but are substantial all along the reach to Bell Creek.

- The DEIS should implement as mitigation for these flow losses a plan to discharge treated waste water in locations that would mitigate these losses.

6.2 Pit Lake Formation

Pit lake formation creates a permanent loss of water from Crooked Creek in two ways. First, the groundwater flow that pre-mine had been toward the creek will be reversed with the permanent drawdown to the pit reversing the gradient at the creek so that water flows into the groundwater. The Corps relies on this reversal of gradient to prevent highly contaminated pit lake water from reaching groundwater or downstream surface water. The streamflow loss to the pit lake would apply along the creek in the pit lake capture zone (the continuing drawdown cone near the pit lake). The second is that the pit would capture surface flows from American Creek, thereby preventing both high and low flows from reaching Crooked Creek.

- The overall effect of the pit depends on the timing of groundwater diversion from the creek, the hydrograph of captured water from American Creek, and the discharge of pit lake water into Crooked Creek.

Effects on surface drainages (Figure 3-5.1) appear mostly constrained to three drainages. If there are facilities that slope over drainage divides, the Corps should make efforts to avoid doing so.

7.0 MINE WATER MANAGEMENT

Mine water management is the plan for how the mine would handle water requirements throughout its operation. It is both a plan for obtaining necessary production water and for discarding water that hinders production. For example, approximately 17,438 gpm would be used for processing and discharged to the tailings impoundment during operations (DEIS, 3.5-21). Water for the process plant comes from various places, including freshwater reservoirs, contact water reservoirs, and dewatering wells. Stormwater management and mine dewatering are the two activities for which the mine attempts to discard excess water. Efficient management of the two can decrease the impacts the mine has on the environment, but the Donlin water management could be improved as described here.

7.1 Discharge to Crooked Creek

Excess water would be discharged to Crooked Creek with treatment, so failures in the collection and treatment system would degrade Crooked Creek. During operations, expected discharge is
WAQ 10 1268 gpm with 786 gpm from mine dewatering (DEIS, Figure 3.5-21). The remainder is from underdrains and contact water reservoirs, with all estimates being highly uncertain. There is a lot of uncertainty in the dewatering estimates, but during operations, most of the dewatering water (547 + 694 = 1241 gpm), whether through perimeter or in-pit dewatering wells, would be treated and discharged (783 gpm) to Crooked Creek (BGC 2014b, Figure 4-2). However, as discussed below, the high K modeling scenario would result in dewatering as much as 3.3 times higher than the predicted scenario. With time, the mine would have to increase its treatment capacity to accommodate this much extra flow. However, the actual geology is highly heterogeneous so it is probable that actual dewatering rates would be variable and could periodically far exceed the 3.3 times, especially if there are high K faults combined with the high K bedrock. The high precipitation scenario which estimates treatment at 859 gpm (BGC 2014b, Figure 4-3) does not encompass the potential for higher treatment rates due to heterogeneous bedrock.

- The DEIS should better plan for treating higher flow rates of dewatering water (and contaminated water from other sources.
- HYD 9 The DEIS should better plan to use dewatering water in operations rather than capturing freshwater flows. For example see section 7.3 regarding the need for Snow Gulch Reservoir.

7.2 Climate Change

CLIM 8

The Corps considered a climate change scenario for the mine site by using an estimate from a group at the University of Alaska Fairbanks, Scenarios Network for Alaska + Arctic Planning (SNAP). It was based on global climate models (GCMs). The SNAP data shows that precipitation during winter months "is projected to increase from current conditions over these decades" (DEIS, p 3.26-10), referring to the time from now to the end of the 21st century. By the 2060-2099 time frame, the SNAP data suggests that precipitation at the mine could increase by from 17 to 25 percent. DEIS Table 3.26-3 shows the increase by month for several future time periods. The table implies a systematic increase by month, but this does not disclose how those changes may occur. It is not likely that each storm system simply has increased precipitation. It is far more likely that a few large events will cause much of the increased precipitation. This could have significant impacts on aspects of the project affected by runoff, which would be much higher during these events. This perhaps could be most important with respect to treatment of runoff from various facilities.

- Treatment facilities must be designed to accommodate larger inflows that occur both as storm events and as long-term climate cycles.

7.3 Snow Gulch Reservoir

HYD 9

A reservoir would be constructed on Snow Gulch, north of the minesite, to provide a contingency source of water for the project (DEIS, p 2-27). "In years with average or below-average precipitation, the CWDs and pit dewatering system would not be able to meet process plant water requirements, in which case additional water would be obtained from the Snow Gulch reservoir" (Id.). However, the water balance modeling shows it provides only a small amount of water to the mine plan and that much more water would be discharged to Crooked Creek than obtained from Snow Gulch (BGC 2014b). During average conditions Snow Gulch would provide 136 gpm of water to the process plant (BGC 2014b, Figure 4-2) and BGC (2014b) Figure 4-1 shows the reservoir would hold about 3000 af most of the time. The process plant uses a large amount of water, with 17,484 gpm being discharged to the tailings; sources include contact water from the Lower and Upper Contact Water Dams (waste rock runoff and seepage), recycled water from the tailings, and dewatering water. Considering the treatment plant discharges 783 gpm to Crooked Creek, and that it is mostly dewatering water during operations, there does not seem to be a need for Snow Gulch water.

- The DEIS should provide better justification for constructing a reservoir in Snow Gulch. It should consider whether the water otherwise obtained from Snow Gulch could be obtained by dewatering at higher rates temporarily.

8.0 WATER QUALITY

WAQ 20

Donlin Mine could affect water quality in many ways although they can be summarized into three possibilities. First, meteoric waters could seep through waste facilities (waste rock or tailings) to reach groundwater or streams. Second, there would be discharge of waters collected from various sources to surface water after treatment. The sources include collected seepage from waste facilities, excess tailings water, contact water from contact water reservoirs, and excess dewatering water (DEIS, Figure 3.5-21). If the collection and treatment facilities work as planned, treated water should not degrade water quality. A third source is the long-term discharge of pit lake water to groundwater or surface water, as discussed above in section 7.1.

8.1 Seepage from Waste Facilities

WAQ 20

A significant issue is the potential for seepage from the WRF or TSF to reach streams thereby causing degradation. There will be over 3,000,000 kilotons of waste rock, which the DEIS claims would be about 91% NAG and the rest being PAG over varying time periods (DEIS, p ES-12). Most PAG-6 rock would be mined early and placed in isolated cells in the waste rock facility (WRF) (Id.). PAG-7 and some PAG-6 rock would be backfilled into the ACMA pit (Id.). In section 2.3, the DEIS identifies 2.99 billion tons waste rock, with 2.46 bil tons going into the WRF and the remainder backfilled into the ACMA pit (DEIS, p 2-7). Conventional tailings at 568 million tons will be held in a slurry tailings impoundment (DEIS, p 2-8).

GRD 1

DEIS Table 3.7-47 notes seepage from the WRF and TSF will exceed standards for various constituents. The Corps assumes that the seepage would either be captured by underdrains and treated or discharged to the pit lake (DEIS, Table 3.7-47, p 3.7-207). The modeling predicts that seepage from the waste rock dump would be diverted to the pit, both while dewatering and as a long-term pit lake. The DEIS relies on this mechanism to prevent stream degradation. The pit will likely be a sink for the bedrock aquifer, but there is much uncertainty regarding the shallow aquifer and whether it would drain towards the pit. The DEIS and supporting studies treat the shallow and bedrock groundwater system as being connected through the mining period, but there is no evidence supporting the assumption.

GRD 1

During pre-mining conditions, overall the aquifer would be unconfined with the pressure head in bedrock being similar to the water table in the shallow aquifer. As the groundwater simulation lowers the pressure below the top of the bedrock, it simulates the shallow aquifer becoming desaturated so that the bedrock aquifer becomes an unconfined aquifer. The reality may be that as pressure in the bedrock drops below the top of the bedrock, an unsaturated zone develops in the bedrock while the shallow aquifer remains saturated and functions as a

GRD 1

perched aquifer. The groundwater modeling code used to simulate dewatering, MODFLOW, is not capable of simulating the development of such an unsaturated zone, so the model results are not evidence against this idea.

Seepage from waste facilities would be into a rather thin surficial layer of alluvium, near the streams, or colluvium, over the mountains. The conceptual model report shows overburden thickness maps that indicate the colluvial thickness is rarely more than 30 feet in the American Creek drainage and mostly less than five feet in the Anaconda Creek drainage, except directly under the creek where it is more than six feet thick (BGC 2014g, Drawings 3 and 4). The groundwater model simulated the shallow aquifer as being 16 feet thick.

GRD 1

The shallow aquifer could have K substantially higher than the bedrock, at least in areas. As noted, the model cannot simulate the hydraulic disconnect that could occur during dewatering. Rather, the groundwater model simply draws groundwater from the surficial layer into the bedrock; the MODFLOW code can do nothing else because it simulates all layers as a saturated porous media with connections among all layers. It cannot simulate an unsaturated zone developing between the surficial layer and the bedrock in the upper part of the bedrock. Simulated drawdown in bedrock would lower the potentiometric surface below the bottom of the surficial aquifer after which MODFLOW simulations would simply desaturate the surficial aquifer.

GRD 1

Because the bedrock K is low, the surficial aquifer could remain saturated, and due to dewatering become perched at least in areas away from fractures. If hydraulic separation occurs and a perched aquifer develops, seepage from the waste facilities may not enter the bedrock and flow to the pit. Rather, the seepage could flow laterally through the surficial aquifer to the streams, thereby bypassing the pit. Seepage from the waste rock and tailings facilities could degrade surface water, primarily in Crooked Creek but also in its tributaries. All assumptions in the DEIS regarding contaminants reaching the pit and not the streams would be incorrect.

GRD 8

Mitigation would be very difficult. Pumpback wells, or converting monitoring wells to pumping wells, would not be effective unless they are very closely spaced[2]. This is because the surficial aquifer is thin and there is a limit to any capture zone that can be created. A capture zone is the portion of the aquifer that would be drawn to the pumping well. If the saturated zone within the aquifer is just a few feet or tens of feet thick, drawdown at the well would be limited

[2] Four monitoring wells would be installed downgradient of the TSF, two on each side of Anaconda Creek. On each side, one would be deep and one would be shallow. Each would be capable of pumping up to 90 gpm if necessary to capture TSF seepage downgradient of the tailings impoundment (DEIS, p 3.6-32). This would be grossly insufficient to capture seepage from the TSF.

GRD 8 to the interface with the bedrock; attempting to draw it lower could just create another bedrock/surficial aquifer disconnect. While theoretically, it is possible to intercept the flow through the surficial aquifer, the required well spacing could be as low as a hundred feet or even less.

PAA 14
- The only effective mitigation would be to avoid the seepage by having a liner under the waste rock. A liner would cause most seepage to collect in the underdrains.

GRD 1
- There is too little information concerning the connection between the surficial aquifer and the bedrock. Pump tests that show pumping in bedrock drawing from the stream are not actually testing what occurs if the potentiometric surface draws below the top of the bedrock; pump tests do not stress the system sufficiently to estimate the potential for a hydraulic disconnect.

8.2 Tailings Facility

The tailings impoundment would be lined with 60-mil liner. This is the same thickness as was used at the TSF at the Stillwater Mine in Montana. At Stillwater, the TSF has been shown to be leaky and the company will shift during future stages to 100-mil liner due to the failure of the 60-mil liner.

PAA 14

- The Donlin Mine should have a 100-mil liner rather than a 60-mil liner to make leaks would be less likely It would also reduce the amount of seepage captured in the underdrain and recirculated which could allow the TSF to be decommissioned more quickly.

The tailings facility is not within the pit capture zone, as shown in Figure 6. The tailings facility would lie over the Anaconda Creek drainage at the bottom of the figure. Although most of the watershed has drawdown due to the tailings impoundment capturing recharge (BGC 2014c, Drawing 40), the groundwater contours show that most of the Anaconda Creek watershed would drain to the low point beneath Anaconda Creek. The creek would lose substantial water due to a loss of recharge due to the tailings. Seepage however would report to the colluvium beneath Anaconda Creek and then to Crooked Creek.

PAA 9

- The best alternative from the perspective of avoiding contamination from the tailings facility is to use dry stack tailings with both a liner beneath them and then an impervious cover as part of reclamation. The DEIS predicts that seepage would be very low after 200 years. If leaks were limited, this option would minimize degradation to Crooked Creek. The impervious cover would help to prevent percolating water from mounding on the liner as well.

PAA 9

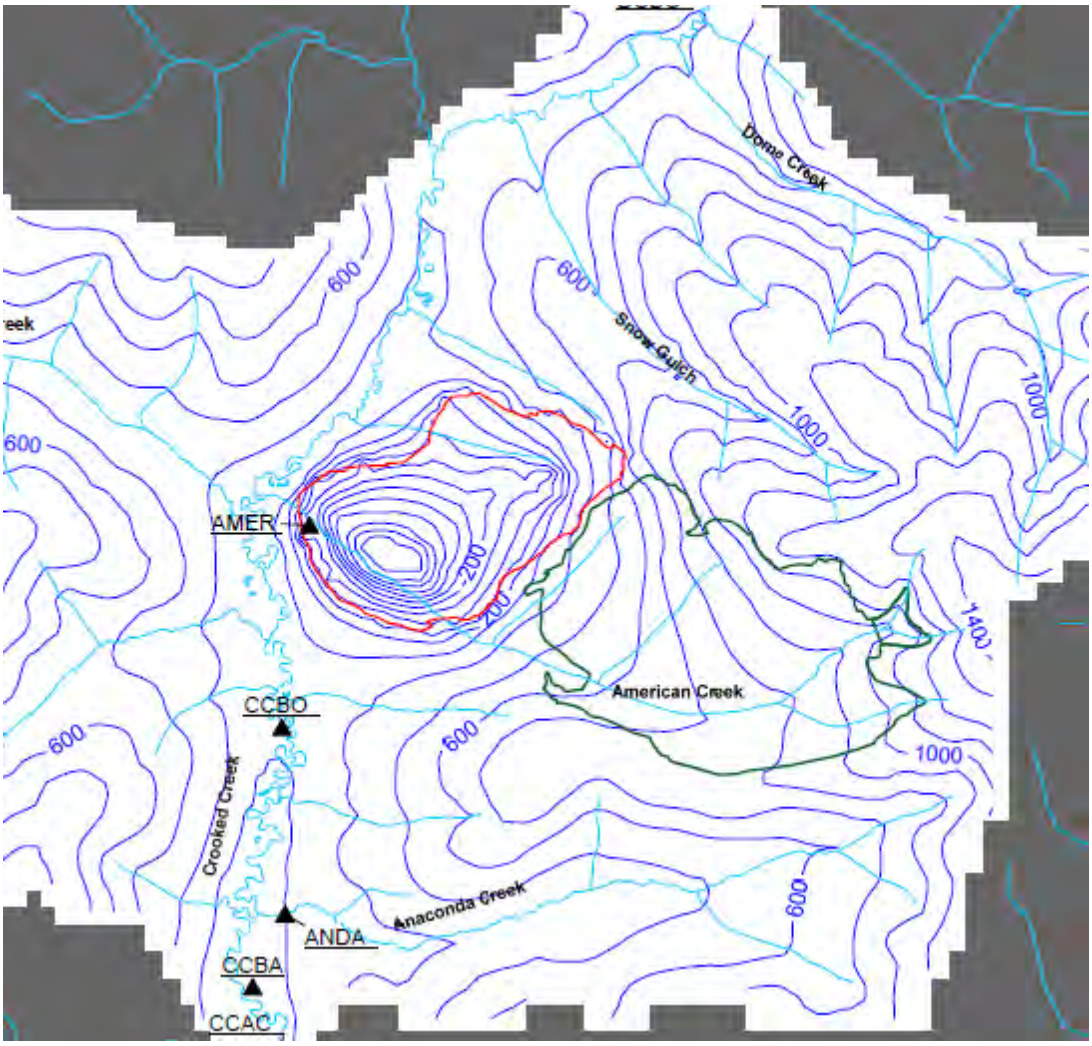


Figure 6: Snapshot of a portion of Drawing 39 (BGC 2014c) showing the bedrock potentiometric surface at the end of mine operations.

NEP 6

Some facilities are not within the predicted pit drawdown cone and the DEIS acknowledges a potential for contaminants to leach to Crooked Creek (DEIS, p 3.6-34). Mitigating measures include liners or other hydraulic containment and doing "further studies such as fate and transport groundwater modeling during final design" (Id.). These suggestions indicate the DEIS was issued prematurely since planning for the mine has not progressed far enough to even have completed all necessary studies or planned adequate mitigation.

- A supplemental DEIS is necessary to disclose important plans such as mitigation for seepage and to complete fate and transport modeling of contaminants leaching from mine facilities.

NEP 6 In closure, the pit lake would remain a hydraulic sink, but it would pull groundwater from much less of a distance during operations or early closure.

8.3 Failure Analysis

The Exec Summary notes that tailings are a "hazardous substance of concern" and that "focus is on high consequence, low probability occurrences [including] … partial tailings dam failure" (DEIS, p ES-44). DEIS section 3.24.3.5 notes such a failure as being a 1 in a thousand year event (DEIS, p 3.24-30), but a tailings impoundment must last forever so even events considered very rare or unlikely have a good chance of eventually occurring. The DEIS should complete a detailed flow routing of slurried tailings.

DAM 5

- The DEIS should analyze the risks associated with tailings dam failure. The analysis should consider the PMF occurring in the watershed because the facility will be there forever. The DEIS should present hydraulic routing of a reasonable portion of the half million tons of tailings down Anaconda Creek and Crooked Creek to show the potential damages.

The DEIS notes that "complete failure of the TSF SRS could lead to release of untreated water in a matter of weeks" (DEIS, p ES – 34). This is another example of a potential systems failure that could lead to substantial degradation in a short time period.

9.0 REVIEW OF GROUNDWATER MODEL DETAILS

Most of the numerical predictions of mine dewatering and impacts on stream flow rely on groundwater modeling. The details of groundwater modeling were presented in BGC (2014c) which is reviewed in this section. BGC (2014c) used the MODFLOW SURFACT code which is based on the MODFLOW code but has a proprietary numerical solver and a routine for simulating unsaturated seepage of recharge to the water table.

GRD 4

9.1 Model Structure

Layer 1 represents alluvium or colluvium up to 200 m amsl and is 5 to 10 m thick (BGC 2014c, p 22). Above 200 m amsl, layer 1 is bedrock, presumably representing an outcrop. Layers 2 through 9 are bedrock with layer 4 being about 70 m thick and layers 5 through 9 increasing from 100 m to 240 m thick (Id.). Layers are thickest in the uplands.

9.2 Parameter Zones

The geologic formations in an aquifer are delineated into zones for simulation. Each model cell is assigned a zone according to its geology. The properties include horizontal and vertical K, storage coefficients, and porosity. The values are initially set based on tests or literature values, and then adjusted during model calibration.

9.21 Conductivity

Within the pit area, the bedrock was delineated into 8 different sedimentary rock formations along with intrusives (BGC 2014c, p 24). Outside of the pit area, the bedrock was considered undifferentiated bedrock of the Kuskokwim group (Id.). Presumably this was done because the bedrock near the pit is better known than away from the pit. The figures showing parameter zones by layer show a complex square section near the pit that abuts against single parameters extending to the boundary; the single parameters are Kuskokwim – Valley and Kuskokwim – Ridge. There could be abrupt transitions among various parameter zones within a layer. This could have large effects on the flow patterns if the changes are substantial.

GRD 4

Basal Greywacke and Upper Greywacke have the same calibrated K values for the same layers (BGC 2014c, Table 7). For layers 1-4, 5, and 6-9 the K values are 0.1, 0.06, and 0.01 ft/d. These formations abut the Kuskokwim formation, which for layers 5, 6-7, and 8-9 have K equal to 0.03, 0,006, and 0.001 ft/d; above layer 5 the Kuskokwim (Ridge) K is 0.03 ft/d and the Kuskokwim (Valley) K varies from 0.1 to 0.3 ft/d (Id.). For layers 5 and lower the surrounding bedrock, undifferentiated Kuskokwim, has K about an order of magnitude lower than near the pit. The low calibrated K values away from the pit are not supported by the observed K values for bedrock near the pit area. The intrusive and shale formations within the pit area are also low K, but above layer 5 these will be removed within the pit. The detailed modeling occurs within the pit area and primarily is important during calibration because it would not be part of the simulation of either dewatering or pit lake development.

- The low K values away from the pit may prevent the expansion of drawdown away from the pit.

GRD 3

Zonation includes a trend of decreasing K with depth. Although they are extensive across the pit area (section 4.2), faults were not modeled except in the sensitivity analysis (Id.).

GRD 1

Calibrated horizontal and vertical K in the alluvium under Crooked Creek is 300 and 70 ft/d. These values are substantially higher than the colluvium which are respectively 0.2 and 0.06 ft/d. These K estimates for alluvium are about three times higher than the observed values.

The colluvium estimates are close to the observed values but the tests in colluvium are small scale. Colluvium K may be substantially underestimated because the thinness of the aquifer would bias the estimate of K through pump test or slug tests to be low.

BGC (2014c, p 8) describes the colluvium as "well-graded materials ranging from cobbles and gravel to sand, silt and clay". Unless the fine materials, silt and clay, fill most of the pores in the cobbles and gravel, K should be much higher. Low simulated K values in the colluvium could limit the amount of water that enters the bedrock due during recharge and could limit the amount drawn into the bedrock during dewatering as long as the colluvium remains hydraulically connected to the bedrock. The contrast between higher K in the colluvium and low K in the bedrock could cause the seepage from waste facilities to move laterally through the shallow groundwater rather than enter deeper bedrock. As discussed in section 7.0, the dewatering simulation could cause a hydraulic disconnect between the bedrock and shallow groundwater allowing a perched zone to form in the shallow groundwater.

Model layer 1 has a sharp transition from alluvium along Crooked Creek to colluvium surrounding the alluvium (Figure 7). Conductivity changes from 300 to 0.6 ft/d along a long reach of the stream. Such large changes in K between adjacent cells often leads to water balance errors in the model solutions. BGC should address the potential for local errors which
GRD 1 can lead to large inappropriate head changes. Conductivity of the valley Kuskokwim formation, which underlies the alluvium (Figure 8), ranges from 0.1 to 0.3 ft/d (BGC 2014c, Table 7). Effectively, the model simulates the high K alluvium as being surrounded by very low K bedrock or colluvium which essentially disconnects the alluvium from the rest of model domain; the model conceptualization as simulated here effectively isolates the alluvium. Using more appropriate K values to simulate the alluvium and surrounding formation would provide a more accurate simulation of flow across the formation boundaries and of the surface/groundwater interchange at Crooked Creek.

- The model simulates the alluvium with a very high K surrounded by low K bedrock and colluvium. This effectively isolates the alluvium and minimizes the effects of dewatering on the stream.

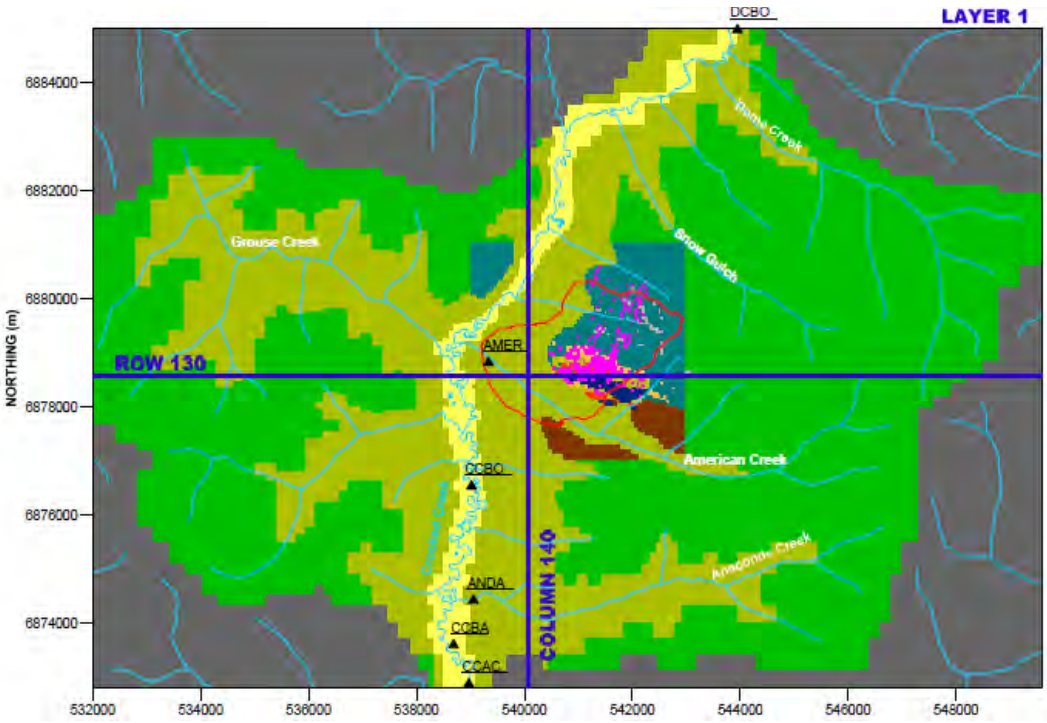


Figure 7: Snapshot of a portion of BGC (2014c) Drawing 17 showing parameter zones in model layer 1. See Figure 9 for a legend.

GRD 1

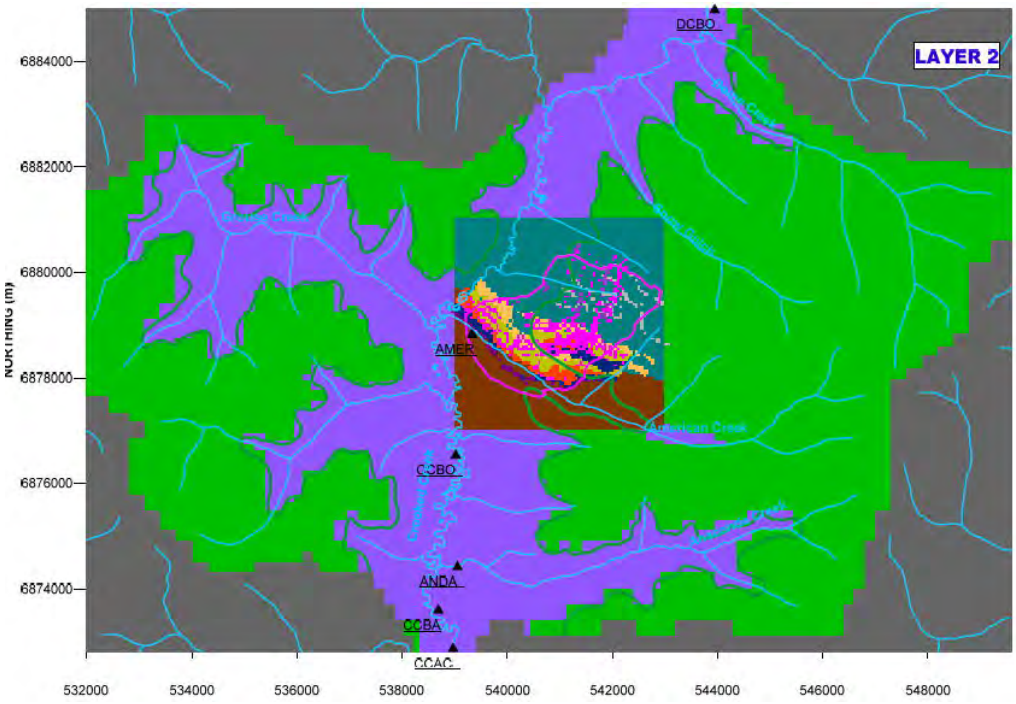


Figure 8: Snapshot of a portion of BGC (2014c) Drawing 18 showing parameter zones in model layer 2. See Figure 9 for a legend.

GRD 1

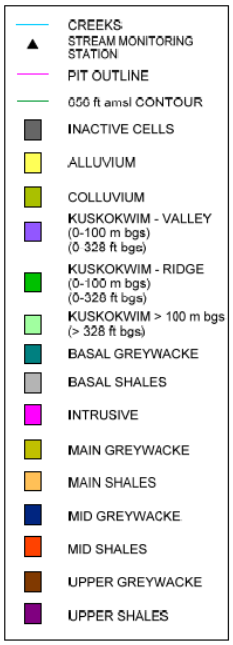


Figure 9: Snapshot of the legend from BGC (2014c) Drawing 18 describing parameter zones used for all of the model drawings. This applies to Figure 7 and 8.

GRD 2

The K estimates represent very small sections of their respective aquifers, but in setting the formation properties, the authors ignore important scale factors. In general, the representative volume of a pump test is the amount of water pumped, divided by the effective porosity (Schulz-Makuch et al. 1999); this effectively means a sample volume, including all pore spaces affected by the pumping. Short-term tests represent properties only over a very small volume. Figure 10 shows an example from the literature of variability for a fracture-flow media, the type of media that controls the flow near the pit. Hydraulic conductivity varies over seven orders of magnitude in the example (Figure 10), depending upon the volume of the aquifer represented in a given test. Setting K for the undifferentiated bedrock as a single value less than most of the tests violates these concepts of scale.

From the perspective of flow and transport prediction (as needed near the pit and waste rock dumps), small-scale properties control local flow while the larger-scale measurements control regional flow, which can be estimated without understanding localized details. A mine that intersects and excavates significant portions of a formation affects flow at a regional level, and therefore needs property measurements at that scale. The short-term tests in the crystalline bedrock presented by INTERA are not relevant at a regional scale.

- Most of the hydrogeologic properties estimated for the DEIS are for a small-scale and yield conductivity values that are much too low for regional flow analysis. This causes the DEIS to predict impacts limited to the areas closer to the Mine.

GRD 2

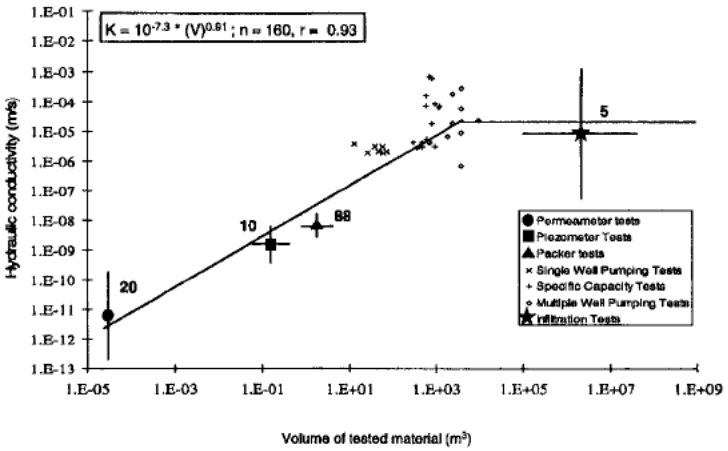


Figure 6. Relationship of hydraulic conductivity to scale of measurement in the Racine Formation of the carbonate aquifer of southeastern Wisconsin. Permeameter, piezometer, packer, and passive infiltration tests were plotted as geometric means with 95% confidence intervals; pumping tests and specific capacity data as single values. Number of observations are given adjacent to means. Passive infiltration tests are derived from the infiltration of Lake Michigan water into the Racine Formation due to the construction of a sewage tunnel. The regression line is derived from all individual values (n = 160) below the infiltration scale. The 95% confidence interval about the slope is 0.91 ± 0.06, and r is the correlation coefficient.

Figure 10: Figure 6 from Schulz-Makuch et al. (1999) showing the variation of hydraulic conductivity with volume of material used for testing. The Racine Formation is a fracture-flow formation and is used here only as an example of the variability.

9.22 Storage Coefficients

GRD 1

Specific yield (Sy) for the alluvium is extremely low, being set at 0.01 (BGC 2014c, Table 7). Sy is the amount of water that is released from storage for a unit drop in the water table; for Sy=0.01, a head drop of one foot would release just 0.01 foot of water from storage. Usually, Sy is much higher. Table 3.5 in Anderson and Woessner (1992) shows a range of 0.01 to 0.46 for categories from fine sand through coarse gravel, the particle sizes found in the alluvium along Crooked Creek. The published range of Sy technically includes the value used in this model for alluvium, but Sy = 0.01 is for fine sand (Id.). Crooked Creek alluvium includes a mixture of particle sizes and the estimates for fine sand have a mean of 0.33 (Id.). Without a substantial detailed pump test estimate of Sy for the alluvium, the value used for the Donlin groundwater model is suspect. Also, the very high K and low Sy in the alluvium are incongruous because Sy is often a surrogate for porosity, and having porosity equal 0.01 is inconsistent with K being 300 ft/d.

- A low Sy for the alluvium will cause the model to underestimate the amount of water drawn into the bedrock during dewatering.

GRD 1 Together the high K and low Sy in the alluvium would serve to minimize the simulated flux from the alluvium into the bedrock. The Sy value affects the simulated interchange of water between the stream and the alluvium and then between the alluvium and the bedrock beneath it. The amount of water drawn into the bedrock from the alluvium due to dewatering could be grossly underestimated. The very high K would allow the alluvium to provide water to the bedrock very easily, meaning without substantial change in head. The gradient at the stream boundary would change very little due to the high K. The streambed K was set equal to the alluvium K so the stream allowed water to pass easily, meaning it provided the necessary water with very little change in gradient. The simulated drawdown would be very low.

9.3 Recharge

The model assumes that recharge enters the model domain at a 28% of annual precipitation per year rate, with all 5.5 in/y applied all in the summer period. If the water surface is above the ground surface, the model does not accept the recharge and it becomes surface runoff to the stream network (BGC 2014c, p 25).

Three conceptual problems with this recharge simulation are obvious. The method does not account for recharge variability due to precipitation amount, slope, or geology. Studies from around the western US have shown variable rates of recharge as a proportion of precipitation, although none of the studies were based in Alaska.

GRD 17 Because recharge must first percolate through a soil zone it is likely that a higher proportion will do so for a higher precipitation because the amount of evapotranspiration is unlikely to increase linearly along with precipitation and because higher precipitation would more often have moister antecedent conditions leading to less precipitation being taken up to make up a soil water deficit.

Slope and geology controls the rate at which precipitation can enter the aquifers and unsaturated zone between the soils and aquifer. Fractured bedrock accepts more percolation than intact bedrock and the ground slope controls the rate at which the meteoric water may runoff or flow downslope as interflow, if a soil layer is available. Differences in conductivity and slope would lead to differences in the rate of recharge at a given point.

Combined, precipitation amount, slope and geology controls the amount of recharge at a location, with the remainder becoming runoff. Drainages would likely be sources of large amounts of water and recharge beneath the streams.

GRD 17

Very little recharge as simulated reaches deeply into the bedrock because the low simulated permeability of the deep bedrock significantly limits the deeper circulation of recharge. BGC (2014c) does not present the simulated amount of groundwater that percolates into the bedrock, the deep groundwater system, but it should. This would reflect the contrast in conductivity between shallow and deep aquifer systems, with lower conductivity at depth preventing deep percolation. The water that remains in the shallow system discharges to surface water quickly. This critical point controls the most important results of the model simulation as well. If the deep bedrock is a little more permeable and allows more recharge to circulate deeply, the required mine dewatering could be doubled without changing the discharge to the stream very significantly.

The comparison of premining baseflows shown in DSEIS Table 4-7 is not meaningful since presumably each model used similar recharge and if the inflow to each model domain is the same, so must be the outflow.

9.4 Calibration

There were about 182 observed groundwater elevations used for calibration. For a model of this size, this is a reasonable number, however, there was a definite bias in their distribution. As shown on BGC (2014c) Drawing 7, the majority of sites were in drainages and only a few were on the ridges. Groundwater converges into the drainages so there is likely an upward gradient in most of the areas that are most represented in the calibration.

GRD 5

Initial calibration for most models is by a steady state simulation wherein average fluxes are simulated and average head values are matched. BGC apparently skipped this step, opting instead for calibrating based on a seasonal transient model (BGC 2014c, p 27). This is reasonable if the model best fit was compared to an observed time series of groundwater observations (and stream flows). However, the "primary calibration target at each location" was the average value of multiple observations, if there were multiple observations (BGC 2014c, p 28). Average groundwater levels may not represent any given seasonal time period, so at best this calibration technique is difficult to evaluate.

BGC (2014c) does not provide necessary details for understanding the calibration simulation:

- BGC should describe the initial conditions used for the calibration scenario.
- BGC should specify how long the calibration scenario was run.
- BGC should specify the head value used for comparison to the average observed head. Is it the value for a given time period or an average for a multitude of simulated observations?

Given that the calibration scenario description is not very useful, the graph of simulated and observed head values (BGC 2014c, Drawing 24) shows some significant bias in the calibration. About 20 of the observations plot below the -25 m envelope line on the graph and just two plot above the +25 m line. At least eight of the observations below the -25m line are wells in the Upper Greywacke formation, layers 1 through 3. The Upper Greywacke may be seen south of and on the south side of the pit underlying much of the American Creek drainage. Simulated heads are about 50 m lower than observed in this area. The gradient driving flow to the American Creek is likely simulated lower than observed. This could lead to a higher K estimate which would lead to drawdown affecting the creek less than it actually would do.

A second calibration scenario was the simulation of the MW07-11 pump test (BGC 2014c, p 29). Other than stating that the grid size was changed for the simulation (Id.), BGC provides almost no details of the test, as follows: "Model stress period lengths or time steps were not specified. It is common to define a stress period based on pumping at specific rates, but the report does not specify how or whether this was done." (Id.)

The report does not explain how calibration was competed. In short term pump test simulations, it is common to adjust storage coefficients because short-term head changes are more sensitive to storage coefficients. The report does not specify whether test statistics were
GRD 5 determined for the pump test simulations, so it is difficult to objectively evaluate these transient calibrations.

The graphs that compare simulated water levels with observed show a very poor match (BGC 2014c, Drawings 26-29). There is no apparent consistency or bias, with some simulated levels exceeding observed and vice versa (Id.). BGC (2014c, p 29) suggests that "bedrock hydraulic conductivity is heterogeneous at the scale of the pumping test". This means that the model may not be accurate with respect to the details of the simulation. However, BGC also suggests that having simulated values "within a factor of two to three of measured drawdowns at the observations wells" (Id.) suggest the K values are reasonable for the scale of the modeling. There is no logic behind this statement because missing the target by a factor of three implies the K should have been set substantially different. It indicates there is substantial room for improvement.

The second transient calibration was of the pump test run to test properties between Crooked Creek and the proposed pit. The drawdown graphs for both alluvial and bedrock wells (BGC 2014c, Drawings 30-32), including both pumped and monitoring wells, show very little agreement between simulated an observed hydrographs. However, these tests were used to set the high alluvial K and low Sy values described above. The lousy match between the

observed and simulate groundwater levels does not provide justification for the alluvial parameters, the effects of which were described above.

Based on the overall calibration summary (BGC 2014c, p 32), the following bullet points suggest problems with the calibration.

GRD 5

- Modeled K of the alluvium is generally higher than observed and that of the colluvium is low for the model scale used here (Id.).
- Modeled bedrock K tended to be lower than the observed range, especially at distance from the pit.
- There is no evidence that storage parameters were even calibrated since they do not vary among formations and because the model fit during pump tests was so poor.
- Any agreement between simulated and observed flows (Drawing 25) is spurious due to the large difference in flow rates.
- It is not appropriate to claim there was a good seasonal match. Graphs for wells MW03-02, -03, -04, -05, -06, -07, -09, -12, -13, and -15, (BGC 2014c, Appendix A) show almost no simulated seasonal effect while the observed seasonal variation exceeds a meter. Some wells, such as MW07-05, and -06, show an observed trend with time that substantially masks the seasonal trend.

9.5 Simulating Mine Dewatering and Pit Development

BGC (2014c) chapter 7 describes the methods used to simulate mine dewatering and pit development. The modeling has three objectives that are of interest here:

GRD 1

- Estimate the dewatering extraction rate
- Evaluate the impacts on mine dewatering and pit development on local surface water
- Estimate the rate of pit lake formation and the recovery in groundwater levels and flow conditions after dewatering

Also of interest is how development of the tailings impoundment affects flows. Other objectives specified by BGC (2014c) are for design purposes.

GRD 17

BGC simulated dewatering using MODFLOW drain boundaries, and possibly also used the well package in advance of reaching a given pit level to remove some initial water. ET was appropriately set to zero within the enlarging pit. However, recharge should have continued to have been simulated because precipitation falls within the pit and if it does not runoff, it will percolate and become recharge. Runoff from within the pit may be captured and managed, but by definition recharge is precipitation that does not runoff. If not pumped it will flow into the

GRD 17 pit at lower levels; there is really no way to "manage" precipitation to prevent recharge (BCG 2014c, p 34).

Captured streams were appropriately turned off during the simulation. During operations, there would be some backfill in the pit. The simulation included simply turning off the drain boundary to the level of the backfill and allowing the groundwater level to recover.

The bedrock properties were not altered during the operations portion of the simulation (BGC 2014c, p 35). This was justified due to the relatively short time period simulated. However, not changing the bedrock properties was an error due to the large difference in storage properties between backfill (Sy = 0.33 for closure simulations) and in-situ bedrock (Sy = 0.003, BGC (2014c), Table 7). The amount of water necessary to fill the unsaturated bedrock with Sy=0.003 is miniscule, by two orders of magnitude, compared to that necessary to fill the backfill with Sy=0.33. During the five years of operations, groundwater levels would fill in the backfill while
GRD 1 removing very little water from the model. Presumably this would be the initial conditions for simulations of the operations period. Recovery would have occurred with too little water being removed. This would decrease the simulated losses to the streams and basically cause the model to underestimate flow losses to the streams. If it allows the backfill to become saturated prematurely, the initial conditions for the closure simulation will be too high and cause the model to simulate too little water removed from the model to be stored in the backfill; this would also reduce the simulated impacts to the streams.

The modeling predicted that total groundwater extraction rate from all wells and drains would initially equal 1700 gpm, increase to 2600 gpm by year 12 and average 1600 gpm over the mine life. The simulated rate decreases to about 1500 gpm after year 20 and some groundwater recovery into the backfill begins to occur (BGC 2014c, Drawing 36). Various factors, some already discussed, could make the dewatering rate higher than simulated:

- Bedrock K away from the pit has been underestimated. This slows the flow of groundwater to the pit and minimizes the simulated dewatering.

GRD 17
- Failure to simulate recharge within the pit boundary simply ignores a source of water that will be removed as dewatering water.

Dewatering dries much of layer 1 as can be seen by the 30 foot drawdown contour encircling much of the area (Figure 11). The model cells within that area would be dry. As noted in the
GRD 1 text (BGC 2014c, p 39), drawdown in the alluvium along Crooked Creek is less than two feet. The lack of drawdown corresponds to the high K and encirclement by low K bedrock and colluvium as described above. The alluvium is effectively isolated from the effects of dewatering (Figure 11) by the model design.

The model also simulates substantial reductions to streamflow in Crooked Creek and tributaries, which would have a large effect on the flows in those streams. However, the reductions have been underestimated for reasons as described herein. Primarily, all dewatering water is prevented from discharging to a groundwater sink which in this model would be a stream. For all of the reasons that dewatering rates have been underestimated, the reductions in streamflow has also been underestimated. Additionally, dewatering effects on Crooked Creek have been underestimated due to the simulation of K and storage properties, therefore Crooked Creek flows would be decreased much more than disclosed in the DEIS.

GRD 1

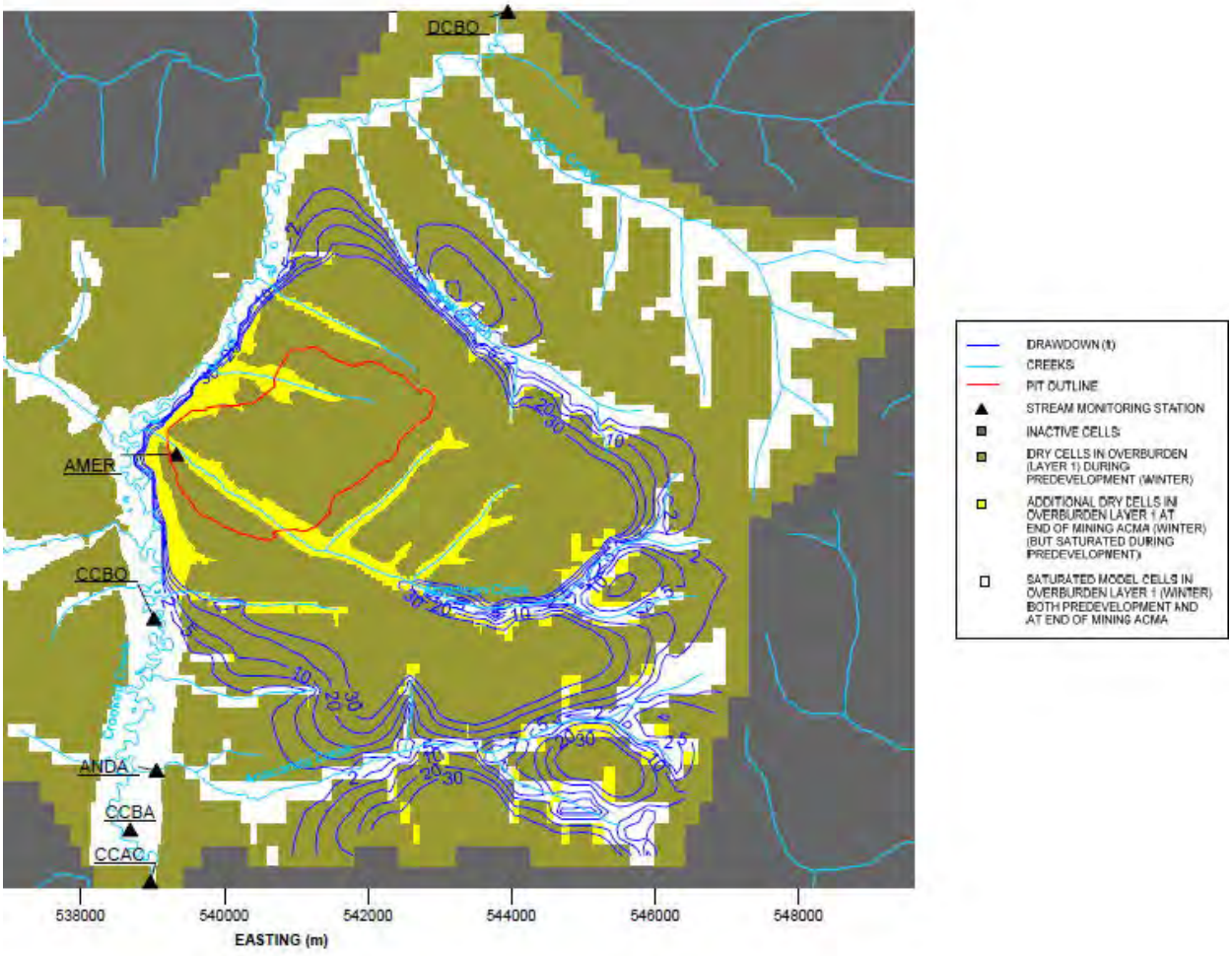


Figure 11: Snapshot of a portion of BGC (2014c) Drawing 37 showing drawdown in model layer 1, the surficial aquifer.

9.6 Simulating Pit Lake Formation

WAQ 11

BGC (2014c) used a special pit lake package to simulate the forming lake. In addition to groundwater flowing into the pit lake, there is inflow from precipitation, runoff, American

Creek flows, waste rock underdrain, contact pond water, and tailings impoundment discharge. The pit lake fills until it is just below its crest after which water would be pumped, treated, and discharged. It initially receives almost 33,000 af of excess tailings water (Lorax 2012, p 3-7), which is generally of poor quality (Lorax 2012, Table 3-3). Water from the tails and waste rock would be discharged to the bottom of the pit void "to encourage the more contaminated (i.e. denser) water to remain at depth within the pit lake and to foster chemically stratified or meromictic conditions within the pit lake" (Lorax 2012, p 3-7)). If this works as planned and the lake does not turn over, water at the bottom of the pit lake would be highly contaminated.

WAQ 11

Groundwater inflow to the pit lake will generally be of good quality compared to the inflows of waste or tailings seepage (Lorax 2012, Table 3-3). However, Lorax (2012) has not simulated different groundwater quality for groundwater entering from different levels or formations. Background groundwater quality is not homogeneous through the entire mass of rock surrounding the pit (BGC, 2011l) and inflows should not be simulated as if it is. This could affect the predicted pit lake water chemistry.

The pit lake would be almost full after 60 years. Although the pit is a sink, meaning the regional groundwater flows toward it from all directions, there is a significant groundwater outflow (BGC 2014c, Drawing 49). This outflow is to fill the backfilled waste rock and dewatered bedrock near the pit, presumably as the lake fills faster than the groundwater levels recover. The particle tracking (BGC 2014c, Drawings 50-53) does not suggest that any water would escape the pit and flow away into the groundwater, but BGC should verify this because escaping pit lake water would degrade surrounding groundwater.

GRD 6

The managed lake elevations is intended to provide adequate freeboard and maintain water levels that the groundwater would continue to discharge to the pit lake rather than creating a flow-through pit lake (BGC 2015g). The gradient is "slight" (BGC 2015g, p 2), however, which suggests that it could reverse so that pit lake water would discharge from the lake occasionally.

- The groundwater model should consider groundwater/pit lake relations when the pit fills to its crest as it could do during extreme wet conditions, as reviewed herein at section 5.2.

9.7 Sensitivity Analysis

A numerical model sensitivity analysis is designed to test the effects of changing various model parameters on the results of simulation. BGC (2014c) chapter 9 describes the sensitivity analysis completed for the Donlin numerical model. BGC's method is to simply make large adjustments to various factors and compare the change in the calibration and to show how it

GRD 1

changes the simulation of future conditions. I review only the sensitivity results that reveal important aspects of the model with respect to the environmental impacts of the proposed mine.

GRD 1

The model was not sensitive to raising and lowering the hydraulic K of the alluvium because the alluvium was essentially isolated from the rest of the system so that stream levels controlled the heads, as discussed above. Calibration statistics improved for three changes, decreasing bedrock K, increasing recharge and streamflow, and simulating faults as low hydraulic K faults (BGC 2014c, p 51). That these wholescale changes improved the calibrations shows the model is not unique but also suggests that the calibration as presented in BGC (2014c) is not as accurate as it could be. I argued above that bedrock K was underestimated so the improvement in calibration statistics for using even lower K suggests that some other aspect of the model is more important for matching head values. Recharge and streamflow were estimated external to the model so changing them would be inappropriate.

GRD 4

Including low K faults improved the calibration (BGC 2014c, p 51). This conceptualization suggests the groundwater system could be segmented. Details of the analysis are sparse, but the faults were only mapped in the pit area so it is likely that faults were only added in that area. This sensitivity analysis illustrates the importance of better understanding the faults and how they affect the groundwater flow.

GRD 3

- Faults could segment bedrock into higher or lower K zones better than formation maps.
- Faults could segment bedrock in ways that would allow dewatering to affect areas farther from the pit, especially if the segmentation includes areas with higher K.
- If the higher K segments extent under creeks, they could create zones in the streams that are much more affected by dewatering.

The model, and DEIS, requires much more information about the faults to be accurate.

Mine dewatering rates were sensitive to bedrock properties (BGC 2014c, p 52). Increasing bedrock K by a factor of 5 increased mine dewatering rates by 3.3 times; increasing bedrock storage coefficients by ten times increased mine dewatering rates by 1.5 (Id.).

GRD 4

High K faults could increase the mine dewatering rates up to 3.3 times depending on their location and the extent of connection with Crooked Creek (BGC 2014c, p 53). This could probably also result from the low-K faults segmenting high-K bedrock under the streams.

GRD 3

Changing bedrock K substantially affected stream flows. Reducing bedrock K reduced streamflows relative to the base case. If the model has bedrock K that is too low, as I argued above, impacts on the streams would be underestimated. Increasing bedrock K by a factor of 5

GRD 4

GRD 4

reduced winter streamflow by 86% and simulating high K faults decreased streamflows by 83% (BGC 2014c, p 54). Increasing bedrock K by a factor of 20 caused Crooked Creek to go dry by the pit (Id.). Increasing storage coefficient also reduced streamflows. The sensitivity of the model predictions to bedrock properties further indicates that the model could have grossly underestimated impacts to streamflow.

The sensitivity results regarding bedrock K verifies the points above about how low K estimates could have caused the model to underestimate dewatering, the extent of the drawdown, and impacts on streamflow.

GRD 3

Low K faults decreased the impacts that dewatering had on streamflow (BGC 2014c, p 54). This is probably due to the segmentation caused by the faults.

GRD 1

Changing alluvial K had little effect on the impacts dewatering had on streamflow (BGC 2014, p 54). This further reflects the comments above about how the alluvium under Crooked Creek is isolated from the bedrock. The isolated alluvium acts as a tub in which water is easily exchanged with the stream.

GRD 4

Pit lake refill time was also sensitive to bedrock K (BGC 2014c, p 55). The increased bedrock K causes the pit lake to fill from 14 to 30 years faster, reflecting the higher flow to the pit (Id.). Decreased K increased the fill time by about 12 years (Id.).

9.8 TSF underdrain predictions

The groundwater model (BGC 2014c) estimated discharge to the tailings impoundment underdrain (Figure 12). The only description of how the TSF was simulated was to note that ET and recharge was set equal to zero (BGC 2014c, p 16, 34).

GRD 8

> The TSF will be a fully-lined impoundment. Therefore, groundwater recharge to the underlying aquifer will cease within the footprint of the facility. In addition, the TSF underdrain will be installed beneath the **liner to capture groundwater discharge from the catchment and deliver it to the SRS downstream of the TSF dam**. Any seepage through the liner would also report to the SRS. SRS water will be used either as make-up water in the process or potentially treated and discharged to Crooked Creek. (BGC 2014c, p 16, emphasis added)

The DEIS describes it as follows: "The TSF would be designed with a rock underdrain that would serve two purposes: 1) capture and direct any TSF leakage to a Seepage Recovery System (SRS) located immediately downgradient of the TSF dam; and 2) collect groundwater from areas upgradient of the TSF and direct it to the SRS as TSF underflow" (DEIS, p3.6-31). The mine would obtain a water right for the diversion of groundwater by the TSF drain (DEIS, p 3.6-32).

The report does not describe the boundary used to simulate the drains, although if the underdrain is beneath the liner to capture groundwater discharge, the underdrain must be simulated as a drain in layer 1. An underdrain would allow groundwater discharging upward due to artesian pressure from undermining the TSF.

Decreased bedrock K in the sensitivity analysis increased flows to the tailings underdrain system (BGC 2014c, p 54, 55). This is because low bedrock K causes more groundwater to remain in the shallow groundwater.

> The reduction in recharge is predicted to lead to a progressive decrease in groundwater flow reporting to the foundation underdrain, from approximately 730 gpm (4,000m3/d) in Year -2 to approximately 440 gpm (2,400m3/d) at the end of mining" (BGS 2014c, p xiv). "Predicted groundwater discharge to the TSF underdrain for the post closure analysis fluctuates on a seasonal basis, and averages 370 gpm (2,000 m3/d) during the winter season, and 440 gpm (2,400 m3/d) during the summer season (BGC 2014c, p xv).

GRD 8

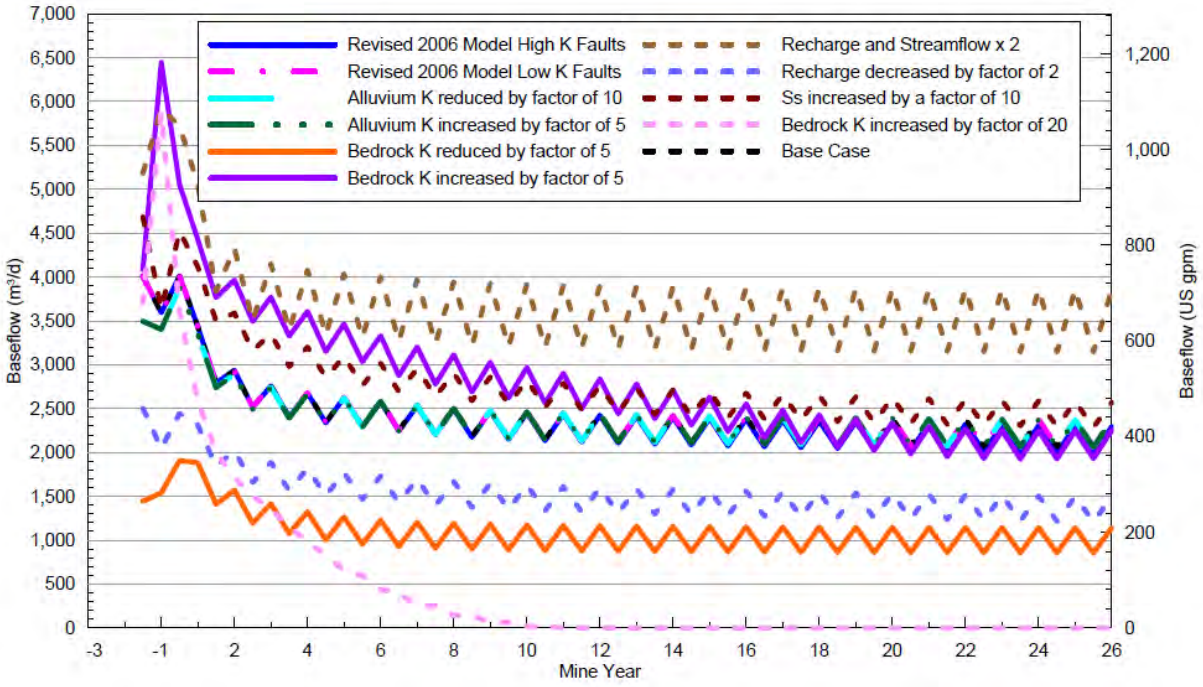


Figure 12: Snapshot of BGC (2014c) Drawing G22 showing the discharge to the tailings impoundment underdrain for the base case and various sensitivity analysis simulations.

10.0 MISCELLANEOUS

GRD 1

The potentiometric surface map (DEIS Figure 3.6-2) does not distinguish among aquifers which means there is an assumption that the groundwater pressure in the bedrock equals the water table in the overlying colluvial aquifer. It argues that "vertical gradients within the groundwater system are not large compared to the scale of the map and the overall relief of the potentiometric surface" (DEIS, p 3.6-8). A reference is to BGC 2011d. This can be an important assumption, driving recharge and discharge locations. What is meant by gradients "not large compared to the scale of the map"?

Groundwater discharge occurs only in creeks and gulches, not to wetlands away from the creeks and gulches (BGC 2014g, p 6). Permafrost is intermittent and generally limited to soils but does extend into bedrock up to 33 feet with an average of 14 feet (BGC 2014g, p 6-8). The only trends apparent in the permafrost mapping show that permafrost is more common in the drainages of American and Anaconda Creek.

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Attachment 1

Tom Myers CV

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Curriculum Vitae

Objective: To provide diverse research and consulting services to nonprofit, government, legal and industry clients focusing on hydrogeology specializing in mine dewatering, contaminant transport, natural gas development, groundwater modeling, NEPA analysis, federal and state regulatory review, and fluvial morphology.

Education

Years	Degree	University
1992-96	Ph.D. Hydrology/Hydrogeology	University of Nevada, Reno Dissertation: Stochastic Structure of Rangeland Streams
1990-92		University of Arizona, Tucson AZ Classes in pursuit of Ph.D. in Hydrology.
1988-90	M.S. Hydrology/Hydrogeology	University of Nevada, Reno Thesis: Stream Morphology, Stability and Habitat in Northern Nevada
1981-83		University of Colorado, Denver, CO Graduate level water resources engineering classes.
1977-81	B.S., Civil Engineering	University of Colorado, Boulder, CO

Professional Experience

Years	Position	Duties
1993-Pr.	Hydrologic Consultant	Completion of hydrogeology studies and testimony focusing on mine dewatering, groundwater modeling, natural gas development, contaminant transport, NEPA review, and water rights for nonprofit groups and government agencies.
1999-2004	Great Basin Mine Watch, Exec Director	Responsible for reviewing and commenting on mining projects with a focus on groundwater and surface water resources, preparing appeals and litigation, organizational development and personnel management.
1992-1997	Univ of NV, Reno, Res. Assoc.	Research on riparian area and watershed management including stream morphology, aquatic habitat, cattle grazing and low-flow and flood hydrology.
1990-1992	U of AZ, Res. and Teach. Assistant	Research on rainfall/runoff processes and climate models. Taught lab sections for sophomore level "Principles of Hydrology". Received 1992 Outstanding Graduate Teaching Assistant Award in the College of Engineering
1988-1990	U of NV, Reno Res. Asst	Research on aquatic habitat, stream morphology and livestock management.
1983-1988	US Bureau of Reclamation Hydraulic Eng.	Performed hydrology planning studies on topics including floodplains, water supply, flood control, salt balance, irrigation efficiencies, sediment transport, rainfall-runoff modeling and groundwater balances.

Peer-Reviewed Publications

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Special Coursework

Years	Course	Sponsor
2011	Hydraulic Fracturing of the Marcellus Shale	National Groundwater Association
2008	Fractured Rock Analysis	MidWest Geoscience
2005	Groundwater Sampling Field Course	Nielson Environmental Field School
2004	Environmental Forensics	National Groundwater Association
2004 and -5	Groundwater and Environmental Law	National Groundwater Association

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Resolution 16-05

A Resolution For Extending The Donlin Gold DEIS Comment Period

NEP 1 **A Resolution To Formally Request That The Army Corps of Engineers (ACOE) Extend The Public Comment Period for the Donlin Gold Draft Environmental Impact Statement (DEIS) By A Minimum Of At Least Six (6) Months Beyond The Current Comment Deadline Of April 30th, 2016.**

WHEREAS, The Native Village of Napakiak is the federally recognized tribal governing body for The Native Village of Napakiak, and;

WHEREAS, The Native Village of Napakiak represents the interests of the tribal members of Napakiak, and;

NEP 1 **WHEREAS,** The Native Village of Napakiak believes that given the immense size, complexity and breadth of the proposed Donlin Gold project, the enormity of the nature of the issues and alternatives analyzed in the DEIS coupled with the conflicting Agency conclusions on the impact to subsistence uses and users, that additional time is necessary for public review of the document to allow for meaningful public comments to the ACOE and BLM on the DEIS;

WHEREAS, a high proportion of villages lack a hard copy of the DEIS (and even the DVD's), and many residents are not familiar enough with computers to find their way through the digital files;

WHEREAS, Federal Agencies are required to make efforts to provide meaningful public involvement in their NEPA process (CEQ NEPA Regulations, 40 C.F.R. §§ 1501.4(b), 1506.6(b));

WHEREAS, The Native Village of Napakiak does not feel that the current public participation efforts to-date, or scheduled prior to the April 30th deadline will meet the requirements of "providing **meaningful** public involvement", for reasons noted above;

TWL 1 **WHEREAS,** the proposed project has the potential to directly affect our tribal members up and down the drainage as well as other Kuskokwim stakeholders for generations to come, if not forever;

NEP 1 **NOW THEREFORE BE IT RESOLVED,** that The Native Village of Napakiak is requesting that the ACOE extend the public comment period for at least six (6) months beyond the current deadline of April 30th, 2016, and that the ACOE schedule additional outreach with the affected communities and Tribes during this extended period for the purpose of soliciting meaningful public comments on the DEIS;

CERTIFICATION:

This resolution was adopted at a meeting in which a quorum was present.

Passed and approved on the 29th day of March 2016 with a vote of 6 Yes, ~~0~~ No, and 1 Abstain.

Nicholas Paul 3-29-16
President, Nicholas Paul Date

Oliane Kameroff 3/29/16
Secretary/Treasurer, Oliane Kameroff Date

cc: file

US Army Corps of Engineers

Donlin Gold Project EIS

Comment Form

The Corps welcomes your comments on the Draft Environmental Impact Statement. If you'd like to mail your comments, please feel free to use this form. Write your comments below then fold this page in thirds so the mailing address shows. Additional pages can be inserted. Remember to affix first class postage. You can also email your comments to POA.donlingoldeis@usace.army.mil, or fax them to (907) 753-5567.

Important topics for comments would include:

- *Comments and questions about the accuracy of information in the Draft EIS.*
- *Comments and questions about the adequacy of methods or assumptions used.*
- *New information to be considered in preparing the Final EIS.*
- *New reasonable alternatives or revisions to current alternatives.*
- *Additional measures to reduce impacts (mitigation).*

March23,2016

Donlin Gold projct shouldn't be allowed to operate, due to a number of reasons.

SUB 15

1. Subsistence: Our salmon species will be jeopardized once development occurs by potentially poisoning them with cyanide. Argentina Gold Mines were recently publizized by looking for whomever is responsible for this spill of cyanide. It might happen here! Cyanide will be barged in with state of the art ISO containers but if spills occur from tailings it will devastate the fishing and wipe them out.

SUB 1

2. Socio-economic: We will be here after the Donlin Gold project is over and done with. We will be maintaining our subsistence way of life.

PHL 16

3. Mercury: Contamination of mercury and arsenic are ever prevalent for our health and well-being. It is estimated that these chemicals are going airborne and we are in the direct path of the north easterly winds where some will be carried away but some will eventually land damaging our Tundra lands blackfish, White fish, lush, and pike fish that we depend on for subsistence.

From; Nunapitchuk IRA Council

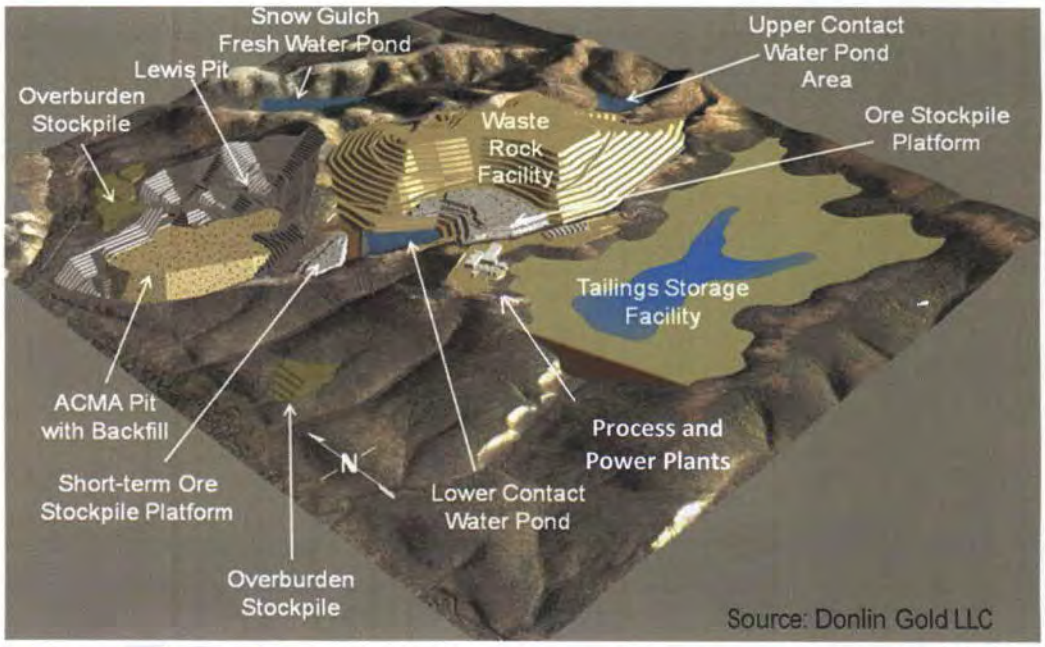
President Wassilie Pleasant

Village of Crooked Creek • Native Village of Napaimute • Native Village of Chuathbaluk • Native Village of Aniak • Knik Tribe • Akiak Native Community

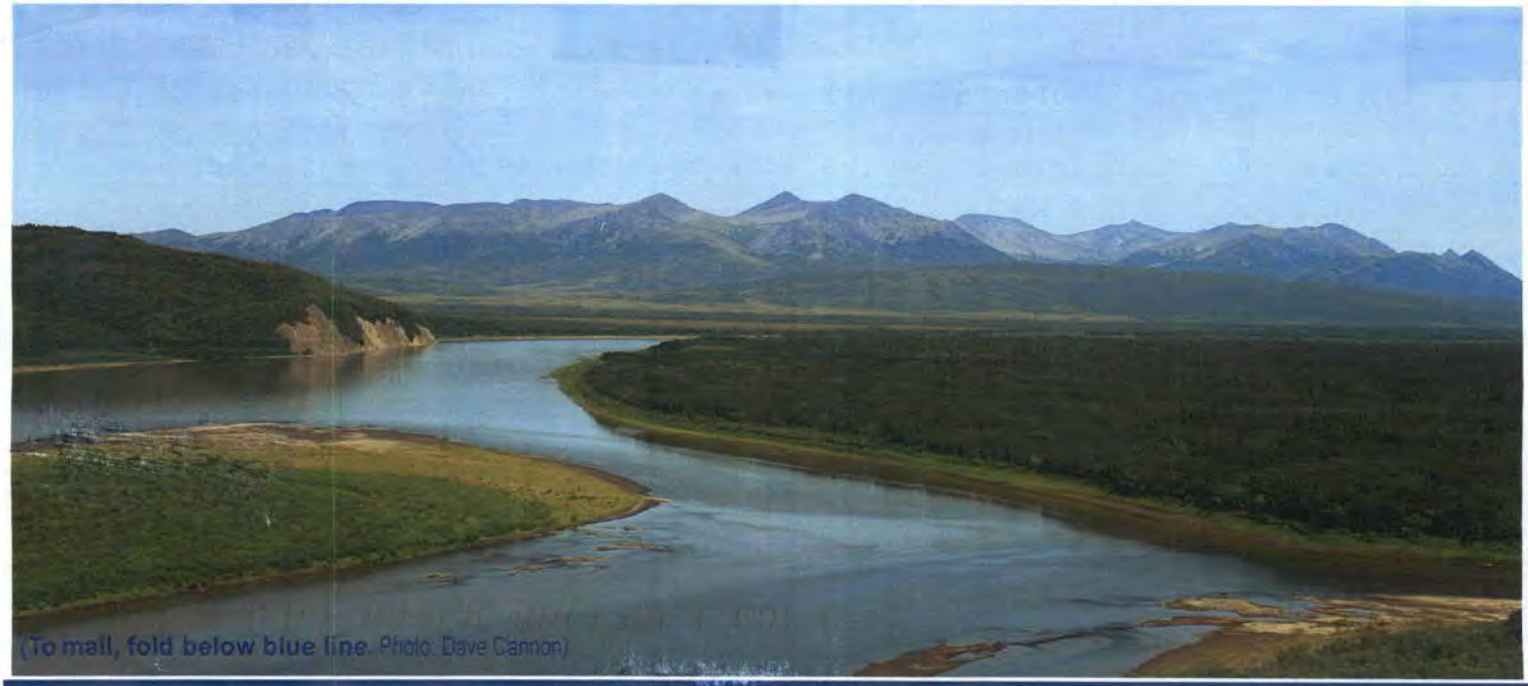
Layout of Proposed Mine Site

The image to the right illustrates the eventual layout of a proposed gold mine, ten miles north of the community of Crooked Creek on the Kuskokwim River in southwestern Alaska, for which the US Army Corps of Engineers is preparing an EIS. The project, proposed by Donlin Gold, LLC, includes a natural gas pipeline and transportation and components. You may use this mail-in form to submit comments.

For more information, please visit:
www.DonlinGoldEIS.com



(fold here)



(To mail, fold below blue line. Photo: Dave Cannon)

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Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, PO Box 6898
Joint Base Elmendorf Richardson, AK

USACE
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APR 0 1 2016
AK REGULATORY

from:

Donlin Gold Project EIS
US Army Corps of Engineers

MAR 24 2016 PM
ANCHORAGE AK
NUNAP
99041

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: DEIS comment
Date: Monday, March 28, 2016 8:45:00 AM
Attachments: donlin eis comment.pdf

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, March 28, 2016 7:49 AM
To: Craig, Bill
Subject: DEIS comment

-----Original Message-----
From: nunap.admin@gmail.com [mailto:nunap.admin@gmail.com] On Behalf Of NUP Tribal Administrator
Sent: Thursday, March 24, 2016 9:19 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold mine

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_____
Eli Wassillie
Tribal Administrator
Native Village of Nunapitchuk
Nunapitchuk IRA Council
Box 130
Nunapitchuk, AK 99641
(907)527-5705; fax 527-5711

My new eMail address is tribaladmin@yupik.org <mailto:tribaladmin@yupik.org>

Comment Form

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March23,2016

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SUB 15

SUB 1

PHL 16

From; Nunapitchuk IRA Council

President Wassilie Pleasant

From:	Tiffany Zulkosky
To:	donlingoldeis, POA
Cc:	Dan Winkelman; Natalia Paul-Brannon
Subject:	[EXTERNAL] Donlin Gold Draft EIS Comment
Date:	Monday, May 09, 2016 2:29:50 PM
Attachments:	7F72A771-7337-4428-89D5-F8F34C9E7661[37].png Tununak Resolution 2016-04[1].pdf Donlin Resolution 16.04.04.pdf

To Whom It May Concern:

The Native Village of Tununak submit Resolution 2016-04 (attached) in opposition to the Donlin Gold Mine Project for your review and as comment to the Draft Environmental Impact Statement (EIS).

A copy of the full resolution is attached, as well as the resolution referenced within Resolution 2016-04.

Should you have any questions, or difficulty opening the attachment, please feel free to contact me via email or at the phone number below.

Thank you,

--

Tiffany Zulkosky
Vice President of Communications

Yukon Kuskokwim Health Corporation
Administration

Post Office Box 528, Bethel, Alaska 99559
(P) 907.543.6013
(F) 907.543.6006

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NATIVE VILLAGE OF TUNUNAK
Tununak IRA Council
P.O. Box 77
Tununak, Alaska 99681
Phone: (907)652-6527 Fax: (907)652-6011

RESOLUTION # 2016-04

A Resolution of the Native Village of Tununak Supporting the YKHC Resolution #16-04-04 in Opposition to the Donalin Gold Mine Project.

WHEREAS, Native Village of Tununak is a Federally Recognized Tribal Government for the Native Village of Tununak Tribal members.

WHEREAS, the Native Village of Tununak fully supports the YKHC Resolution #16-04-04 in Opposition to the Donalin Gold Project.

PHL 4 BE IT FURTHER RESOLVED that the Native Village of Tununak hereby opposes the development and operation of the Donalin Creek Gold Mine due to the extreme hazards and excessive risks it would pose to the health and welfare of the Yukon Kuskokwim Delta Region.

CERTIFICATION

I hereby certify that the above resolution was duly adopted at a regular meeting of the Native Village of Tununak on this 27th day of April 2014 at which a quorum was present, with a vote of 4 for, 0 against, 0 abstentions, and 1 absent.

George Hooper Jr, President — Date: 4/29/2016

Attest
James G. James, Tribal Administrator — Date: 4-29-16

YUKON-KUSKOKWIM HEALTH CORPORATION

"Working Together to Achieve Excellent Health"

Resolution No. 16-04-04

A Resolution of the Yukon-Kuskokwim Health Corporation Full Board of Directors in Opposition to the Donlin Gold Mine Project

WHEREAS: The Yukon-Kuskokwim Health Corporation is a tribal organization administering self-governance programs, services, functions and activities under the Indian Self-Determination and Education Assistance Act; and

WHEREAS: The Mission of the Yukon-Kuskokwim Health Corporation is "Working Together to Achieve Excellent Health"; and

WHEREAS: The Yukon-Kuskokwim Health Corporation provides health services to people in an area of Southwest Alaska comparable in size to the State of Oregon; and

SER 7

WHEREAS: Many people living within the service area of the Yukon-Kuskokwim Health Corporation experience poverty and unemployment rates among the highest in the United States, according to the Labor Department's Alaska's Economic Trends October 2013 report; and

WHEREAS: The proposed Donlin Gold mine is expected to employ 3,000 persons during construction and up to 1,400 persons during operation with a large multimillion dollar annual payroll; and

WHEREAS: The Board of Directors recognize that although the mine will add jobs to the region, many locally hired persons that worked for the mine have relocated from their home village to more metropolitan cities with their earnings and Donlin provides transportation from residence to work for each job rotation; and

WHEREAS: The earnings of many present and former employees of the mine have gone to larger cities; and

WHEREAS: The relocation of the families of the mine workers has caused a drain of human resources in small villages in the region and that drain is expected to increase as the workforce of the mine increases; and

SUB 17

WHEREAS: The majority of people living within the service area of the Yukon-Kuskokwim Health Corporation depend upon the Kuskokwim River for their food supply and in many villages, their water supply as well; and

WHEREAS: The proposed Donlin Gold mine is located approximately 150 miles northeast of Bethel, Alaska, about 10 miles from the Kuskokwim River, a large salmon producing river; and

SUB 17

YUKON-KUSKOKWIM HEALTH CORPORATION

"Working Together to Achieve Excellent Health"

WHEREAS: The reported method of gold retrieval for this mine will involve blasting and crushing rock, then mixing the pulverized rock with cyanide and other chemicals; and

WHEREAS: The rock in the mine area contains mercury which will be released into the air through the mining process and the mercury will fall onto the streams and land and will contaminate fish, animals and ultimately people; and

MON 9

WHEREAS: Studies are being done, but none can predict the effects of mercury, cyanide and other disruptions in the Yukon-Kuskokwim ecosystem in 100 years, when our grandchildren are living here; and

WHEREAS: The proposed project is expected to have the following components:

a. A 315 mile, 14 inch natural gas pipeline coming across the Alaska Range;
b. A new Barge Terminal facility in Bethel;
c. A new 5-acre port on the Kuskokwim River near Angyaruaq or Jungjuk Creek;
d. A new 30-mile road from the upriver port to the mine site;
e. A 5,000 foot airstrip
f. A 40,000,000 gallon diesel fuel tank farm;
g. A Tailings pond for waste chemicals;
h. A 2-mile long and 1-mile wide open pit; and
i. A use of 10,000 acres of land;
j. Increased Barge traffic on the River hauling fuel, chemicals (including cyanide), supplies, and equipment on the Kuskokwim River daily during the ice-free months.

SUB 15

WHEREAS: There have been examples of environmental disasters resulting from similar type large industrial sized mines that experienced unexpected failures of their safety measures; and

WHEREAS: A failure of the safety measures planned for the Donlin Gold Mine could cause catastrophic damage to the ecosystem of the Yukon-Kuskokwim Delta and would obliterate the subsistence way of life for the people served by the Yukon-Kuskokwim Health Corporation; and

WHEREAS: Such failure would devastate the fisheries on the Kuskokwim River and its tributaries, thus negatively impacting the health of the people of the region.

PHL 4

NOW THEREFORE BE IT RESOLVED that Yukon-Kuskokwim Health Corporation Full Board of Directors hereby opposes the development and operation of the Donlin Creek Gold Mine due to the extreme hazards and excessive risks it would pose to the health and welfare of the people of the Yukon-Kuskokwim Delta Region.

P.O. Box 528 • Bethel, Alaska 99559 • 907-543-6000 • 1-800-478-3321

YUKON-KUSKOKWIM HEALTH CORPORATION

"Working Together to Achieve Excellent Health"

CERTIFICATION

Adopted at a duly convened meeting of the Board of Directors of the Yukon-Kuskokwim Health Corporation at which a quorum was present on April 22, 2016 by a vote of 19 in favor, 0 opposed, 0 abstaining, and 0 absent.

Attested:

Esai Twitchell, Chairman
YKHC Board of Directors

Patrick Tall, Secretary
YKHC Board of Directors

From:	Tiffany Zulkosky
To:	donlingoldeis, POA
Cc:	Dan Winkelman; Natalia Paul-Brannon
Subject:	[EXTERNAL] Donlin Gold Draft EIS Comment
Date:	Monday, May 09, 2016 2:36:16 PM
Attachments:	7F72A771-7337-4428-89D5-F8F34C9E7661[39].png Nightmute Tribal Council Resolution.pdf Donlin Resolution 16.04.04[1][1].pdf

To Whom It May Concern:

The Negtemiut Tribal Council submit Resolution 2016-05-23 (attached) in opposition to the Donlin Gold Mine Project for your review and as comment to the Draft Environmental Impact Statement (EIS).

A copy of the full resolution is attached, as well as the resolution referenced within it.

Should you have any questions, or difficulty opening the attachment, please feel free to contact me via email or at the phone number below.

Thank you,

--

Tiffany Zulkosky
Vice President of Communications

Yukon Kuskokwim Health Corporation
Administration

Post Office Box 528, Bethel, Alaska 99559
(P) 907.543.6013
(F) 907.543.6006

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FAX

Negtemiut Tribal Council
P.O. Box 90021 Nightmute, AK 99690
Phone: (907) 647-6215 Fax: 647-6112
Email: negtemiut_tribe@live.com

To: Dan Winkleman From: Nightmute T.C.

Fax: 907-543-6006 Pages: 5 including cover

Phone: Date: April

Re: Resolution in opposition cc: ~~of~~ to the Donlin Gold

☒ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Comments:

If you have any questions call Edna @ 907-647-6215. Thank You.

[Pick the date]

Negtemiut Tribal Council
P.O. Box 90021 Nightmute, AK 99690
Phone: (907) 647-6215 Fax: 647-6112

RESOLUTION: 16-05-23

A RESOLUTION OF THE Yukon- Kuskokwim Health Corporation Full Board of Directors in Opposition to the Donlin Gold Mine Project.

WHEREAS: Negtemiut Tribal Council is the Tribal Government for Nightmute, AK.

WHEREAS: Nightmute Tribal Council supports the "YKHC Full Board Resolution in opposition to the Donlin Gold Mine Project.

PHL 4

Now Therefore it be resolved that the Negtemiut Tribal Council hereby opposes the development and operation for the Donlin Gold Creek Gold Mine due to the extreme hazards and excessive risks it would pose to the health and welfare of the people of the Yukon Kuskokwim Delta Region.

Adopted at a Duly constituted meeting and passed, which a quorum was present on April 25,2016 5 In Favor Ø Opposed Ø Abstaining 2 Absent

Simeon Tulik
Tribal President, Simeon Tulik

Bertha George
Tribal Secretary, Bertha George

YUKON-KUSKOKWIM HEALTH CORPORATION

"Working Together to Achieve Excellent Health"

Resolution No. 16-04-04

A Resolution of the Yukon-Kuskokwim Health Corporation
Full Board of Directors in Opposition to the Donlin Gold Mine Project

WHEREAS: The Yukon-Kuskokwim Health Corporation is a tribal organization administering self-governance programs, services, functions and activities under the Indian Self-Determination and Education Assistance Act; and

WHEREAS: The Mission of the Yukon-Kuskokwim Health Corporation is "Working Together to Achieve Excellent Health"; and

WHEREAS: The Yukon-Kuskokwim Health Corporation provides health services to people in an area of Southwest Alaska comparable in size to the State of Oregon; and

SER 7 **WHEREAS:** Many people living within the service area of the Yukon-Kuskokwim Health Corporation experience poverty and unemployment rates among the highest in the United States, according to the Labor Department's Alaska's Economic Trends October 2013 report; and

WHEREAS: The proposed Donlin Gold mine is expected to employ 3,000 persons during construction and up to 1,400 persons during operation with a large multimillion dollar annual payroll; and

WHEREAS: The Board of Directors recognize that although the mine will add jobs to the region, many locally hired persons that worked for the mine have relocated from their home village to more metropolitan cities with their earnings and Donlin provides transportation from residence to work for each job rotation; and

WHEREAS: The earnings of many present and former employees of the mine have gone to larger cities; and

WHEREAS: The relocation of the families of the mine workers has caused a drain of human resources in small villages in the region and that drain is expected to increase as the workforce of the mine increases; and

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WHEREAS: The proposed Donlin Gold mine is located approximately 150 miles northeast of Bethel, Alaska, about 10 miles from the Kuskokwim River, a large salmon producing river; and

WHEREAS: The reported method of gold retrieval for this mine will involve blasting and crushing rock, then mixing the pulverized rock with cyanide and other chemicals; and

WHEREAS: The rock in the mine area contains mercury which will be released into the air through the mining process and the mercury will fall onto the streams and land and will contaminate fish, animals and ultimately people; and

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c. A new 5-acre port on the Kuskokwim River near Angyaruaq or Jungjuk Creek;
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h. A 2-mile long and 1-mile wide open pit; and
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PHL 4 **NOW THEREFORE BE IT RESOLVED** that Yukon-Kuskokwim Health Corporation Full Board of Directors hereby opposes the development and operation of the Donlin Creek Gold Mine due to the extreme hazards and excessive risks it would pose to the health and welfare of the people of the Yukon-Kuskokwim Delta Region.

YUKON-KUSKOKWIM HEALTH CORPORATION

"Working Together to Achieve Excellent Health"

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Attested:

Esai Twitchell, Chairman
YKHC Board of Directors

Patrick Tall, Secretary
YKHC Board of Directors

From:	Eric Nelius
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin project / barging perspective / EIS comment
Date:	Tuesday, May 31, 2016 8:32:28 AM
Attachments:	image003.png Nelius_Donlin Perspective.pdf

To Whom it May Concern:

Please review the attached letter, which includes my perspective in regard to the barging proposal for the Donlin Gold project.

Regards.

Eric Nelius
Brice Marine LLC
907.888.6517
BRMARlogo

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RTb Na f 1VcVV
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BARG 5

AUR R UN ORR N RUR V c VPRQ.NO baaUR VOVVaf SV P RN RQ.ON TR a NSSVP V aR SR V T d VaU
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4 Q.P b VPNaV V N d Nf N Rf R R R a a Nc VQV T P SVPa QN TR aUR d NaR NSR a NcR V
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P aNPa V a VOR d UR d cV VOVVaf PVPb aN PR N R R a VaV P a baVVgR N V a
VSSa b NURNQ.V QR a R aNO VU N V T N N TR R a 6 f Re R VR PR aUV SNPR a SNPR RaU Q
SR aNO VUV T P aNPaR Q. b OR RSVaV T O aU N aVR Q. d aUR NQ 6a P RNaR N URNaUf S b QNaV
S P b VPNaV V aUR Sbab R 3 N VWPa aUNa d V N a fRN R S V T P RPaV
ORad RR abT R Na N Q.cV NTR SVUR N d V cR OR RSVPVN 6 / Va /Nf 6d RQ.UN Q.Na
Pb aVcNaV T d V T R NaV UV N T SVUR R AUR R PN R NaV R a T NSaR aN V T f SV a
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MIT 15

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RcR a T b QV T?AUR R RaVaVcR Nab R SaUR a V ORad RR /RaUR N Q 7b TWV 0 RR d V N cVQR S NaU bTUb QR aN QV T SaUR VcR? RN aV R ONaUf Ra f?AUV QNVf b cRf d V a N NaR V a d R N RQ NQ aUNa V V VgR V N Q RR ON TR cV T?RcR Qb V T aUR UN d R a R NaV T d RR ?9 NQV T ON TR d VaUV N d NO R V Va? RQVPNaRQ Of d NaR QR aU aUNa PUN TR QNVf V aUV T Rd a aUR N V R?4 b QV T V N RTVaV NaR P PR RcR f d UR R V aUR N V R R cV R a? aWa aUR 8b d V ?B V T T Q N N TR R a NPaVPR ? PRQb R ReRPbaV ?aURf Q aUN R ?

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The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

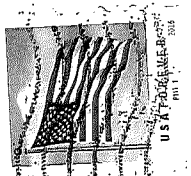
Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

When I first learned of this Gold mine operation, I was excited for the jobs & revenue it would bring to the area. Since then, I have been researching other mine operations and their potential for disaster to the environment. I don't believe Donlin can prepare for all disasters. If a disaster were to happen, it would be devastating to all that live on the Kuskokwim and beyond. To have the tailings pond long after all the gold has been recovered and to have to constantly monitor them is a disaster that will never go away. The Kuskokwim region is a very fragile environment that would not sustain any environmental disaster.

I am opposed to the Donlin Gold Mine Project

Ben Libby

SVE 3



MISSOULA, MT 590

29 MAY 2016 PM 3 L

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

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US Army Corps of Engineers

Donlin Gold Project EIS

Shari Kelly 2/1/16

Comment Form

The Corps welcomes your comments on the Draft Environmental Impact Statement. If you'd like to mail your comments, please feel free to use this form. Write your comments below then fold this page in thirds so the mailing address shows. Additional pages can be inserted. Remember to affix first class postage. You can also email your comments to POA.donlingoldeis@usace.army.mil, or fax them to (907) 753-5567.

Important topics for comments would include:

- *Comments and questions about the accuracy of information in the Draft EIS.*
- *Comments and questions about the adequacy of methods or assumptions used.*
- *New information to be considered in preparing the Final EIS.*
- *New reasonable alternatives or revisions to current alternatives.*
- *Additional measures to reduce impacts (mitigation).*

→ Wait until less environmentally impactful technology is developed for gold extraction or less dispendious energy sources

GAS 6

→ Concerned about the amount of natural gas consumption and the impact of potentially decreased amounts of natural gas available for people and ↑ cost of natural gas due to ↓ supply

→ Instead of LNG pipeline for energy, what about natural gas being converted and sent from the North Slope as electrical current transmitted by power lines, instead?

FSR 1

→ Concerned about potential leaks / breakages of the 315 mile LNG pipeline / diesel fuel

FSR 2

→ Concerned about diesel fuel spills in / along the Kuskokwim if each tug pushes 4 barges of fuel!

→ Who takes care of the mess when retaining walls fail after the 65-year liability limit? (mind closure) 60 yrs.

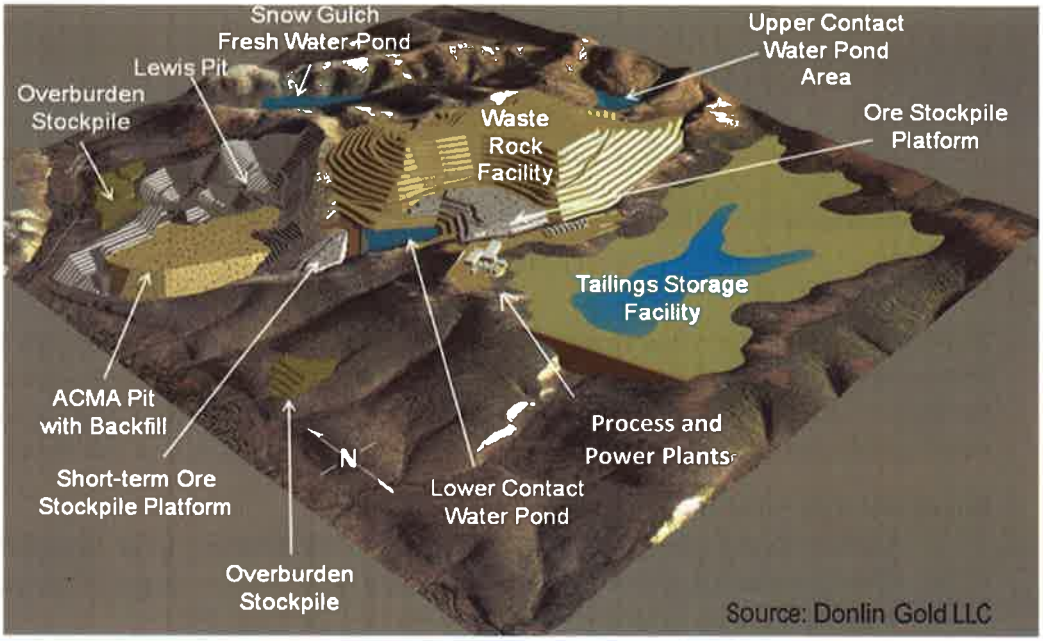
FISH 6

→ Decreased water levels due to ↓ snowfall would ↑ impact on salmon from numerous barge trips

Layout of Proposed Mine Site

The image to the right illustrates the eventual layout of a proposed gold mine, ten miles north of the community of Crooked Creek on the Kuskokwim River in southwestern Alaska, for which the US Army Corps of Engineers is preparing an EIS. The project, proposed by Donlin Gold, LLC, includes a natural gas pipeline and transportation and components. You may use this mail-in form to submit comments.

For more information, please visit:
www.DonlinGoldEIS.com



(fold here)

(To mail, fold below blue line. Photo: Dave Cannon)

111

from:

US Army Corps of Engineers
Donlin Gold Project EIS

Please place first-class postage here.

Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, PO Box 6898
Joint Base Elmendorf Richardson, AK
99506-0898

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: [EXTERNAL] Donlin Gold comment
Date: Thursday, March 10, 2016 3:40:34 PM

Bill Craig
Environmental Department Manager
D 1-907-261-6703 C 1-907-441-7207
bill.m.craig@aecom.com

AECOM
700 G Street, Anchorage, Alaska 99501
T 1-907-562-3366 F 1-907-562-1297
www.aecom.com

-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Thursday, March 10, 2016 6:27 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold comment

-----Original Message-----
From: Shari Neth [mailto:shari.neth@gmail.com]
Sent: Wednesday, March 09, 2016 9:26 AM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold comment

I have attended two draft EIS meetings in Bethel, and I am greatly concerned about the effects of climate change on the current plans, and the environmental impact the Donlin Gold mine would have on the Kuskokwim watershed and our region of southwest Alaska. I would recommend Alternative #1: No action. Donlin Gold needs to JUST WAIT until energy and mining technology catch up to the demands of environmental protection, to preserve the natural subsistence infrastructure for generations to come. The gold is there. Focus on and invest in developing safe, alternative mining and transportation technology. The current plans which depend on natural gas, fuel, and the Kuskokwim River to get supplies to the mine are very costly and questionable, doing things the way they've been done in the past, rather than being futuristic. Get on board with cooperatives such as AVEC and work together to develop an energy infrastructure that would not only benefit the mine, but villages up and down the Kuskokwim, as well, and not contribute to global warming. Be forward-thinking. Develop and patent new mining technologies that lessen environmental impact and safeguard against "accidents" and retaining wall failures for centuries, not just sixty-five years. Develop mining techniques that don't require the release of toxins into the air and water.

CLIM 5

MIT 30

Furthermore, climate change has brought us warmer winters and VERY LITTLE SNOW. This means the water level of the Kuskokwim is dropping, and current supply and fuel hauling plans are questionable.

CLIM 5

I also wonder how Donlin's demands for natural gas would affect the gas supply to residents of Anchorage and surrounding areas.

GAS 6

In conclusion, I recommend Alternative #1: No action.
Thank you for your consideration of my concerns.
Sincerely,
Sharon M. Neth

Smith, Neal

From: Craig, Bill
Sent: Friday, April 22, 2016 1:13 PM
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: Comment letter on Donlin Draft EIS Supporting Alternative 2
Attachments: image001.png

Follow Up Flag: Follow up
Flag Status: Flagged

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, April 22, 2016 12:44 PM
To: Craig, Bill
Subject: FW: Comment letter on Donlin Draft EIS Supporting Alternative 2

-----Original Message-----
From: Rick Van Nieuwenhuyse [mailto:rickvann@arcticairships.com]
Sent: Friday, April 22, 2016 11:44 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Comment letter on Donlin Draft EIS Supporting Alternative 2

To whom it may concern;

I am writing this letter in support of Alternative 2 to allow the Donlin Gold project to be built and operated thereby providing several generations of job opportunities in the Kuskokwim Region. The project is located on lands specifically selected by two Alaska Native Corporations - Calista Native Corporation and The Kuskokwim Corporation under ANSCA for mineral development so that these corporations could provide long-term wealth creation opportunities for their shareholders. The plan put forward by Donlin Gold is a solid, well thought out plan that address all major environmental and social concerns, and provides appropriate mitigation for impacts to wetlands. Donlin Gold has conducted many years of community outreach and truly understands the importance of subsistence to the residents of the region. Donlin Gold understands that the Kukskokwim River is the life-line of the region. They have studied the river in detail, including all of the other uses along the river. Their plans recognize the importance of the river for transportation, subsistence and recreation. The plan specifically accommodates subsistence concerns. The mine when built will bring long-awaited for jobs and prosperity to one of the poorest regions of the United States of America. To not allow this project to move forward would be a crime of epic proportions and would cause undue harm to the regions residence and Alaska native corporation shareholders for year to come.

SER 1

Respectfully,

Rick Van Nieuwenhuyse

Rick Van Nieuwenhuyse

Chairman

Cell 778-386-6227

601 W 5th Avenue, Suite 900| Anchorage, AK 99501 | info@arcticairships.com <mailto:info@arcticairships.com>

From: Noble, Steven
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Thursday, April 28, 2016 10:59:50 AM

SER 4 I am fully in support of this project. Alaska needs the private investment and to add some diversity to the economy. I believe they have good solutions to obtain the energy required to run the mine and to get the material to tidewater. When the anti mine folks get to the point where one of their biggest concerns is that the mine will be such an appealing place to work that people will move away from their villages as a result of the increased income and opportunities, there is not much left to say. She we really stop this mine so people can continue to have fewer opportunities??? This is just fear based opposition.

Please approve the EIS and help us make Alaska a better place to live and work.

Steve

Steve Noble
4825 Shoshoni Ave
Anchorage Alaska

Smith, Neal

From: Scott Vierra <scottv@northstarak.com>
Sent: Monday, April 25, 2016 2:10 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Attachments: Donlin Support DEIS 4-25-16.dotx

Please see attached letter in support of the Donlin Gold EIS.

Thank you,

Kind Regards,

Scott Vierra

NSES / NSTS
Off 907-263-0120
Cell 907-570-2669
scottv@northstarak.com
"We can change to survive crisis or we can adopt a culture of relentless change"
Sergio Marchionne

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OF ANDERSON TERMINAL

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U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

April 25, 2016

Subject: Comments in support of the DEIS for the responsible development of the Donlin Creek Gold Mine.

Review Team,

North Star Terminal & Stevedore Co LLC and North Star Equipment Services has operated in Alaska since 1950. Our livelihood in great part depends on responsible resource development. We have been active in developing solutions in support of the marine cargo handling needs and construction of the infrastructure for the Donlin Gold Mine Project for over ten years. We have seen firsthand the careful attention being paid to environmentally responsible development solutions for the project. This project could generate many high paying jobs for our company and needs your support.

Considerations for your support include:

- Donlin Gold has conducted extensive studies to develop an environmentally and socially responsible gold mine project.
- The natural gas pipeline proposal is a result of conversations with the region about reducing the amount of diesel barges on the Kuskokwim River. The use of natural gas for power generation, instead of diesel, will also reduce air emissions.
- Donlin Gold will be the first large mine in Alaska to use a synthetic liner underneath its entire tailings impoundment. Additionally, dry closure of the tailings storage facility at the end of the mine's life is a "best practice" Donlin Gold is proposing to ensure an environmentally responsible mining project.
- The tailings dam will be constructed of engineered rock fill and use a downstream construction method that is the most stable of all tailings dam types, designed for water storage and to withstand earthquakes.
- Donlin Gold will employ state of the art mercury emissions controls. To ensure the mercury emissions are well below air quality standards.
- Donlin Gold will construct an active water treatment plant to ensure that water that is discharged from the site is treated to meet water quality standards.

Job Opportunities and Economic Stimulant

SER 18

- Improved transportation and communications infrastructure to support the mine, including port and pipeline facilities, can provide better services and lower cost of energy, goods and services to local residents.

- More than $480 million has been spent on exploration of the property, engineering and environmental studies, camp support, flight services, fuel and other supplies, with most of that expended in the last 10 years
- Donlin Gold will support organizations that offer job skill training for a prepared workforce.

SER 13

- 3,000 construction jobs for 4 years and between 600 and 1,200 jobs for the 27.5 estimated life of the mine, will have a significant and positive impact on the economy of the region and the state.
- In addition to direct employment and contracting opportunities associated with Donlin Gold, many indirect business opportunities are anticipated in areas such as logistics, transportation, training, education and health care.

SER 12

Transparent Operations

- Donlin Gold has a proven record of discussing the project's plans with the people of the region and listening to what they have to say about the region and the proposed project, including meetings and materials in the Yup'ik language.
- Donlin Gold is committed to developing a project consistent with the values of the Yup'ik and Athabascan cultures of the region.

We strongly support the development of the Donlin Gold Mine. It will mean jobs, revenue for the State of Alaska and production of gold for the world's economy to digest.

Respectfully Submitted,

Scott Vierra
Business Development
scottv@northstarak.com

From:	Craig, Bill
To:	Bellion, Tara; Evans, Jessica
Cc:	sheila.m.newman@usace.army.mil
Subject:	FW: [EXTERNAL] Extension Request of the commenting period for the Draft Environmental Impact Statement (DEIS) for the Donlin gold mine project
Date:	Tuesday, April 12, 2016 8:48:15 AM
Attachments:	2016-4-11_Donlin Gold Project request for extension to Army Corps.docx

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-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Tuesday, April 12, 2016 6:46 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Extension Request of the commenting period for the Draft Environmental Impact Statement (DEIS) for the Donlin gold mine project

-----Original Message-----
From: Elisabeth Dabney [mailto:dabney@northern.org]
Sent: Monday, April 11, 2016 10:59 AM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>
Cc: Julia Mickley <mickley@northern.org>
Subject: [EXTERNAL] Extension Request of the commenting period for the Draft Environmental Impact Statement (DEIS) for the Donlin gold mine project

April 11, 2016

Submitted via E-mail and post mail

U.S. Army Corps of Engineers Alaska District

Keith Gordon, Project Manager

CEPOA-RD-Gordan

PO Box 6898

JBER, AK 99506-0898

Dear Mr. Gordon,

On behalf of the Northern Alaska Environmental Center board of directors and 900+ members, I am requesting an extension of the commenting period for the Draft Environmental Impact Statement (DEIS) for the Donlin gold mine project. I make this request given the following information and thank you for your time in reviewing our concerns.

In-region support of extension.

The potentially impacted communities along the Kuskokwim River and watershed have contacted us and we support their concerns and request for an extension for the commenting period of the DEIS for the Donlin gold mine project. We believe the accessibility to the DEIS, education about the document, and how to prepare and submit comments are all significantly valid concerns. Further, requests for additional in-region hearings by in-region communities is a testament to the concerns residents have and demonstrates a desire to fully take part in the commenting process in an educated and substantive manner. Finally, some in-region communities have limited computer and Internet accessibility and are only now receiving their hardcopy versions of the DEIS and beginning the process of reviewing the document.

Iditarod National Historic Trail.

This year's Iditarod Trail Committee issued a new rule prohibiting mushers from making public statements deemed "injurious to" the race, including comments "disparaging to any of the sponsors." As not only a National Historic Trail and having national importance, we strongly believe that Alaska's elite mushing community should be given the opportunity to take part in the commenting process both publically and personally. According to this year's rule, racers must wait 45 days after the last musher crosses the finish line. The last musher crossed the finish line this year on March 19. Therefore, mushers would not be able to comment at minimum until May 4, 2016.

The length and depth of the Draft Environmental Impact Statement.

The Draft Environmental Impact Statement (DEIS) for the Donlin gold mine project is 5,000+ pages in length. It will require hundreds of hours to not only read, but prepare substantive comments addressing stakeholder concerns. Additionally, an extended timeframe would allow for public education on the document and dissemination of fact sheets and information to garner the most substantive and thorough comments from all interested and potentially impacted stakeholders.

Therefore, we are requesting an extension of at minimum an additional 6 months after the existing April 30, 2016 deadline to review and submit comments for the DEIS of the Donlin gold mine project. Again, thank you for your time in reviewing our concerns and considering our request.

Sincerely,

Elisabeth B. Dabney

--

Elisabeth Dabney

Executive Director
Northern Alaska Environmental Center
830 College Rd, Fairbanks AK 99701-1535 Main (907) 452-5021

Direct (907) 452-5094
www.northern.org

P Please consider the environment before printing this e-mail

April 11, 2016

Submitted via E-mail and post mail

U.S. Army Corps of Engineers Alaska District
Keith Gordon, Project Manager
CEPOA-RD-Gordan
PO Box 6898
JBER, AK 99506-0898

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Sincerely,

Elisabeth B. Dabney
Executive Director

Northern
Alaska Environmental
Center

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April 11, 2016

Submitted via E-mail and post mail

U.S. Army Corps of Engineers Alaska District
Keith Gordon, Project Manager
CEPOA-RD-Gordan
PO Box 6898
JBER, AK 99506-0898

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A 501 (C) (3) NOT-FOR-PROFIT ORGANIZATION
830 COLLEGE ROAD, FAIRBANKS, ALASKA 99701
(907) 452-5021 • www.northern.org

NEP 1

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Sincerely,

Elisabeth B. Dabney
Executive Director

Northern
Alaska Environmental
Center

830 College Rd.
Fairbanks, AK 99701-1535
(907)452-5021
www.northern.org

Address Service Requested

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US Army Corps of Engineers
Alaska District
Keith Gordon, project manager
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

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From:	Newman, Sheila M POA
To:	Brewer, Jason D POA
Subject:	Fw: [EXTERNAL] Technical memo :: Review of the Draft EIS for the Donlin Gold mine project
Date:	Wednesday, June 01, 2016 4:45:22 AM
Attachments:	2016-05-31_Technical Memo_Donlin DEIS review_Northern Center .pdf

Sent from my BlackBerry 10 smartphone.

From: Elisabeth Dabney <dabney@northern.org>
Sent: Tuesday, May 31, 2016 6:02 PM
To: Newman, Sheila M POA
Subject: [EXTERNAL] Technical memo :: Review of the Draft EIS for the Donlin Gold mine project

Dear Ms. Newman,

Please find attached for inclusion in the permanent record for the comment period for the Donlin Gold mine project Draft EIS, a technical review of the DEIS.

This review was commissioned by the Northern Alaska Environmental Center.

Sincerely,
Elisabeth Dabney

--
Elisabeth Dabney
Executive Director
Northern Alaska Environmental Center
830 College Rd, Fairbanks AK 99701-1535
Main (907) 452-5021
Direct (907) 452-5094
Blockedwww.northern.org

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TECHNICAL MEMORANDUM
REVIEW OF THE DRAFT SUPPLEMENT ENVIRONMENTAL IMPACT STATEMENT FOR THE DONLIN GOLD PROJECT

May 11, 2016
Minor Revisions, May 26, 2016

Prepared for: Northern Alaska Environmental Center

Prepared by: Tom Myers, PhD, Hydrologic Consultant, Reno NV

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1.0 INTRODUCTION

Donlin Gold, LLC (Donlin) has proposed to construct the Dolin Gold Project in the Kuskokwim watershed in southwest Alaska. The U.S. Army Corps of Engineers (Corps) is the lead agency for the preparation of the draft environmental impact statement (DEIS). The proposed project includes a large open pit mine with transportation facilities to a port at Bethel Alaska, and a natural gas pipeline from Cook Inlet.

This technical memorandum reviews the DEIS and supporting documents with an emphasis on hydrogeology at the mine sites. The emphasis is on the effects of mine dewatering, pit lake development, treatment of contact water (rainfall or snowmelt that has contacted lands disturbed by mining), and seepage from tailings and waste rock facilities reaching the streams. Dewatering effects include the effects on stream baseflow. This review does not include transportation facilities, port development, or the natural gas pipeline.

My background includes a PhD and MS in hydrology/hydrogeology from the University of Nevada, Reno and a BS in civil engineering from the University of Colorado. I have 35 years of employment experience in consulting, academics and government, with about 20 years specific to mining and energy development hydrogeology. My specialties include numerical modeling and contaminant transport. I have published 17 peer-reviewed journal articles with five articles since 2009 concerning groundwater modeling, contaminant transport, and aquifer water balance. My CV is attached to this review.

2.0 SUMMARY OF MAJOR IMPACTS OF THE PROPOSED PROJECT AND ERRORS WITH THE DEIS ANALYSIS

GRD 1

Development of the proposed mining project would affect the hydrogeology in the mine site area in the following ways.

Mine dewatering will substantially lower the groundwater table near the pit and in surrounding bedrock. Although errors in the conceptual flow model and numerical groundwater model cause the DEIS to under-predict the dewatering impacts, dewatering to keep the pit dry would intercept groundwater flowing toward a stream where it would be become baseflow. Dewatering will reduce streamflows by up to 10 and 30 % during summer and winter, respectively, according to the DEIS. Various uncertainties acknowledged in the DEIS could increase the flow loss from the creek.

HYD 7

Mine construction affects surface runoff in many ways, including the pit intercepting surface runoff in American Creek, thereby preventing it from reaching the stream and the tailings impoundment covering 70% of the Anaconda Creek drainage which prevents a large proportion

HYD 7

of that streams' flow from discharging to Crooked Creek. Ancillary mine facilities such as freshwater reservoirs divert or use surface water runoff which can affect both high and low streamflow rates. Together these effects could lower flows in the creek even more than just by dewatering, with some estimates being as high as 100 percent loss during winter baseflow periods.

WAQ 10

The mine would require approximately 17,438 gpm for processing which would be discharged to the tailings impoundment during operations. Water for the process plant comes from various places, including freshwater reservoirs, contact water reservoirs, and dewatering wells. Excess water would be discharged to Crooked Creek with treatment, so failures in the collection and treatment system would discharge contaminants to and degrade Crooked Creek. During operations, expected discharge from the water treatment plant is 1268 gpm with 786 gpm from mine dewatering and the remainder from underdrains and contact water reservoirs. All sources are subject to much uncertainty meaning that periodic high flows could overwhelm the treatment system. For example, if the bedrock has a significantly higher conductivity, the dewatering rates could be much higher because it would pull water from further away and allow recharge to enter the bedrock from the shallow aquifer faster. Heterogeneity in the bedrock including with the faults could cause periodic high dewatering amounts. The DEIS does not plan for the probability that the treatment facilities will be periodically exceeded by dewatering water or other contact water requiring treatment before discharge.

CLIM 8

The pit lake would recover during mine closure to a point where it would overflow its rim, if allowed, into Crooked Creek. The pit lake water quality would be very poor, according to pit lake modeling, due to waste rock seepage into the pit and acid generating rock around the pit and backfilled into the pit. Donlin would start pumping pit lake water when it reaches 33 feet below the rim to treat and discharge into Crooked Creek. At this point, most of the flow losses from Crooked Creek would cease. However, there are uncertainties not considered in the DEIS that could cause the pit lake to fill and overwhelm the pump and treat system. A spill could devastate Crooked Creek. Climate change could increase precipitation by up to 25% on average but there would also be more frequent very large events, which is not considered in the DEIS. This pump and treat system would be required forever so all possible combinations of weather will eventually occur.

GRD 1

The DEIS relies on the mine dewatering system and the pit lake to draw groundwater including seepage from the waste rock dump and prevent it contaminating downgradient groundwater or discharging to Crooked Creek. However, there is a significant probability that a perched aquifer will form in the shallow aquifer as dewatering lowers the groundwater table. This will short-circuit seepage from the waste rock dump to Crooked Creek. I describe the details in the next few paragraphs concerning the numerical groundwater model. Drawdown occurs under the

GRD 1

tailings impoundment but it will not draw groundwater to the pit because drawdown does not eliminate the ridge in the groundwater table between the tailings and the pit. Seepage escaping the underdrain will flow through the colluvium under Anaconda Creek and either discharge into Anaconda Creek or into the alluvium around and ultimately into Crooked Creek.

DAM 3

The DEIS does not consider the impacts of catastrophic failure, such as would occur with a tailings dam failure. The analysis should consider the probable maximum flood occurring in the watershed because the facility will be there forever. The DEIS should present hydraulic routing of a reasonable portion of the half million tons of tailings down Anaconda Creek and Crooked Creek to show the potential damages.

GRD 4

Most of the DEIS predictions are from a numerical groundwater model. Two aspects of the numerical groundwater model severely bias the predicted impacts of dewatering. The bias is that simulated dewatering does not spread far from the mine pit and affects stream flows much less than it probably will.

- The conceptualization of the bedrock away from the mine pit has very low conductivity, lower than measured in most pump tests and lower than would be expected by considering the scale effects of small-scale test and regional scale models. It is treated as undifferentiated bedrock, meaning treated as one single mass, with a conductivity an order of magnitude less than most of the bedrock simulated within the pit area. This low conductivity prevents the spread of drawdown from the pit into the bedrock, thereby limiting how far the effects can spread. The low conductivity is not justified by observed pump test values or by scale effects which would cause the conductivity to be higher than determined from small-scale pump tests. This prevents the simulated drawdown from affecting overlying streams and wetlands.
- The alluvium around Crooked Creek is simulated with a very high conductivity and very low storativity. Low conductivity bedrock and colluvium surrounds the alluvium. This effectively isolates the alluvium and Crooked Creek from impacts of dewatering. The low storage coefficient allows the alluvium to release very little water for a change in water levels in the alluvium while the very high conductivity limits the change in head. This explains why dewatering drawdown effectively hits a wall at the creek.

GRD 1

The numerical modeling also fails to consider that a perched aquifer could develop in the shallow aquifer. This is partly due to the large difference between bedrock and shallow aquifer conductivity. As simulated drawdown lowers the water table from the shallow groundwater into the bedrock, it is likely that an unsaturated zone would form between a saturated zone in the shallow aquifer and bedrock. Seepage from the waste rock facility would discharge to Crooked Creek rather than be drawn to the pit lake, as relied upon in the DEIS. Drawdown

GRD 1 would occur in the bedrock and pull contaminants toward the pit lake, but perched zones in the shallow aquifer would provide a saturated pathway for contaminants to reach Crooked Creek. The numerical model fails to simulate this because the model cannot simulate such as system. The only potential mitigation would be a liner beneath the waste rock with a leak capture system.

PAA 9 The option for the tailings facility that best prevents seepage from degrading Crooked Creek is dry stack tailing with both a liner and impervious cover to minimize potential seepage with time after closure. This is necessary because the tailings are outside of the pit capture zone and seepage would drain to the streams.

PAA 14 The TSF should have a 100-mil liner rather than a 60-mil liner to make leaks would be less likely. The TSF should have an impervious cover to prevent percolation through the tailings from mounding on the liner, which would increase head on the liner and the leak rates and potentially cause instability problems.

HYD 9 Donlin should consider removing the Snow Gulch Reservoir from the plan to avoid impacts to that tributary watershed.

PAA 27 They should also leave a buffer between the pit and the Crooked Creek alluvium to decrease the connection with the alluvium and decrease the amount of water potentially drawn from the creek.

3.0 DEIS ALTERNATIVES

The DEIS describes five alternatives, including no action (alternative 1), the proposed action (alternative 2,) (mine layout shown in Figure 1), two alternatives that alter the pipeline and transportation routes but leave the mine plan basically as proposed under alternative 2 (alternatives 3 and 4), and an alternative that would alter the mine plan to use dry stack tailings rather (alternative 5) than a slurry system. Dry stack tailings alternative 5 has two options. Option 1 would not be lined but there would be an underdrain to remove seepage. Option 2 would have a liner. There would be eight freshwater wells for domestic and sanitary uses, and up to 35 pit perimeter wells and 80 in-pit dewatering wells (DEIS, p 2-9).

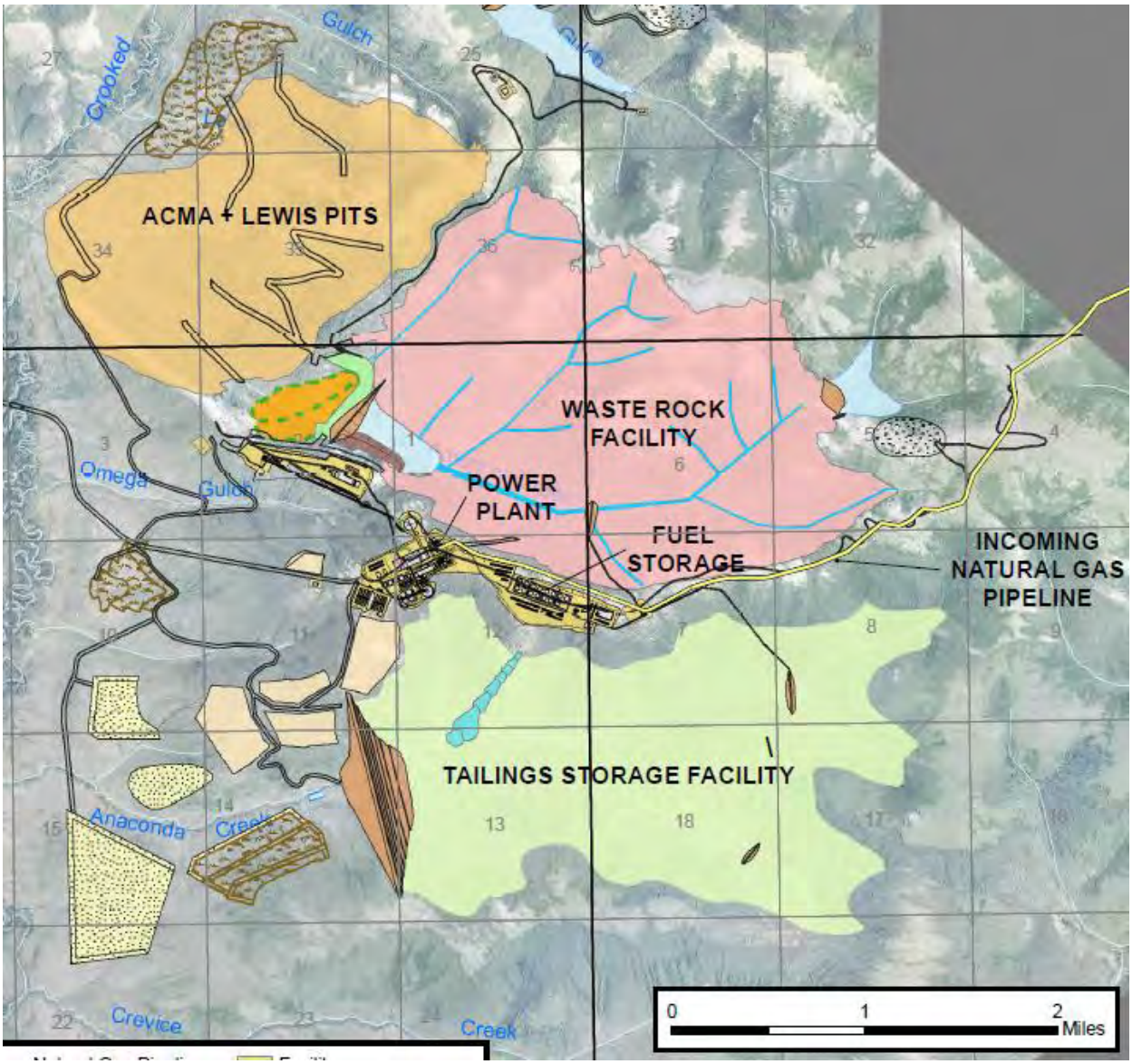


Figure 1: Alternative 2 general mine layout - DEIS Figure 2.3-1

3.1 Recommended Additional Alternative

PAA 27

A primary impact of this proposed mine is the impacts mine dewatering and pit lake formation could have on stream flows. As will be discussed in section 9.0, the properties of the bedrock separating the proposed pit from the alluvium under Crooked Creek have some control over the amount of surface water drawn from the stream into the groundwater. Several amendments should be made to Alternative 2 or should be added to an existing alternative and considered as a new alternative.

PAA 27
- The DEIS should include a setback alternative which requires the pit excavation not intersect the Crooked Creek alluvium. There should be a minimum setback from the creek of several hundred feet to protect stream flows. The exact distance could be determined based on additional understanding of the bedrock properties.

PAA 14
- The waste rock facility (WRF) that would be constructed over the American Creek should have a drain through it to allow streamflow to pass without being captured in an upper contact water pond. Below the WRF, there should be a channel created to allow it to pass the proposed pit

HYD 9
- Snow Gulch Reservoir should be removed if not really needed. See section 7.3 below.

3.2 Adaptive Management and Monitoring

The Corps calls for adaptive management activities pertaining to groundwater hydrology. Donlin should assess monitoring data especially with respect to drawdown to assess whether the groundwater monitoring regime is adequate. Donlin should assess whether drawdown has extended beyond the monitoring system.

- If drawdown at the most distant wells from the mine has become significant, new monitoring wells should be installed. This should be assessed at least every three years during operations.

GRD 12
The groundwater model would be reexamined after three years of pit dewatering to "minimize uncertainty about dewatering effects" (DEIS, p 3.6-44; DEIS, Table 5.7-1). This should include verification of the original model to assess the accuracy of the DEIS predictions.

- If they differ substantially, then new modeling and new NEPA analysis should be completed based on new predictions. A substantial difference is difficult to establish in advance, but would probably include the dewatering pumping rate being off by 100% (pumping twice the expected amount), having drawdown at a monitoring well twice that predicted, or having Crooked Creek lose flow along an unexpected rate or more than expected.
- New modeling should include new ideas of the conceptual flow model in the area. Two obvious considerations are the modeling of the bedrock as a porous media without considering fractures and the distribution of recharge throughout the area.

CLIM 10
The Corps indicates that climate change should be considered in future modeling (DEIS, p 3.6-45, DEIS Table 5.7-1 #3). Long-term climatic observations at the site should be compared with climate model predictions to assess the accuracy of the predictions with respect to Donlin.

CLIM 10

- Climate change effects on the project should be included with each model update and use the most current precipitation forecasts from global climate models. If the simulations predict substantially different potential future conditions, the Corps should complete supplementary NEPA analysis to disclose to the public the potential changes and to allow the public to provide additional comment.

4.0 MINE DEWATERING

Mine dewatering is the process of removing groundwater for the purpose of lowering the water table, or causing drawdown, to keep the mine pit dry. At Donlin, the company would use pit perimeter wells, in-pit wells, and horizontal drains in the pit wall. The water table would be drawn down near the Donlin pit as much as 1400 feet.

The lateral extent that drawdown expands to depends on recharge because recharge replaces groundwater as it is removed. Dewatering removes water out to the extent of an influence zone where the dewatering pumpage equals the sum of recharge that is captured and streamflow induced to recharge. Drawdown will expand until it has captured an amount of recharge and streamflow equal to the pumping rate needed to lower the water table at the mine. At the point where dewatering pumpage equals recharge, the groundwater pumping will approach steady state. Dewatering affects larger areas in dry regions because the recharge is low and smaller areas in wet regions because of the much higher recharge.

GRD 17

The bedrock hydrogeology controls the dewatering rate and affects how rapidly the drawdown expands. This effectively means conductivity (K), the ease with which groundwater flows through a porous media. All else being equal, more water will be pulled more quickly from further away with a high K value. This means the drawdown cone would approach its maximum extent more quickly with a high K.

4.1 Recharge

Groundwater recharge equals 5.5 in/y or 28 percent of average annual precipitation (DEIS, p 3.6-11). The DEIS does not provide a reference for this estimate, but the numerical model report (BGC 2014c) references BGC (2011b) as the source of the recharge estimate. That document mentions recharge only in an appendix which is a memorandum regarding “Potable Water Supply Assessment”; it states: “[a]verage annual recharge in the mine area was assumed to be 139 mm/y, based on the feasibility calibration of the numerical groundwater flow model (BGC 2007c)”. The reference section does not have a BGC 2007c, but BGC 2007g is “Numerical Hydrogeologic Model Results ad Pit Dewatering Design, Final Report”.

Recharge is usually estimated in a conceptual model report, but the most recent conceptual model report for Donlin, BGC (2014g), does not derive recharge. The amount used for this project, 5.5 in/y, is not unreasonable, based on my experience, although it is higher as a proportion of annual precipitation than most areas. Because snowmelt is a slow process the estimate is not unreasonable.

- It is important for the DEIS to have an accurate description of recharge, one of the most important hydrogeologic parameters, and how it was determined.

GRD 17 Recharge equals groundwater discharge from a basin which is at steady state (Myers 2016, Cherkauer 2004). Usually, groundwater discharge is stream baseflow. For the Crooked Creek watershed, recharge would equal baseflow at the mouth of the basin expressed as a depth, in inches, over the watershed. It could be estimated for smaller tributary basins if such detail is desirable but the accuracy may decrease if groundwater tributary areas do not exactly match topographic boundaries. In the Crooked Creek watershed, there could be two forms of baseflow because discharge from alluvial/colluvial aquifers should differ from discharge from bedrock aquifers. Shallow aquifers could effectively drain more quickly than the bedrock aquifers which should provide the late-winter baseflow. If the actual amount of recharge reaching bedrock is small, the drawdown in bedrock should expand more than it appears to and have a much larger effect on winter than on late summer flows (DEIS, Figure 3.6-8).

Recharge affects the DEIS predictions by its effects on groundwater model simulations, as reviewed below in section 9.3. In general, higher recharge means higher discharge and calibrating a model using higher groundwater flux rates would lead to higher estimated K values. Together, high recharge and high K could lead to higher dewatering estimates.

GRD 1 The modeled bedrock K is very low and that of the shallow aquifer, either colluvium or alluvium is much higher, as I describe below, so some of the recharge probably moves through the surficial aquifer to the nearest stream under natural conditions. Depending on the connection between the shallow and bedrock aquifer, dewatering of the bedrock might not pull all of the groundwater from the shallow aquifer into the bedrock which means that the shallow aquifer might remain saturated and continue discharging to the streams. While this might limit the effect of dewatering it also would affect the transport of contaminants from the TSF and WRF to the streams. Isotope data indicates that the age of groundwater varies from 21 to 56 years and that deeper water is older which generally follows the groundwater recharge path.

GRD 1 The DEIS notes that prediction of the impacts due to dewatering are very uncertain. "Sensitivity analysis simulations (see discussion below in this section) suggest that prediction of the amount of streamflow depletion is difficult." (DEIS, p 3.6-25) This refers to sensitivity of

GRD 1 the model predictions to both recharge and bedrock properties. I review model sensitivity in section 9.7.

4.2 Bedrock Hydrogeology

Most pit excavation will be in bedrock, so bedrock will control groundwater flow to the pit and, through connections with streams, control how dewatering affects groundwater baseflow. The DEIS (Table 3.6-2) reports bedrock K varies over about four orders of magnitude at each depth level for three different levels, upper (<330 ft), middle (330 – 660 feet depth), and lower (>660

GRD 2 ft depth). The K ranges are 0.006-14, 0.0009-0.9, and 0.0003-0.2 ft/d, respectively.

The gap analysis for hydrogeologic data acknowledges that scale could affect the hydrogeologic properties in the modeling (BGC 2013b). In general, the K of a formation increases with the scale of the volume being considered. This generally means that a single-well pump test or slug test yields a lower K estimate than a several day pump test with monitoring wells, with lab tests and groundwater modeling K estimates also considered on a similar scale relationship. The gap analysis suggests that BGC complete larger scale pump tests. As noted below in section 9.0, the numerical model did not account for scale effects.

The conceptual model report identifies up to 18 faults crossing the open pit zone (BGC 2014g). Little is known about the faults from a hydrogeologic perspective and they are not even mapped outside of the pit area. The bedrock hydrogeology treats the bedrock as a porous media meaning that the faults are not considered individually, either as flow barriers or conduits. Drawing 2 (BGC 2014g) shows mapped thrust faults mostly crossing the pit in a general east-west direction, but the mapping does not extend much beyond the pit. There is no indication of whether the fault layout in the pit is representative of faults beyond the pit. BGC (2014g, p 19) suggests that there is no indication of a trend of K with respect to the proximity to faults, but Drawing 26 does not show sufficient tests in the area with faults to

GRD 3 support this claim. Thrust faults can have high permeability damage zones. Therefore, if faults intersected by the pit have long-scale high permeability damage zones, dewatering effects could extend for a long distance beyond the pit and the predicted drawdown cone.

- The DEIS does not adequately disclose the properties of the faults that intersect the pit. The DEIS also does not propose monitoring or adaptive management for dealing with a fault system that extends drawdown far from the pit or causes much higher dewatering than expected. Model sensitivity analysis without actually simulating the faults is insufficient planning for the faults.

GRD 3

- If there is sufficient data, the DEIS should provide a plot of K versus distance from a faults to estimate whether there is a trend. There should also be more pump testing completed in the pit area among the faults to collect sufficient data for analysis.

5.0 PIT LAKE FORMATION

After mining ceases, mine dewatering would stop and groundwater would begin to flow into the mine. The open pit would fill in 50 to 55 years with groundwater inflow, surface runoff, and water from the TSF (DEIS, p 2-40), although other reports have estimated other times up to 60 years (Lorax 2012). TSF water would be pumped to the pit lake whenever it does not meet standards (DEIS, p 2-40); at the beginning of closure, about 30,000 acre-feet (af) of tailings water would be pumped into the pit so simulations of pit lake development start with an initial volume. The pit initially would be a hydrologic sink for regional groundwater but would eventually fill to a point where it would discharge into Crooked Creek, except that when the water level is 33 feet below the crest, the mine would begin pumping and discharging the water. This would be required in perpetuity to prevent the pit lake from overtopping its banks (Id.). Treatment sludge would be dumped into the pit lake (Id.).

GRD 6

Inflow to the pit lake is groundwater and runoff from various sources. The pit lake essentially would exist forever so the planning must account for all potential inflows and climate change. BGC (2015l) considers some of the extreme conditions the pit would experience in future, specifically "the ability of the pit lake to handle storm events during the post-closure period" (BGC 2015l, p 1). The average discharge to Crooked Creek, if not treated would average 2812 gallons per minute (gpm) and the treatment plant would be able to treat at rates up to 7486 gpm (Id.) with an operating period of six months per year. More inflow would require a longer annual operating period. To provide freeboard (not designed for any specific return interval), treatment of the pit lake would begin when the pit lake is 33 feet below its crest (Id.). There would be a spillway in the southwest corner of the pit near Crooked Creek designed to accommodate the probable maximum flood of 11,301 cfs (with flood routing through the pit lake, the actual discharge rate would be less). At water level elevation 328 (33 feet below the crest), the pit lake volume would be 376,170 af and at the crest of 359 feet above mean sea level (amsl) the volume would be 405,360 af (BGC 2015l, p 2). The watershed area above the outlet would be 5122 acres (Id.), although much of that would be the pit lake, and the estimated average annual runoff is 4700 af/y (Id.). At this rate it would require six years to fill the pit over the upper 33 feet, or 29,190 af (Id.). Presumably the difference would be made up by groundwater inflow.

5.1 Pit Lake Water Quality

The DEIS discloses that the pit lake "water quality … will not meet applicable water quality criteria without treatment" (DEIS, p 3.6-35). The DEIS and supporting documents complete substantial modeling of the pit lake water quality and show that it would be very poor. Details of that modeling are not reviewed here because there are huge uncertainties that lead to the precise predictions being inaccurate (Maest et al. 2005). The models are accurate enough to provide general trends of pit lake quality. DEIS Table 3.7-36 shows that the water quality of the surface layers of the pit lake would exceed standards for aluminum, antimony, arsenic, cadmium, copper, iron, lead, manganese, molybdenum, selenium, and mercury with pH being lower than standard (DEIS, p 3.7-129). Seepage inflows to the pit lake from PAG waste rock and from the tailings impoundment are extremely poor with sulfate inflow being as high as 180,000 mg/l (compare to a standard of 250 mg/l) (DEIS, Table 3.7-37). The modeling does depend on the pit lake remaining stratified because the pit lake quality at depth is extremely poor.

GRD 6

The predictions are accurate enough to plan around two aspects of the pit lake. Groundwater outflow from the pit lake would contaminate surrounding groundwater and discharges from the pit lake to surface water would contaminate Crooked Creek, in violation of standards and discharge permits.

5.2 Pit Lake Discharge Control

The plan is to use lake level management, basically pumping, to maintain the lake level at 10 to 30 feet below the level of Crooked Creek (Id.). The pumped water would be treated and discharged to Crooked Creek (Id.). The long-term treatment of water pumped from the pit lake, to prevent it overflowing, would be at 2911 gpm (BGC 2014b, Figure 5-4). This is pumping and treating in perpetuity. After closure and complete pit lake development[1], the groundwater inflow rate will probably not vary as much as it could during dewatering. However, the higher bedrock K scenario leads to substantially more groundwater inflow into the long term. The long-term pump and treat requirement could be much higher than specified here as a long-term average due to higher groundwater inflows. Runoff and precipitation entering the pit lake would cause short term variability.

WAQ 10

BGC estimates the volume of the probable maximum precipitation over the watershed is 5030 af in 24 hours, which is about one sixth of the freeboard (Id.). Treatment capacity in six months

[1] Many pit lakes only approach full development if evaporation exceeds inflow, mostly of groundwater. These terminal pit lakes usually have only evaporation as an outflow. The Donlin pit lake will reach full conditions because it will fill to its rim if pumping did not establish an outflow. The pit lake as a whole would therefore not be subject to significant evapoconcentration as a pit lake with evaporation as its exclusive outflow.

is 5920 af (Id.). BGC's conclusion is that the pit lake would have no difficulty holding large volumes of runoff for treatment in the future.

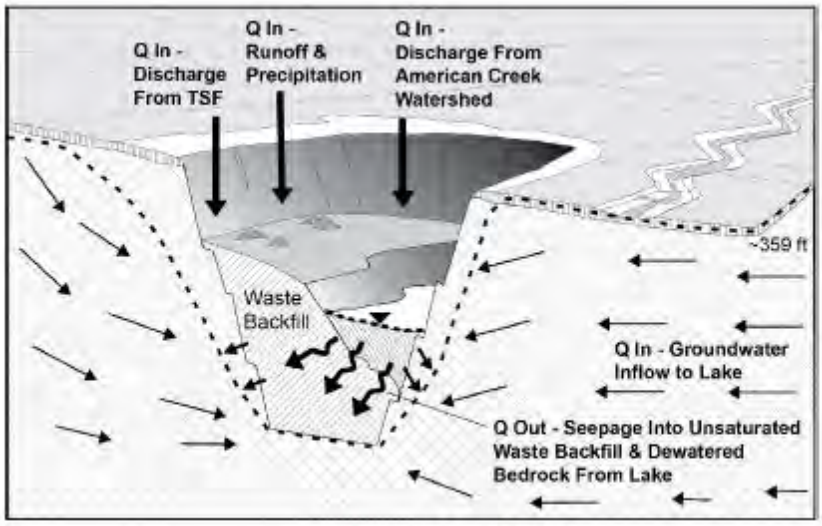
WAQ 10

This is essentially a treatment in perpetuity plan. The calibrated groundwater model predicted the pit lake would fill in 52 years while two sensitivity analyses predicted 26 and 39 years for a wet climate and more conductive bedrock scenario, respectively. The wet climate scenario had increased recharge and streamflow rates by a factor of two and the more conductive bedrock scenario has increased bedrock K by a factor of five. Both scenarios filled the lake faster because they provided more water more quickly than the calibrated model scenario. After the pit is full, groundwater presumably continues to flow toward it from all directions (Id.).

5.3 Groundwater Flows

GRD 6

The DEIS discloses that pit lake water would discharge to surrounding groundwater both initially and in the long term (DEIS, p 3.6-35), as described in Figure 2. This is partly due to the placement of unsaturated backfill in the pit and to the fact that as the pit lake fills water from the pit lake will resaturate the surrounding bedrock. This differs from many pit lake systems which fill primarily by groundwater inflow, but at Donlin the bedrock K is low and does not recover immediately. Figure 3 shows simulated groundwater inflow and outflow at Donlin.



GRD 6

Figure 2: Snapshot of a portion of DEIS Figure 3.6-9 showing the model of pit lake inflow and outflow.

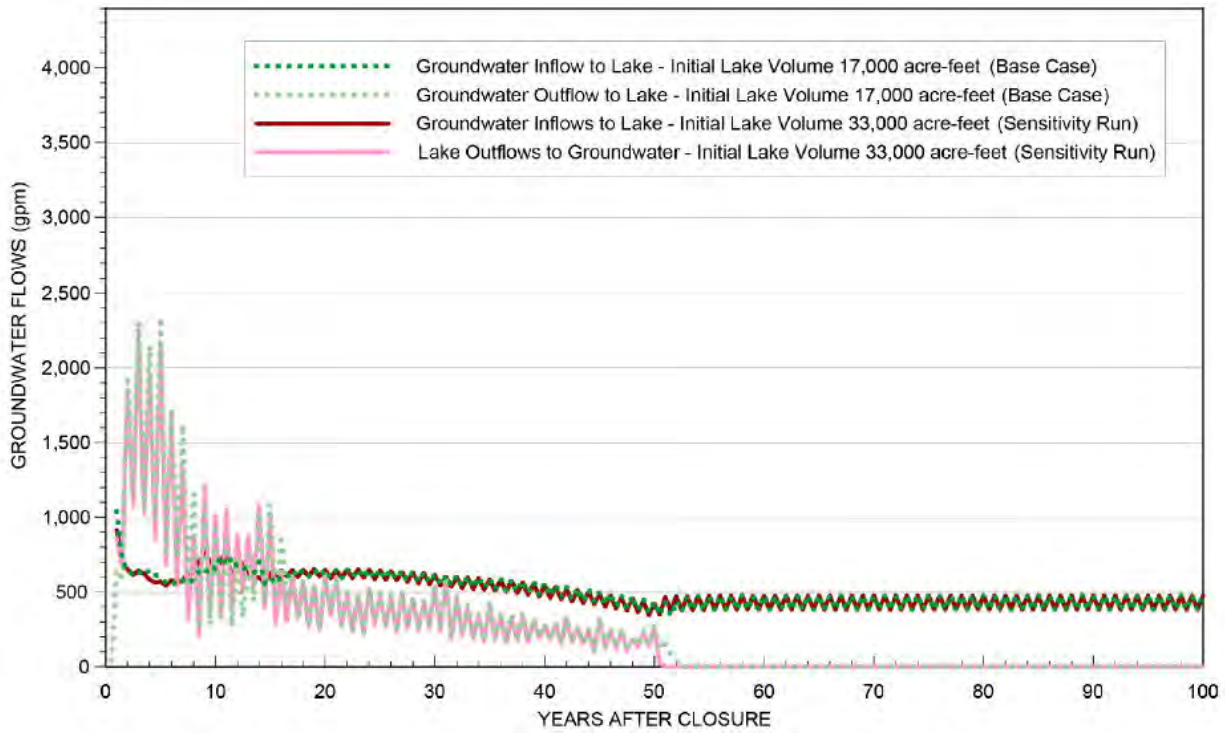


Figure 3: Snapshot of a portion of DEIS Figure 3.6-10 showing simulated groundwater inflow to and outflow from the pit lake as the pit fills with water.

GRD 6

Partially backfilling the pit causes an interesting system of groundwater inflow/outflow at the pit lake. The backfill would be unsaturated at the beginning of pit lake formation and therefore has to be wetted as part of the pit lake formation by groundwater outflow from the pit lake to the backfill (DEIS, p 3.6-35) (Figure 2). BGC (2014c) describes the groundwater/pit lake relationship:

> Results of the post-closure simulation show that the pit lake is predicted to fill to its managed maximum stage (i.e., 331 ft amsl or 101 m amsl) approximately 60 years after closure (Drawing 48). During the first 8 years after closure, pit lake water is predicted to seep out of the lake into the dewatered bedrock and into the pore space of the waste rock placed as backfill within the pit (see Figure 4-4). Predicted lake outflow during this period declines from approximately 2,860 gpm to 1,100 gpm (15,600 m3/d to 6,000 m3/d; Drawing 49). From Year 8 to 60 after closure, lake seepage or outflow is simulated to decline from 1,100 gpm to 0 gpm (6,000 m3/d to 0 m3/d) as groundwater elevations rise toward stable levels. Once the pit lake fills and groundwater elevations stabilize around the pit lake, seepage from the lake is predicted to cease. Thereafter, groundwater fluctuations are in response to seasonal changes and seasonal management of the lake stage. The managed lake stage results in a slight hydraulic gradient oriented toward the open pit, making the pit a groundwater sink. (BGC 2014c, p 45)

It is difficult to visualize how so much water leaves the pit lake and enters the surrounding groundwater (Figure 3), considering how the water table is hundreds of feet higher than the pit lake level (Figure 4). However, the modeling shows a significant outflow that is controlled partly by seasonal pit lake level changes. The net groundwater flow to the pit lake is very small (Figure 3) and the fact that discharge from the pit lake continues until the pit lake is almost full suggests pathways exist for flow to leave the pit lake and not return. This could occur at various depths depending on the details of the potentiometric surface.

GRD 6

The groundwater contours at the end of mining suggest one possible pathway for contaminants to leave the pit and possibly enter surface water (Figure 4). Southwest of the pit the groundwater contours are much lower than northeast of the pit due to the general slope of groundwater in the area. If the pit lake fills faster than the surrounding groundwater table, as indicated by Figures 2 and 3, it is possible that the pit lake creates pressure in deeper bedrock that causes an upward gradient to the creek away from the pit. Pit lake water could flow through deeper bedrock layers then upward toward the surface due to higher pressure conditions in deep bedrock.

- The DEIS or BGC (2014c) should present a detailed analysis of the potentiometric surface at depth near the pit lake to estimate where groundwater discharging from the pit lake would go. (The particle tracking diagrams in BGC (2014c) are not useful because they are apparently for single model layers whereas actual contaminants would change layers.)
- The DEIS or BCG (2014c) should present potentiometric surface maps for each model layer to assess whether outflow is possible from some depths in the pit lake.

GRD 6

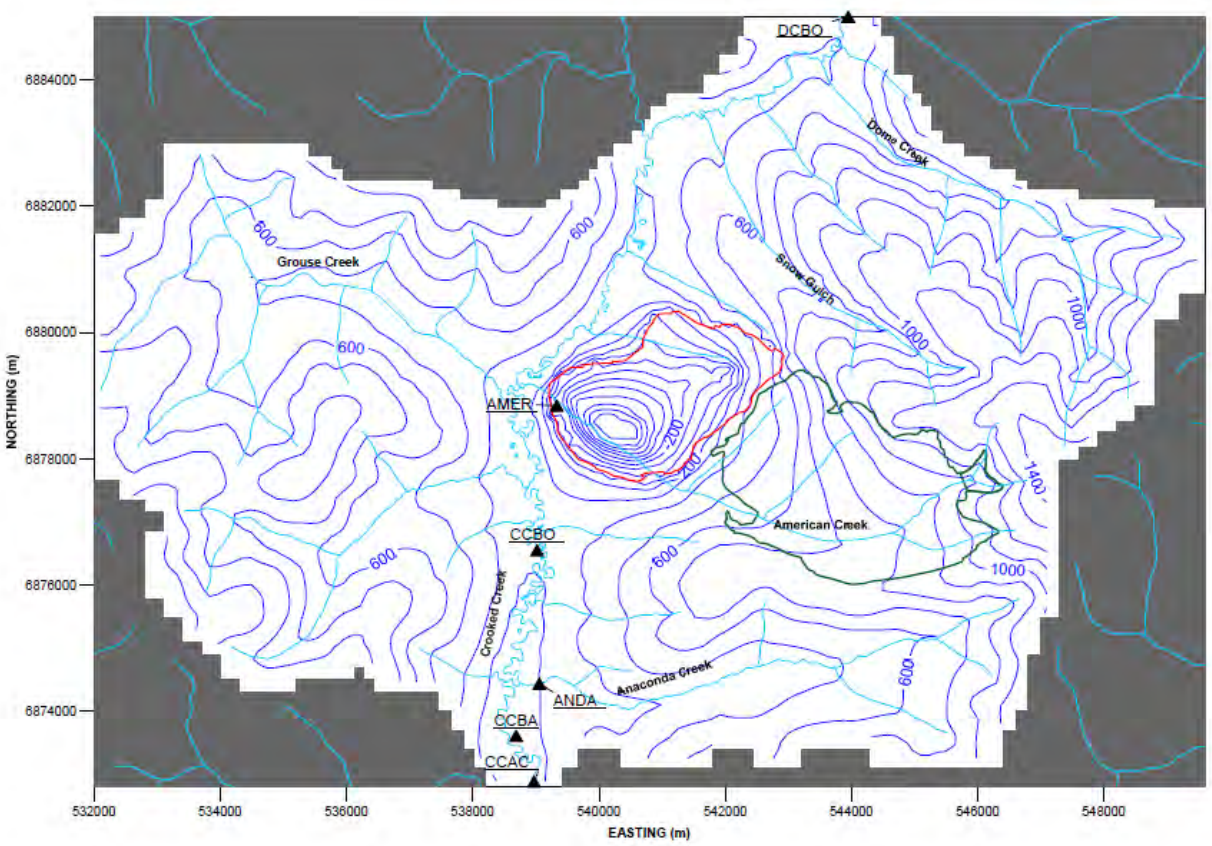


Figure 4: Snapshot of Drawing 39 (BGC 2014c) showing simulated groundwater contours at the end of mining.

5.4 Climate Change Impact on Pit Lake Planning

CLIM 8

The DEIS must plan for significant climate change into the future, as it appears to acknowledge (DEIS, p 3.26-2), due to the necessity of pumping and treating the pit lake water in perpetuity. Increased precipitation in this part of the Alaska must be considered because it could vastly increase the inflows to the pit. If they occur over a short-term period, it would seem likely that the potential for spills from the pit would increase.

However, the modeling does not include climate change. The design water balance is based on a deterministic data set of precipitation running from 1940 to 2010. Climate change will increase precipitation up to 25% over the next 80 years (DEIS, section 3.23), but as discussed above, the increase would be highly variable. It is critical to consider the potential inflow to the pit lake with not just an increased average flow but with a much increased variance to account for large inflow events occurring during a wet period.

CLIM 8

- Pit lake water balance simulations should include stochastically simulated precipitation events to account for the increased frequency of what are currently low frequency events.
- Pit lake simulations with climate change should also include simulations with higher groundwater inflow that could result from higher bedrock K or high-K faults and fractures.

Combined with the fact that groundwater inflow could be much higher (see section 9.0), the freeboard analyzed in BGC (2015l) is not as sufficient as suggested.

- The DEIS should disclose whether the closure treatment plant would be able to operate up to 12 months a year in all kinds of weather.
- The DEIS should plan for treatment on future conditions with climate change rather than being just based on the current climate statistics.

6.0 IMPACTS ON STREAM FLOWS

6.1 Pit Construction

Pit construction affects streamflow in two ways. First, dewatering to keep the pit dry would intercept groundwater flowing toward a stream where it would be become baseflow. Dewatering will reduce streamflows by up to 10 and 30 % during summer and winter, respectively (BGC 2014c, Drawing 44). Figure 5 shows reductions in groundwater discharges to various Crooked Creek tributaries caused by dewatering (BGC 2014c, p 40). The impact of dewatering decreases with distance from the stream.

HYD 7

Second, mine construction affects surface runoff in many ways, many having to do with mine water management described in Section 7.0. The pit would intercept surface runoff in American Creek, thereby preventing it from reaching the stream (BGC 2015h). The tailings impoundment would cover about 70% of the Anaconda Creek drainage (DEIS, p 3.5-77) which removes a large proportion of that streams' flow from discharging to Crooked Creek; much of that flow is diverted to mine water management as tailings water or as captured by the tailings underdrain. Ancillary mine facilities also divert or use surface water runoff which can affect both high and low streamflow rates.

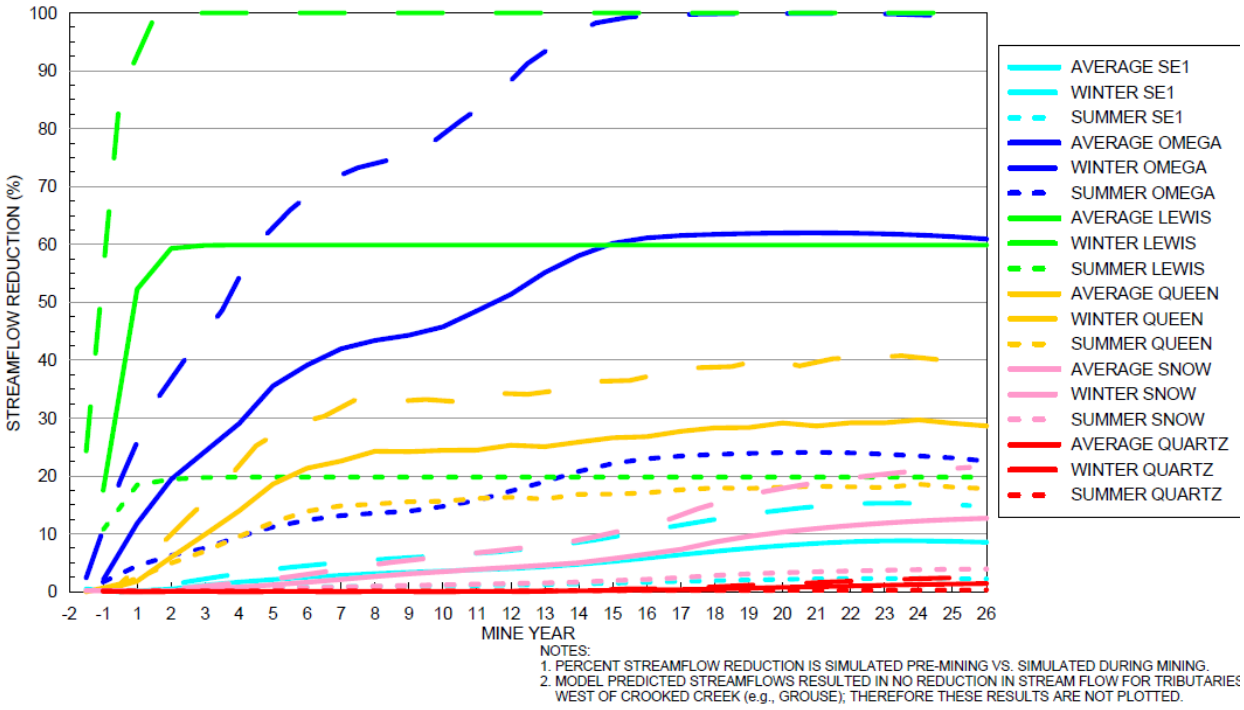


Figure 5: Snapshot of Drawing 45 (BGC 2014c) showing reductions in flow from various Crooked Creek tributaries due to mine dewatering.

HYD 7

Together, dewatering and mine water management cause very substantial changes in streamflows in Crooked Creek and its tributaries. The DEIS separates the discussion of impacts which can be very confusing. For example, the description of flow losses to Anaconda Creek (DEIS, p 3.5-76 - -77) does not address a loss to mine dewatering, but the summary of loss in DEIS Table 3.5-26 does include dewatering (as shown by the variation in losses for the high-K scenario which is a mine dewatering scenario in the groundwater model (BGC 2014c)). The DEIS apparently considers all impacts to Crooked Creek including cumulative impacts from the tributaries, which includes dewatering impacts (Figure 5). The failure to assign flow losses to specific activities increases the difficulty of considering mitigation.

- The DEIS should tabulate all of the predicted streamflow losses in the same table so that their magnitude can be compared

There is a lot of uncertainty around the predicted losses to Crooked Creek and other features.

MIT 31

Effects on Crooked Creek flow could vary widely depending on season, precipitation conditions, bedrock hydraulic K, phase of mine operations, and distance from the mine. For example, Crooked Creek flow below the mine site near Crevice Creek would be

MIT 31

reduced by 20 percent in winter under average precipitation and K conditions, and by 26 percent in dry conditions, during late operations (year 20 onward). The greatest flow reduction experienced near the mouth of Crooked Creek (at Bell Creek about 8 miles downstream of the mine) is projected to be 4 to 10 percent under the above conditions. In the event that K is higher than expected, 45 to 100 percent of Crooked Creek flow could be reduced in winter near the mine site under average to dry precipitation conditions, with much of the flow restored below Crevice Creek (16 to 40 percent reductions) due to tributary inflows. (DEIS, p 3.5-2)

Year 20 may be the year of maximum impact on Crooked Creek stream flows because the pit footprint would be at its maximum extent which would make for the greatest capture of runoff by the pit and because pit dewatering captures its maximum rate in year 20 (DEIS, p 3.5-82). Flow losses from Crooked Creek are as high as 100% (during year 20 at the confluence with American Creek for the high bedrock K, low precipitation scenario, DEIS Table 3.5-26), but are substantial all along the reach to Bell Creek.

- The DEIS should implement as mitigation for these flow losses a plan to discharge treated waste water in locations that would mitigate these losses.

6.2 Pit Lake Formation

Pit lake formation creates a permanent loss of water from Crooked Creek in two ways. First, the groundwater flow that pre-mine had been toward the creek will be reversed with the permanent drawdown to the pit reversing the gradient at the creek so that water flows into the groundwater. The Corps relies on this reversal of gradient to prevent highly contaminated pit lake water from reaching groundwater or downstream surface water. The streamflow loss to the pit lake would apply along the creek in the pit lake capture zone (the continuing drawdown cone near the pit lake). The second is that the pit would capture surface flows from American Creek, thereby preventing both high and low flows from reaching Crooked Creek.

- The overall effect of the pit depends on the timing of groundwater diversion from the creek, the hydrograph of captured water from American Creek, and the discharge of pit lake water into Crooked Creek.

Effects on surface drainages (Figure 3-5.1) appear mostly constrained to three drainages. If there are facilities that slope over drainage divides, the Corps should make efforts to avoid doing so.

7.0 MINE WATER MANAGEMENT

Mine water management is the plan for how the mine would handle water requirements throughout its operation. It is both a plan for obtaining necessary production water and for discarding water that hinders production. For example, approximately 17,438 gpm would be used for processing and discharged to the tailings impoundment during operations (DEIS, 3.5-21). Water for the process plant comes from various places, including freshwater reservoirs, contact water reservoirs, and dewatering wells. Stormwater management and mine dewatering are the two activities for which the mine attempts to discard excess water. Efficient management of the two can decrease the impacts the mine has on the environment, but the Donlin water management could be improved as described here.

7.1 Discharge to Crooked Creek

Excess water would be discharged to Crooked Creek with treatment, so failures in the collection and treatment system would degrade Crooked Creek. During operations, expected discharge is
WAQ 10 1268 gpm with 786 gpm from mine dewatering (DEIS, Figure 3.5-21). The remainder is from underdrains and contact water reservoirs, with all estimates being highly uncertain. There is a lot of uncertainty in the dewatering estimates, but during operations, most of the dewatering water (547 + 694 = 1241 gpm), whether through perimeter or in-pit dewatering wells, would be treated and discharged (783 gpm) to Crooked Creek (BGC 2014b, Figure 4-2). However, as discussed below, the high K modeling scenario would result in dewatering as much as 3.3 times higher than the predicted scenario. With time, the mine would have to increase its treatment capacity to accommodate this much extra flow. However, the actual geology is highly heterogeneous so it is probable that actual dewatering rates would be variable and could periodically far exceed the 3.3 times, especially if there are high K faults combined with the high K bedrock. The high precipitation scenario which estimates treatment at 859 gpm (BGC 2014b, Figure 4-3) does not encompass the potential for higher treatment rates due to heterogeneous bedrock.

- The DEIS should better plan for treating higher flow rates of dewatering water (and contaminated water from other sources.
- The DEIS should better plan to use dewatering water in operations rather than capturing
HYD 9 freshwater flows. For example see section 7.3 regarding the need for Snow Gulch Reservoir.

7.2 Climate Change

CLIM 8

The Corps considered a climate change scenario for the mine site by using an estimate from a group at the University of Alaska Fairbanks, Scenarios Network for Alaska + Arctic Planning (SNAP). It was based on global climate models (GCMs). The SNAP data shows that precipitation during winter months "is projected to increase from current conditions over these decades" (DEIS, p 3.26-10), referring to the time from now to the end of the 21st century. By the 2060-2099 time frame, the SNAP data suggests that precipitation at the mine could increase by from 17 to 25 percent. DEIS Table 3.26-3 shows the increase by month for several future time periods. The table implies a systematic increase by month, but this does not disclose how those changes may occur. It is not likely that each storm system simply has increased precipitation. It is far more likely that a few large events will cause much of the increased precipitation. This could have significant impacts on aspects of the project affected by runoff, which would be much higher during these events. This perhaps could be most important with respect to treatment of runoff from various facilities.

- Treatment facilities must be designed to accommodate larger inflows that occur both as storm events and as long-term climate cycles.

7.3 Snow Gulch Reservoir

HYD 9

A reservoir would be constructed on Snow Gulch, north of the minesite, to provide a contingency source of water for the project (DEIS, p 2-27). "In years with average or below-average precipitation, the CWDs and pit dewatering system would not be able to meet process plant water requirements, in which case additional water would be obtained from the Snow Gulch reservoir" (Id.). However, the water balance modeling shows it provides only a small amount of water to the mine plan and that much more water would be discharged to Crooked Creek than obtained from Snow Gulch (BGC 2014b). During average conditions Snow Gulch would provide 136 gpm of water to the process plant (BGC 2014b, Figure 4-2) and BGC (2014b) Figure 4-1 shows the reservoir would hold about 3000 af most of the time. The process plant uses a large amount of water, with 17,484 gpm being discharged to the tailings; sources include contact water from the Lower and Upper Contact Water Dams (waste rock runoff and seepage), recycled water from the tailings, and dewatering water. Considering the treatment plant discharges 783 gpm to Crooked Creek, and that it is mostly dewatering water during operations, there does not seem to be a need for Snow Gulch water.

- The DEIS should provide better justification for constructing a reservoir in Snow Gulch. It should consider whether the water otherwise obtained from Snow Gulch could be obtained by dewatering at higher rates temporarily.

8.0 WATER QUALITY

WAQ 20

Donlin Mine could affect water quality in many ways although they can be summarized into three possibilities. First, meteoric waters could seep through waste facilities (waste rock or tailings) to reach groundwater or streams. Second, there would be discharge of waters collected from various sources to surface water after treatment. The sources include collected seepage from waste facilities, excess tailings water, contact water from contact water reservoirs, and excess dewatering water (DEIS, Figure 3.5-21). If the collection and treatment facilities work as planned, treated water should not degrade water quality. A third source is the long-term discharge of pit lake water to groundwater or surface water, as discussed above in section 7.1.

8.1 Seepage from Waste Facilities

WAQ 20

A significant issue is the potential for seepage from the WRF or TSF to reach streams thereby causing degradation. There will be over 3,000,000 kilotons of waste rock, which the DEIS claims would be about 91% NAG and the rest being PAG over varying time periods (DEIS, p ES-12). Most PAG-6 rock would be mined early and placed in isolated cells in the waste rock facility (WRF) (Id.). PAG-7 and some PAG-6 rock would be backfilled into the ACMA pit (Id.). In section 2.3, the DEIS identifies 2.99 billion tons waste rock, with 2.46 bil tons going into the WRF and the remainder backfilled into the ACMA pit (DEIS, p 2-7). Conventional tailings at 568 million tons will be held in a slurry tailings impoundment (DEIS, p 2-8).

GRD 1

DEIS Table 3.7-47 notes seepage from the WRF and TSF will exceed standards for various constituents. The Corps assumes that the seepage would either be captured by underdrains and treated or discharged to the pit lake (DEIS, Table 3.7-47, p 3.7-207). The modeling predicts that seepage from the waste rock dump would be diverted to the pit, both while dewatering and as a long-term pit lake. The DEIS relies on this mechanism to prevent stream degradation. The pit will likely be a sink for the bedrock aquifer, but there is much uncertainty regarding the shallow aquifer and whether it would drain towards the pit. The DEIS and supporting studies treat the shallow and bedrock groundwater system as being connected through the mining period, but there is no evidence supporting the assumption.

GRD 1

During pre-mining conditions, overall the aquifer would be unconfined with the pressure head in bedrock being similar to the water table in the shallow aquifer. As the groundwater simulation lowers the pressure below the top of the bedrock, it simulates the shallow aquifer becoming desaturated so that the bedrock aquifer becomes an unconfined aquifer. The reality may be that as pressure in the bedrock drops below the top of the bedrock, an unsaturated zone develops in the bedrock while the shallow aquifer remains saturated and functions as a

GRD 1

perched aquifer. The groundwater modeling code used to simulate dewatering, MODFLOW, is not capable of simulating the development of such an unsaturated zone, so the model results are not evidence against this idea.

Seepage from waste facilities would be into a rather thin surficial layer of alluvium, near the streams, or colluvium, over the mountains. The conceptual model report shows overburden thickness maps that indicate the colluvial thickness is rarely more than 30 feet in the American Creek drainage and mostly less than five feet in the Anaconda Creek drainage, except directly under the creek where it is more than six feet thick (BGC 2014g, Drawings 3 and 4). The groundwater model simulated the shallow aquifer as being 16 feet thick.

GRD 1

The shallow aquifer could have K substantially higher than the bedrock, at least in areas. As noted, the model cannot simulate the hydraulic disconnect that could occur during dewatering. Rather, the groundwater model simply draws groundwater from the surficial layer into the bedrock; the MODFLOW code can do nothing else because it simulates all layers as a saturated porous media with connections among all layers. It cannot simulate an unsaturated zone developing between the surficial layer and the bedrock in the upper part of the bedrock. Simulated drawdown in bedrock would lower the potentiometric surface below the bottom of the surficial aquifer after which MODFLOW simulations would simply desaturate the surficial aquifer.

GRD 1

Because the bedrock K is low, the surficial aquifer could remain saturated, and due to dewatering become perched at least in areas away from fractures. If hydraulic separation occurs and a perched aquifer develops, seepage from the waste facilities may not enter the bedrock and flow to the pit. Rather, the seepage could flow laterally through the surficial aquifer to the streams, thereby bypassing the pit. Seepage from the waste rock and tailings facilities could degrade surface water, primarily in Crooked Creek but also in its tributaries. All assumptions in the DEIS regarding contaminants reaching the pit and not the streams would be incorrect.

GRD 8

Mitigation would be very difficult. Pumpback wells, or converting monitoring wells to pumping wells, would not be effective unless they are very closely spaced[2]. This is because the surficial aquifer is thin and there is a limit to any capture zone that can be created. A capture zone is the portion of the aquifer that would be drawn to the pumping well. If the saturated zone within the aquifer is just a few feet or tens of feet thick, drawdown at the well would be limited

[2] Four monitoring wells would be installed downgradient of the TSF, two on each side of Anaconda Creek. On each side, one would be deep and one would be shallow. Each would be capable of pumping up to 90 gpm if necessary to capture TSF seepage downgradient of the tailings impoundment (DEIS, p 3.6-32). This would be grossly insufficient to capture seepage from the TSF.

GRD 8 to the interface with the bedrock; attempting to draw it lower could just create another bedrock/surficial aquifer disconnect. While theoretically, it is possible to intercept the flow through the surficial aquifer, the required well spacing could be as low as a hundred feet or even less.

PAA 14
- The only effective mitigation would be to avoid the seepage by having a liner under the waste rock. A liner would cause most seepage to collect in the underdrains.

GRD 1
- There is too little information concerning the connection between the surficial aquifer and the bedrock. Pump tests that show pumping in bedrock drawing from the stream are not actually testing what occurs if the potentiometric surface draws below the top of the bedrock; pump tests do not stress the system sufficiently to estimate the potential for a hydraulic disconnect.

8.2 Tailings Facility

The tailings impoundment would be lined with 60-mil liner. This is the same thickness as was used at the TSF at the Stillwater Mine in Montana. At Stillwater, the TSF has been shown to be leaky and the company will shift during future stages to 100-mil liner due to the failure of the 60-mil liner.

PAA 14

- The Donlin Mine should have a 100-mil liner rather than a 60-mil liner to make leaks would be less likely It would also reduce the amount of seepage captured in the underdrain and recirculated which could allow the TSF to be decommissioned more quickly.

The tailings facility is not within the pit capture zone, as shown in Figure 6. The tailings facility would lie over the Anaconda Creek drainage at the bottom of the figure. Although most of the watershed has drawdown due to the tailings impoundment capturing recharge (BGC 2014c, Drawing 40), the groundwater contours show that most of the Anaconda Creek watershed would drain to the low point beneath Anaconda Creek. The creek would lose substantial water due to a loss of recharge due to the tailings. Seepage however would report to the colluvium beneath Anaconda Creek and then to Crooked Creek.

PAA 9

- The best alternative from the perspective of avoiding contamination from the tailings facility is to use dry stack tailings with both a liner beneath them and then an impervious cover as part of reclamation. The DEIS predicts that seepage would be very low after 200 years. If leaks were limited, this option would minimize degradation to Crooked Creek. The impervious cover would help to prevent percolating water from mounding on the liner as well.

PAA 9

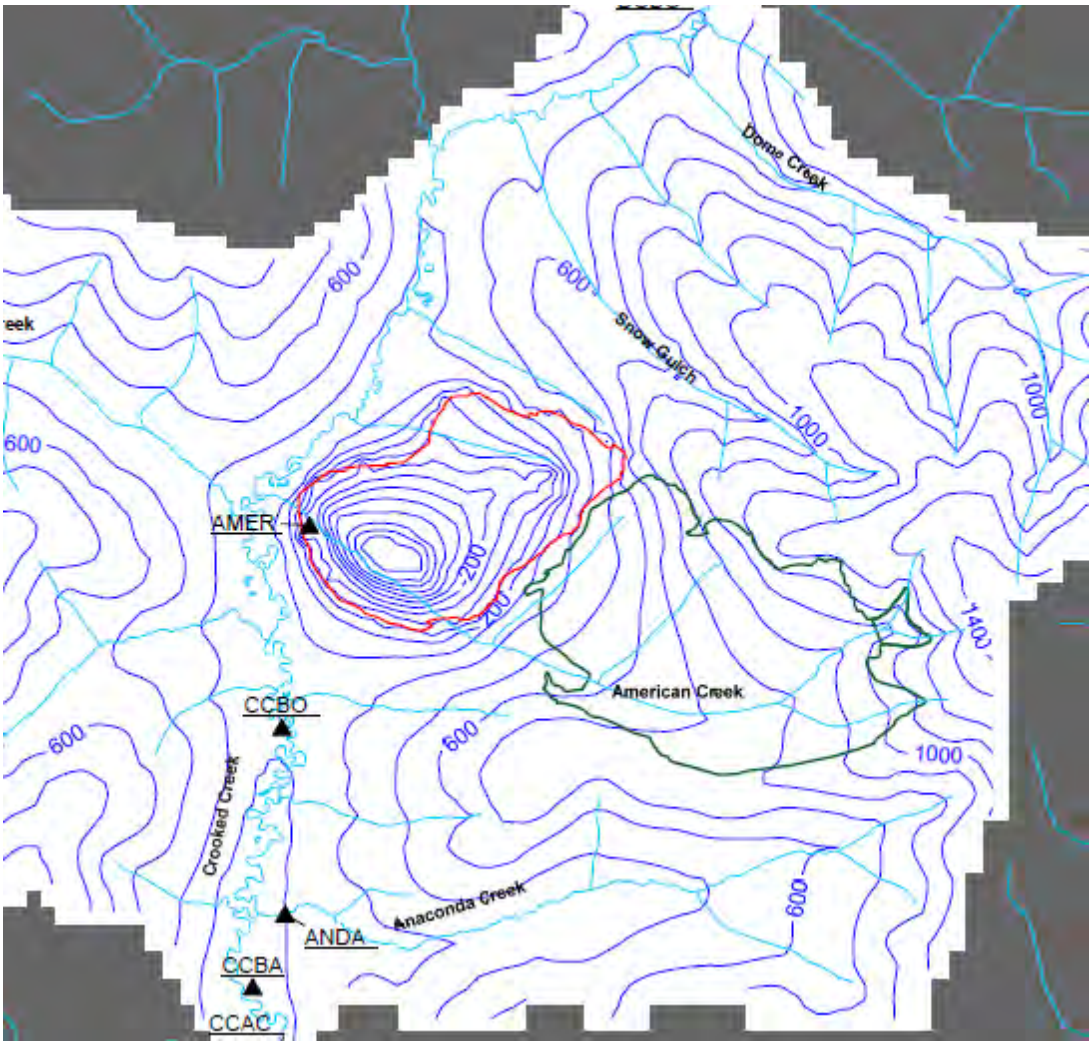


Figure 6: Snapshot of a portion of Drawing 39 (BGC 2014c) showing the bedrock potentiometric surface at the end of mine operations.

NEP 6

Some facilities are not within the predicted pit drawdown cone and the DEIS acknowledges a potential for contaminants to leach to Crooked Creek (DEIS, p 3.6-34). Mitigating measures include liners or other hydraulic containment and doing "further studies such as fate and transport groundwater modeling during final design" (Id.). These suggestions indicate the DEIS was issued prematurely since planning for the mine has not progressed far enough to even have completed all necessary studies or planned adequate mitigation.

- A supplemental DEIS is necessary to disclose important plans such as mitigation for seepage and to complete fate and transport modeling of contaminants leaching from mine facilities.

NEP 6 In closure, the pit lake would remain a hydraulic sink, but it would pull groundwater from much less of a distance during operations or early closure.

8.3 Failure Analysis

The Exec Summary notes that tailings are a "hazardous substance of concern" and that "focus is on high consequence, low probability occurrences [including] … partial tailings dam failure" (DEIS, p ES-44). DEIS section 3.24.3.5 notes such a failure as being a 1 in a thousand year event (DEIS, p 3.24-30), but a tailings impoundment must last forever so even events considered very rare or unlikely have a good chance of eventually occurring. The DEIS should complete a detailed flow routing of slurried tailings.

DAM 5

- The DEIS should analyze the risks associated with tailings dam failure. The analysis should consider the PMF occurring in the watershed because the facility will be there forever. The DEIS should present hydraulic routing of a reasonable portion of the half million tons of tailings down Anaconda Creek and Crooked Creek to show the potential damages.

The DEIS notes that "complete failure of the TSF SRS could lead to release of untreated water in a matter of weeks" (DEIS, p ES – 34). This is another example of a potential systems failure that could lead to substantial degradation in a short time period.

9.0 REVIEW OF GROUNDWATER MODEL DETAILS

Most of the numerical predictions of mine dewatering and impacts on stream flow rely on groundwater modeling. The details of groundwater modeling were presented in BGC (2014c) which is reviewed in this section. BGC (2014c) used the MODFLOW SURFACT code which is based on the MODFLOW code but has a proprietary numerical solver and a routine for simulating unsaturated seepage of recharge to the water table.

GRD 4

9.1 Model Structure

Layer 1 represents alluvium or colluvium up to 200 m amsl and is 5 to 10 m thick (BGC 2014c, p 22). Above 200 m amsl, layer 1 is bedrock, presumably representing an outcrop. Layers 2 through 9 are bedrock with layer 4 being about 70 m thick and layers 5 through 9 increasing from 100 m to 240 m thick (Id.). Layers are thickest in the uplands.

9.2 Parameter Zones

The geologic formations in an aquifer are delineated into zones for simulation. Each model cell is assigned a zone according to its geology. The properties include horizontal and vertical K, storage coefficients, and porosity. The values are initially set based on tests or literature values, and then adjusted during model calibration.

9.21 Conductivity

Within the pit area, the bedrock was delineated into 8 different sedimentary rock formations along with intrusives (BGC 2014c, p 24). Outside of the pit area, the bedrock was considered undifferentiated bedrock of the Kuskokwim group (Id.). Presumably this was done because the bedrock near the pit is better known than away from the pit. The figures showing parameter zones by layer show a complex square section near the pit that abuts against single parameters extending to the boundary; the single parameters are Kuskokwim – Valley and Kuskokwim – Ridge. There could be abrupt transitions among various parameter zones within a layer. This could have large effects on the flow patterns if the changes are substantial.

GRD 4

Basal Greywacke and Upper Greywacke have the same calibrated K values for the same layers (BGC 2014c, Table 7). For layers 1-4, 5, and 6-9 the K values are 0.1, 0.06, and 0.01 ft/d. These formations abut the Kuskokwim formation, which for layers 5, 6-7, and 8-9 have K equal to 0.03, 0,006, and 0.001 ft/d; above layer 5 the Kuskokwim (Ridge) K is 0.03 ft/d and the Kuskokwim (Valley) K varies from 0.1 to 0.3 ft/d (Id.). For layers 5 and lower the surrounding bedrock, undifferentiated Kuskokwim, has K about an order of magnitude lower than near the pit. The low calibrated K values away from the pit are not supported by the observed K values for bedrock near the pit area. The intrusive and shale formations within the pit area are also low K, but above layer 5 these will be removed within the pit. The detailed modeling occurs within the pit area and primarily is important during calibration because it would not be part of the simulation of either dewatering or pit lake development.

- The low K values away from the pit may prevent the expansion of drawdown away from the pit.

GRD 3

Zonation includes a trend of decreasing K with depth. Although they are extensive across the pit area (section 4.2), faults were not modeled except in the sensitivity analysis (Id.).

GRD 1

Calibrated horizontal and vertical K in the alluvium under Crooked Creek is 300 and 70 ft/d. These values are substantially higher than the colluvium which are respectively 0.2 and 0.06 ft/d. These K estimates for alluvium are about three times higher than the observed values.

The colluvium estimates are close to the observed values but the tests in colluvium are small scale. Colluvium K may be substantially underestimated because the thinness of the aquifer would bias the estimate of K through pump test or slug tests to be low.

BGC (2014c, p 8) describes the colluvium as "well-graded materials ranging from cobbles and gravel to sand, silt and clay". Unless the fine materials, silt and clay, fill most of the pores in the cobbles and gravel, K should be much higher. Low simulated K values in the colluvium could limit the amount of water that enters the bedrock due during recharge and could limit the amount drawn into the bedrock during dewatering as long as the colluvium remains hydraulically connected to the bedrock. The contrast between higher K in the colluvium and low K in the bedrock could cause the seepage from waste facilities to move laterally through the shallow groundwater rather than enter deeper bedrock. As discussed in section 7.0, the dewatering simulation could cause a hydraulic disconnect between the bedrock and shallow groundwater allowing a perched zone to form in the shallow groundwater.

Model layer 1 has a sharp transition from alluvium along Crooked Creek to colluvium surrounding the alluvium (Figure 7). Conductivity changes from 300 to 0.6 ft/d along a long reach of the stream. Such large changes in K between adjacent cells often leads to water balance errors in the model solutions. BGC should address the potential for local errors which
GRD 1 can lead to large inappropriate head changes. Conductivity of the valley Kuskokwim formation, which underlies the alluvium (Figure 8), ranges from 0.1 to 0.3 ft/d (BGC 2014c, Table 7). Effectively, the model simulates the high K alluvium as being surrounded by very low K bedrock or colluvium which essentially disconnects the alluvium from the rest of model domain; the model conceptualization as simulated here effectively isolates the alluvium. Using more appropriate K values to simulate the alluvium and surrounding formation would provide a more accurate simulation of flow across the formation boundaries and of the surface/groundwater interchange at Crooked Creek.

- The model simulates the alluvium with a very high K surrounded by low K bedrock and colluvium. This effectively isolates the alluvium and minimizes the effects of dewatering on the stream.

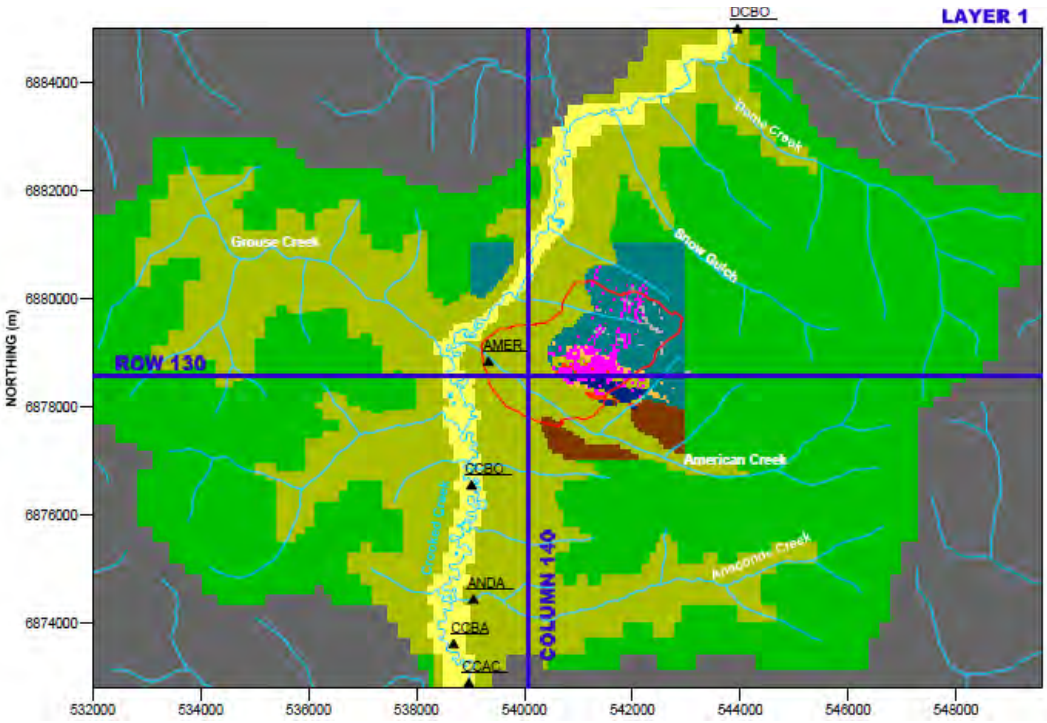


Figure 7: Snapshot of a portion of BGC (2014c) Drawing 17 showing parameter zones in model layer 1. See Figure 9 for a legend.

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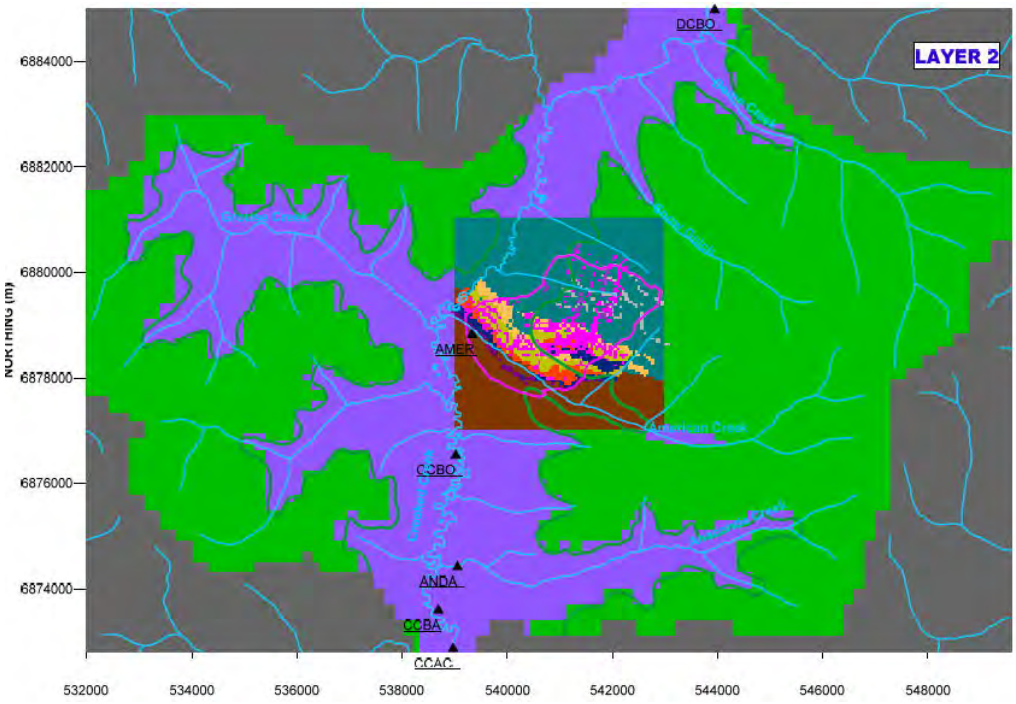

Figure 8: Snapshot of a portion of BGC (2014c) Drawing 18 showing parameter zones in model layer 2. See Figure 9 for a legend.

GRD 1

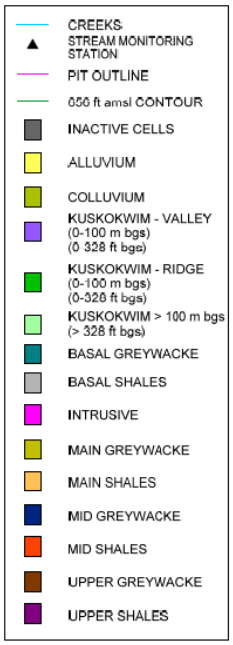

Figure 9: Snapshot of the legend from BGC (2014c) Drawing 18 describing parameter zones used for all of the model drawings. This applies to Figure 7 and 8.

GRD 2

The K estimates represent very small sections of their respective aquifers, but in setting the formation properties, the authors ignore important scale factors. In general, the representative volume of a pump test is the amount of water pumped, divided by the effective porosity (Schulz-Makuch et al. 1999); this effectively means a sample volume, including all pore spaces affected by the pumping. Short-term tests represent properties only over a very small volume. Figure 10 shows an example from the literature of variability for a fracture-flow media, the type of media that controls the flow near the pit. Hydraulic conductivity varies over seven orders of magnitude in the example (Figure 10), depending upon the volume of the aquifer represented in a given test. Setting K for the undifferentiated bedrock as a single value less than most of the tests violates these concepts of scale.

From the perspective of flow and transport prediction (as needed near the pit and waste rock dumps), small-scale properties control local flow while the larger-scale measurements control regional flow, which can be estimated without understanding localized details. A mine that intersects and excavates significant portions of a formation affects flow at a regional level, and therefore needs property measurements at that scale. The short-term tests in the crystalline bedrock presented by INTERA are not relevant at a regional scale.

- Most of the hydrogeologic properties estimated for the DEIS are for a small-scale and yield conductivity values that are much too low for regional flow analysis. This causes the DEIS to predict impacts limited to the areas closer to the Mine.

GRD 2

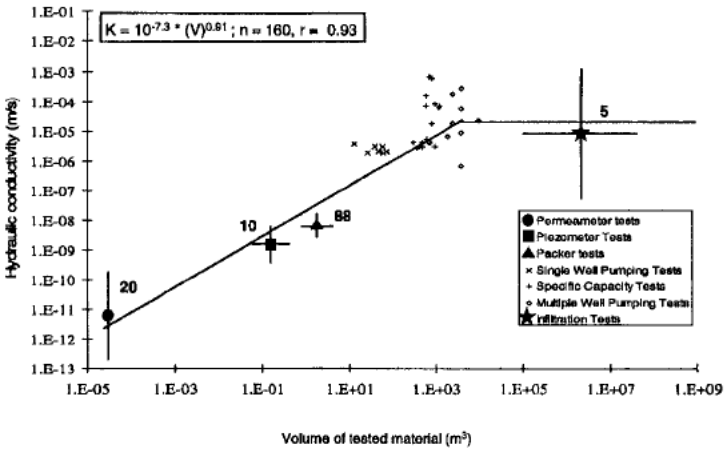

Figure 6. Relationship of hydraulic conductivity to scale of measurement in the Racine Formation of the carbonate aquifer of southeastern Wisconsin. Permeameter, piezometer, packer, and passive infiltration tests were plotted as geometric means with 95% confidence intervals; pumping tests and specific capacity data as single values. Number of observations are given adjacent to means. Passive infiltration tests are derived from the infiltration of Lake Michigan water into the Racine Formation due to the construction of a sewage tunnel. The regression line is derived from all individual values (n = 160) below the infiltration scale. The 95% confidence interval about the slope is 0.91 ± 0.06, and r is the correlation coefficient.

Figure 10: Figure 6 from Schulz-Makuch et al. (1999) showing the variation of hydraulic conductivity with volume of material used for testing. The Racine Formation is a fracture-flow formation and is used here only as an example of the variability.

9.22 Storage Coefficients

GRD 1

Specific yield (Sy) for the alluvium is extremely low, being set at 0.01 (BGC 2014c, Table 7). Sy is the amount of water that is released from storage for a unit drop in the water table; for Sy=0.01, a head drop of one foot would release just 0.01 foot of water from storage. Usually, Sy is much higher. Table 3.5 in Anderson and Woessner (1992) shows a range of 0.01 to 0.46 for categories from fine sand through coarse gravel, the particle sizes found in the alluvium along Crooked Creek. The published range of Sy technically includes the value used in this model for alluvium, but Sy = 0.01 is for fine sand (Id.). Crooked Creek alluvium includes a mixture of particle sizes and the estimates for fine sand have a mean of 0.33 (Id.). Without a substantial detailed pump test estimate of Sy for the alluvium, the value used for the Donlin groundwater model is suspect. Also, the very high K and low Sy in the alluvium are incongruous because Sy is often a surrogate for porosity, and having porosity equal 0.01 is inconsistent with K being 300 ft/d.

- A low Sy for the alluvium will cause the model to underestimate the amount of water drawn into the bedrock during dewatering.

GRD 1 Together the high K and low Sy in the alluvium would serve to minimize the simulated flux from the alluvium into the bedrock. The Sy value affects the simulated interchange of water between the stream and the alluvium and then between the alluvium and the bedrock beneath it. The amount of water drawn into the bedrock from the alluvium due to dewatering could be grossly underestimated. The very high K would allow the alluvium to provide water to the bedrock very easily, meaning without substantial change in head. The gradient at the stream boundary would change very little due to the high K. The streambed K was set equal to the alluvium K so the stream allowed water to pass easily, meaning it provided the necessary water with very little change in gradient. The simulated drawdown would be very low.

9.3 Recharge

The model assumes that recharge enters the model domain at a 28% of annual precipitation per year rate, with all 5.5 in/y applied all in the summer period. If the water surface is above the ground surface, the model does not accept the recharge and it becomes surface runoff to the stream network (BGC 2014c, p 25).

Three conceptual problems with this recharge simulation are obvious. The method does not account for recharge variability due to precipitation amount, slope, or geology. Studies from around the western US have shown variable rates of recharge as a proportion of precipitation, although none of the studies were based in Alaska.

GRD 17 Because recharge must first percolate through a soil zone it is likely that a higher proportion will do so for a higher precipitation because the amount of evapotranspiration is unlikely to increase linearly along with precipitation and because higher precipitation would more often have moister antecedent conditions leading to less precipitation being taken up to make up a soil water deficit.

Slope and geology controls the rate at which precipitation can enter the aquifers and unsaturated zone between the soils and aquifer. Fractured bedrock accepts more percolation than intact bedrock and the ground slope controls the rate at which the meteoric water may runoff or flow downslope as interflow, if a soil layer is available. Differences in conductivity and slope would lead to differences in the rate of recharge at a given point.

Combined, precipitation amount, slope and geology controls the amount of recharge at a location, with the remainder becoming runoff. Drainages would likely be sources of large amounts of water and recharge beneath the streams.

GRD 17

Very little recharge as simulated reaches deeply into the bedrock because the low simulated permeability of the deep bedrock significantly limits the deeper circulation of recharge. BGC (2014c) does not present the simulated amount of groundwater that percolates into the bedrock, the deep groundwater system, but it should. This would reflect the contrast in conductivity between shallow and deep aquifer systems, with lower conductivity at depth preventing deep percolation. The water that remains in the shallow system discharges to surface water quickly. This critical point controls the most important results of the model simulation as well. If the deep bedrock is a little more permeable and allows more recharge to circulate deeply, the required mine dewatering could be doubled without changing the discharge to the stream very significantly.

The comparison of premining baseflows shown in DSEIS Table 4-7 is not meaningful since presumably each model used similar recharge and if the inflow to each model domain is the same, so must be the outflow.

9.4 Calibration

There were about 182 observed groundwater elevations used for calibration. For a model of this size, this is a reasonable number, however, there was a definite bias in their distribution. As shown on BGC (2014c) Drawing 7, the majority of sites were in drainages and only a few were on the ridges. Groundwater converges into the drainages so there is likely an upward gradient in most of the areas that are most represented in the calibration.

GRD 5

Initial calibration for most models is by a steady state simulation wherein average fluxes are simulated and average head values are matched. BGC apparently skipped this step, opting instead for calibrating based on a seasonal transient model (BGC 2014c, p 27). This is reasonable if the model best fit was compared to an observed time series of groundwater observations (and stream flows). However, the "primary calibration target at each location" was the average value of multiple observations, if there were multiple observations (BGC 2014c, p 28). Average groundwater levels may not represent any given seasonal time period, so at best this calibration technique is difficult to evaluate.

BGC (2014c) does not provide necessary details for understanding the calibration simulation:

- BGC should describe the initial conditions used for the calibration scenario.
- BGC should specify how long the calibration scenario was run.
- BGC should specify the head value used for comparison to the average observed head. Is it the value for a given time period or an average for a multitude of simulated observations?

Given that the calibration scenario description is not very useful, the graph of simulated and observed head values (BGC 2014c, Drawing 24) shows some significant bias in the calibration. About 20 of the observations plot below the -25 m envelope line on the graph and just two plot above the +25 m line. At least eight of the observations below the -25m line are wells in the Upper Greywacke formation, layers 1 through 3. The Upper Greywacke may be seen south of and on the south side of the pit underlying much of the American Creek drainage. Simulated heads are about 50 m lower than observed in this area. The gradient driving flow to the American Creek is likely simulated lower than observed. This could lead to a higher K estimate which would lead to drawdown affecting the creek less than it actually would do.

A second calibration scenario was the simulation of the MW07-11 pump test (BGC 2014c, p 29). Other than stating that the grid size was changed for the simulation (Id.), BGC provides almost no details of the test, as follows: "Model stress period lengths or time steps were not specified. It is common to define a stress period based on pumping at specific rates, but the report does not specify how or whether this was done." (Id.)

The report does not explain how calibration was competed. In short term pump test simulations, it is common to adjust storage coefficients because short-term head changes are more sensitive to storage coefficients. The report does not specify whether test statistics were
GRD 5 determined for the pump test simulations, so it is difficult to objectively evaluate these transient calibrations.

The graphs that compare simulated water levels with observed show a very poor match (BGC 2014c, Drawings 26-29). There is no apparent consistency or bias, with some simulated levels exceeding observed and vice versa (Id.). BGC (2014c, p 29) suggests that "bedrock hydraulic conductivity is heterogeneous at the scale of the pumping test". This means that the model may not be accurate with respect to the details of the simulation. However, BGC also suggests that having simulated values "within a factor of two to three of measured drawdowns at the observations wells" (Id.) suggest the K values are reasonable for the scale of the modeling. There is no logic behind this statement because missing the target by a factor of three implies the K should have been set substantially different. It indicates there is substantial room for improvement.

The second transient calibration was of the pump test run to test properties between Crooked Creek and the proposed pit. The drawdown graphs for both alluvial and bedrock wells (BGC 2014c, Drawings 30-32), including both pumped and monitoring wells, show very little agreement between simulated an observed hydrographs. However, these tests were used to set the high alluvial K and low Sy values described above. The lousy match between the

observed and simulate groundwater levels does not provide justification for the alluvial parameters, the effects of which were described above.

Based on the overall calibration summary (BGC 2014c, p 32), the following bullet points suggest problems with the calibration.

GRD 5

- Modeled K of the alluvium is generally higher than observed and that of the colluvium is low for the model scale used here (Id.).
- Modeled bedrock K tended to be lower than the observed range, especially at distance from the pit.
- There is no evidence that storage parameters were even calibrated since they do not vary among formations and because the model fit during pump tests was so poor.
- Any agreement between simulated and observed flows (Drawing 25) is spurious due to the large difference in flow rates.
- It is not appropriate to claim there was a good seasonal match. Graphs for wells MW03-02, -03, -04, -05, -06, -07, -09, -12, -13, and -15, (BGC 2014c, Appendix A) show almost no simulated seasonal effect while the observed seasonal variation exceeds a meter. Some wells, such as MW07-05, and -06, show an observed trend with time that substantially masks the seasonal trend.

9.5 Simulating Mine Dewatering and Pit Development

BGC (2014c) chapter 7 describes the methods used to simulate mine dewatering and pit development. The modeling has three objectives that are of interest here:

GRD 1

- Estimate the dewatering extraction rate
- Evaluate the impacts on mine dewatering and pit development on local surface water
- Estimate the rate of pit lake formation and the recovery in groundwater levels and flow conditions after dewatering

Also of interest is how development of the tailings impoundment affects flows. Other objectives specified by BGC (2014c) are for design purposes.

GRD 17

BGC simulated dewatering using MODFLOW drain boundaries, and possibly also used the well package in advance of reaching a given pit level to remove some initial water. ET was appropriately set to zero within the enlarging pit. However, recharge should have continued to have been simulated because precipitation falls within the pit and if it does not runoff, it will percolate and become recharge. Runoff from within the pit may be captured and managed, but by definition recharge is precipitation that does not runoff. If not pumped it will flow into the

GRD 17 pit at lower levels; there is really no way to "manage" precipitation to prevent recharge (BCG 2014c, p 34).

Captured streams were appropriately turned off during the simulation. During operations, there would be some backfill in the pit. The simulation included simply turning off the drain boundary to the level of the backfill and allowing the groundwater level to recover.

The bedrock properties were not altered during the operations portion of the simulation (BGC 2014c, p 35). This was justified due to the relatively short time period simulated. However, not changing the bedrock properties was an error due to the large difference in storage properties between backfill (Sy = 0.33 for closure simulations) and in-situ bedrock (Sy = 0.003, BGC (2014c), Table 7). The amount of water necessary to fill the unsaturated bedrock with Sy=0.003 is miniscule, by two orders of magnitude, compared to that necessary to fill the backfill with Sy=0.33. During the five years of operations, groundwater levels would fill in the backfill while
GRD 1 removing very little water from the model. Presumably this would be the initial conditions for simulations of the operations period. Recovery would have occurred with too little water being removed. This would decrease the simulated losses to the streams and basically cause the model to underestimate flow losses to the streams. If it allows the backfill to become saturated prematurely, the initial conditions for the closure simulation will be too high and cause the model to simulate too little water removed from the model to be stored in the backfill; this would also reduce the simulated impacts to the streams.

The modeling predicted that total groundwater extraction rate from all wells and drains would initially equal 1700 gpm, increase to 2600 gpm by year 12 and average 1600 gpm over the mine life. The simulated rate decreases to about 1500 gpm after year 20 and some groundwater recovery into the backfill begins to occur (BGC 2014c, Drawing 36). Various factors, some already discussed, could make the dewatering rate higher than simulated:

- Bedrock K away from the pit has been underestimated. This slows the flow of groundwater to the pit and minimizes the simulated dewatering.

GRD 17
- Failure to simulate recharge within the pit boundary simply ignores a source of water that will be removed as dewatering water.

Dewatering dries much of layer 1 as can be seen by the 30 foot drawdown contour encircling much of the area (Figure 11). The model cells within that area would be dry. As noted in the
GRD 1 text (BGC 2014c, p 39), drawdown in the alluvium along Crooked Creek is less than two feet. The lack of drawdown corresponds to the high K and encirclement by low K bedrock and colluvium as described above. The alluvium is effectively isolated from the effects of dewatering (Figure 11) by the model design.

The model also simulates substantial reductions to streamflow in Crooked Creek and tributaries, which would have a large effect on the flows in those streams. However, the reductions have been underestimated for reasons as described herein. Primarily, all dewatering water is prevented from discharging to a groundwater sink which in this model would be a stream. For all of the reasons that dewatering rates have been underestimated, the reductions in streamflow has also been underestimated. Additionally, dewatering effects on Crooked Creek have been underestimated due to the simulation of K and storage properties, therefore Crooked Creek flows would be decreased much more than disclosed in the DEIS.

GRD 1

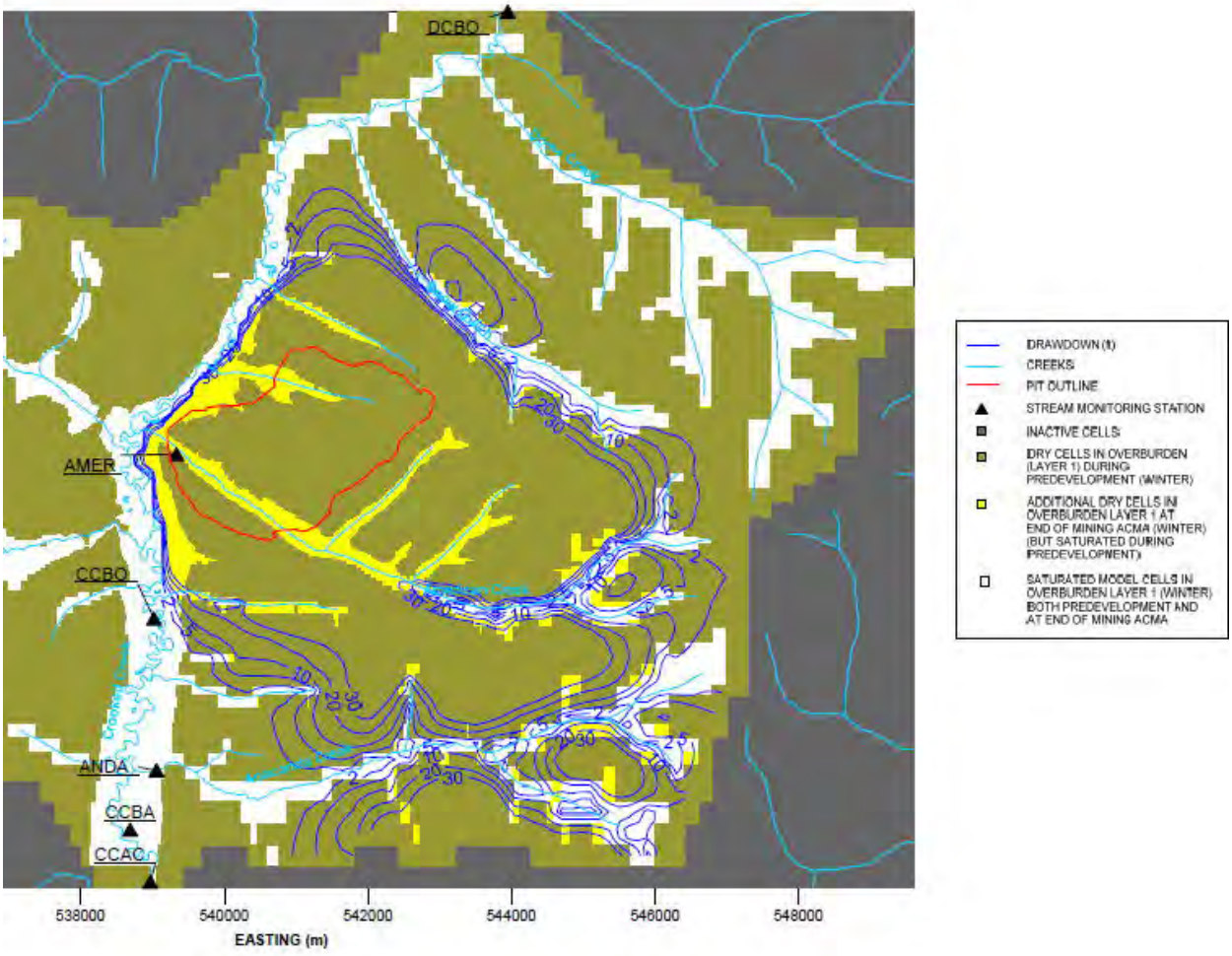

Figure 11: Snapshot of a portion of BGC (2014c) Drawing 37 showing drawdown in model layer 1, the surficial aquifer.

9.6 Simulating Pit Lake Formation

WAQ 11

BGC (2014c) used a special pit lake package to simulate the forming lake. In addition to groundwater flowing into the pit lake, there is inflow from precipitation, runoff, American

Creek flows, waste rock underdrain, contact pond water, and tailings impoundment discharge. The pit lake fills until it is just below its crest after which water would be pumped, treated, and discharged. It initially receives almost 33,000 af of excess tailings water (Lorax 2012, p 3-7), which is generally of poor quality (Lorax 2012, Table 3-3). Water from the tails and waste rock would be discharged to the bottom of the pit void "to encourage the more contaminated (i.e. denser) water to remain at depth within the pit lake and to foster chemically stratified or meromictic conditions within the pit lake" (Lorax 2012, p 3-7)). If this works as planned and the lake does not turn over, water at the bottom of the pit lake would be highly contaminated.

WAQ 11

Groundwater inflow to the pit lake will generally be of good quality compared to the inflows of waste or tailings seepage (Lorax 2012, Table 3-3). However, Lorax (2012) has not simulated different groundwater quality for groundwater entering from different levels or formations. Background groundwater quality is not homogeneous through the entire mass of rock surrounding the pit (BGC, 2011l) and inflows should not be simulated as if it is. This could affect the predicted pit lake water chemistry.

The pit lake would be almost full after 60 years. Although the pit is a sink, meaning the regional groundwater flows toward it from all directions, there is a significant groundwater outflow (BGC 2014c, Drawing 49). This outflow is to fill the backfilled waste rock and dewatered bedrock near the pit, presumably as the lake fills faster than the groundwater levels recover. The particle tracking (BGC 2014c, Drawings 50-53) does not suggest that any water would escape the pit and flow away into the groundwater, but BGC should verify this because escaping pit lake water would degrade surrounding groundwater.

GRD 6

The managed lake elevations is intended to provide adequate freeboard and maintain water levels that the groundwater would continue to discharge to the pit lake rather than creating a flow-through pit lake (BGC 2015g). The gradient is "slight" (BGC 2015g, p 2), however, which suggests that it could reverse so that pit lake water would discharge from the lake occasionally.

- The groundwater model should consider groundwater/pit lake relations when the pit fills to its crest as it could do during extreme wet conditions, as reviewed herein at section 5.2.

9.7 Sensitivity Analysis

A numerical model sensitivity analysis is designed to test the effects of changing various model parameters on the results of simulation. BGC (2014c) chapter 9 describes the sensitivity analysis completed for the Donlin numerical model. BGC's method is to simply make large adjustments to various factors and compare the change in the calibration and to show how it

GRD 1

changes the simulation of future conditions. I review only the sensitivity results that reveal important aspects of the model with respect to the environmental impacts of the proposed mine.

GRD 1

The model was not sensitive to raising and lowering the hydraulic K of the alluvium because the alluvium was essentially isolated from the rest of the system so that stream levels controlled the heads, as discussed above. Calibration statistics improved for three changes, decreasing bedrock K, increasing recharge and streamflow, and simulating faults as low hydraulic K faults (BGC 2014c, p 51). That these wholescale changes improved the calibrations shows the model is not unique but also suggests that the calibration as presented in BGC (2014c) is not as accurate as it could be. I argued above that bedrock K was underestimated so the improvement in calibration statistics for using even lower K suggests that some other aspect of the model is more important for matching head values. Recharge and streamflow were estimated external to the model so changing them would be inappropriate.

GRD 4

Including low K faults improved the calibration (BGC 2014c, p 51). This conceptualization suggests the groundwater system could be segmented. Details of the analysis are sparse, but the faults were only mapped in the pit area so it is likely that faults were only added in that area. This sensitivity analysis illustrates the importance of better understanding the faults and how they affect the groundwater flow.

GRD 3

- Faults could segment bedrock into higher or lower K zones better than formation maps.
- Faults could segment bedrock in ways that would allow dewatering to affect areas farther from the pit, especially if the segmentation includes areas with higher K.
- If the higher K segments extent under creeks, they could create zones in the streams that are much more affected by dewatering.

The model, and DEIS, requires much more information about the faults to be accurate.

Mine dewatering rates were sensitive to bedrock properties (BGC 2014c, p 52). Increasing bedrock K by a factor of 5 increased mine dewatering rates by 3.3 times; increasing bedrock storage coefficients by ten times increased mine dewatering rates by 1.5 (Id.).

GRD 4

High K faults could increase the mine dewatering rates up to 3.3 times depending on their location and the extent of connection with Crooked Creek (BGC 2014c, p 53). This could probably also result from the low-K faults segmenting high-K bedrock under the streams.

GRD 3

Changing bedrock K substantially affected stream flows. Reducing bedrock K reduced streamflows relative to the base case. If the model has bedrock K that is too low, as I argued above, impacts on the streams would be underestimated. Increasing bedrock K by a factor of 5

GRD 4

GRD 4

reduced winter streamflow by 86% and simulating high K faults decreased streamflows by 83% (BGC 2014c, p 54). Increasing bedrock K by a factor of 20 caused Crooked Creek to go dry by the pit (Id.). Increasing storage coefficient also reduced streamflows. The sensitivity of the model predictions to bedrock properties further indicates that the model could have grossly underestimated impacts to streamflow.

The sensitivity results regarding bedrock K verifies the points above about how low K estimates could have caused the model to underestimate dewatering, the extent of the drawdown, and impacts on streamflow.

GRD 3

Low K faults decreased the impacts that dewatering had on streamflow (BGC 2014c, p 54). This is probably due to the segmentation caused by the faults.

GRD 1

Changing alluvial K had little effect on the impacts dewatering had on streamflow (BGC 2014, p 54). This further reflects the comments above about how the alluvium under Crooked Creek is isolated from the bedrock. The isolated alluvium acts as a tub in which water is easily exchanged with the stream.

GRD 4

Pit lake refill time was also sensitive to bedrock K (BGC 2014c, p 55). The increased bedrock K causes the pit lake to fill from 14 to 30 years faster, reflecting the higher flow to the pit (Id.). Decreased K increased the fill time by about 12 years (Id.).

GRD 8

9.8 TSF underdrain predictions

The groundwater model (BGC 2014c) estimated discharge to the tailings impoundment underdrain (Figure 12). The only description of how the TSF was simulated was to note that ET and recharge was set equal to zero (BGC 2014c, p 16, 34).

> The TSF will be a fully-lined impoundment. Therefore, groundwater recharge to the underlying aquifer will cease within the footprint of the facility. In addition, the TSF underdrain will be installed beneath the **liner to capture groundwater discharge from the catchment and deliver it to the SRS downstream of the TSF dam**. Any seepage through the liner would also report to the SRS. SRS water will be used either as make-up water in the process or potentially treated and discharged to Crooked Creek. (BGC 2014c, p 16, emphasis added)

The DEIS describes it as follows: "The TSF would be designed with a rock underdrain that would serve two purposes: 1) capture and direct any TSF leakage to a Seepage Recovery System (SRS) located immediately downgradient of the TSF dam; and 2) collect groundwater from areas upgradient of the TSF and direct it to the SRS as TSF underflow" (DEIS, p3.6-31). The mine would obtain a water right for the diversion of groundwater by the TSF drain (DEIS, p 3.6-32).

The report does not describe the boundary used to simulate the drains, although if the underdrain is beneath the liner to capture groundwater discharge, the underdrain must be simulated as a drain in layer 1. An underdrain would allow groundwater discharging upward due to artesian pressure from undermining the TSF.

Decreased bedrock K in the sensitivity analysis increased flows to the tailings underdrain system (BGC 2014c, p 54, 55). This is because low bedrock K causes more groundwater to remain in the shallow groundwater.

> The reduction in recharge is predicted to lead to a progressive decrease in groundwater flow reporting to the foundation underdrain, from approximately 730 gpm (4,000m3/d) in Year -2 to approximately 440 gpm (2,400m3/d) at the end of mining" (BGS 2014c, p xiv). "Predicted groundwater discharge to the TSF underdrain for the post closure analysis fluctuates on a seasonal basis, and averages 370 gpm (2,000 m3/d) during the winter season, and 440 gpm (2,400 m3/d) during the summer season (BGC 2014c, p xv).

GRD 8

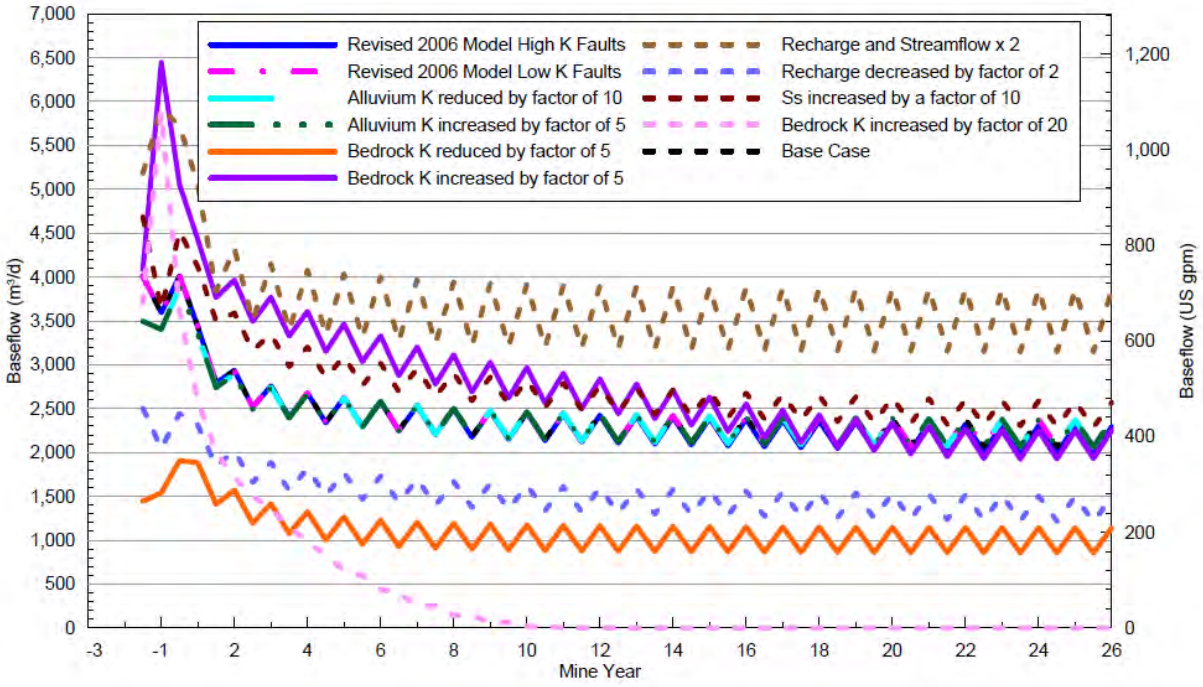

Figure 12: Snapshot of BGC (2014c) Drawing G22 showing the discharge to the tailings impoundment underdrain for the base case and various sensitivity analysis simulations.

10.0 MISCELLANEOUS

GRD 1

The potentiometric surface map (DEIS Figure 3.6-2) does not distinguish among aquifers which means there is an assumption that the groundwater pressure in the bedrock equals the water table in the overlying colluvial aquifer. It argues that "vertical gradients within the groundwater system are not large compared to the scale of the map and the overall relief of the potentiometric surface" (DEIS, p 3.6-8). A reference is to BGC 2011d. This can be an important assumption, driving recharge and discharge locations. What is meant by gradients "not large compared to the scale of the map"?

Groundwater discharge occurs only in creeks and gulches, not to wetlands away from the creeks and gulches (BGC 2014g, p 6). Permafrost is intermittent and generally limited to soils but does extend into bedrock up to 33 feet with an average of 14 feet (BGC 2014g, p 6-8). The only trends apparent in the permafrost mapping show that permafrost is more common in the drainages of American and Anaconda Creek.

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Attachment 1

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Curriculum Vitae

Objective: To provide diverse research and consulting services to nonprofit, government, legal and industry clients focusing on hydrogeology specializing in mine dewatering, contaminant transport, natural gas development, groundwater modeling, NEPA analysis, federal and state regulatory review, and fluvial morphology.

Education

Years	Degree	University
1992-96	Ph.D. Hydrology/Hydrogeology	University of Nevada, Reno Dissertation: Stochastic Structure of Rangeland Streams
1990-92		University of Arizona, Tucson AZ Classes in pursuit of Ph.D. in Hydrology.
1988-90	M.S. Hydrology/Hydrogeology	University of Nevada, Reno Thesis: Stream Morphology, Stability and Habitat in Northern Nevada
1981-83		University of Colorado, Denver, CO Graduate level water resources engineering classes.
1977-81	B.S., Civil Engineering	University of Colorado, Boulder, CO

Professional Experience

Years	Position	Duties
1993-Pr.	Hydrologic Consultant	Completion of hydrogeology studies and testimony focusing on mine dewatering, groundwater modeling, natural gas development, contaminant transport, NEPA review, and water rights for nonprofit groups and government agencies.
1999-2004	Great Basin Mine Watch, Exec Director	Responsible for reviewing and commenting on mining projects with a focus on groundwater and surface water resources, preparing appeals and litigation, organizational development and personnel management.
1992-1997	Univ of NV, Reno, Res. Assoc.	Research on riparian area and watershed management including stream morphology, aquatic habitat, cattle grazing and low-flow and flood hydrology.
1990-1992	U of AZ, Res. and Teach. Assistant	Research on rainfall/runoff processes and climate models. Taught lab sections for sophomore level "Principles of Hydrology". Received 1992 Outstanding Graduate Teaching Assistant Award in the College of Engineering
1988-1990	U of NV, Reno Res. Asst	Research on aquatic habitat, stream morphology and livestock management.
1983-1988	US Bureau of Reclamation Hydraulic Eng.	Performed hydrology planning studies on topics including floodplains, water supply, flood control, salt balance, irrigation efficiencies, sediment transport, rainfall-runoff modeling and groundwater balances.

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Special Coursework

Years	Course	Sponsor
2011	Hydraulic Fracturing of the Marcellus Shale	National Groundwater Association
2008	Fractured Rock Analysis	MidWest Geoscience
2005	Groundwater Sampling Field Course	Nielson Environmental Field School
2004	Environmental Forensics	National Groundwater Association
2004 and -5	Groundwater and Environmental Law	National Groundwater Association

From:	David Deisley
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Friday, May 27, 2016 10:47:04 AM
Attachments:	image001.png 2016-05-27 NovaGold DEIS Comment Letter.pdf

Attached please find a comment letter from NOVAGOLD RESOURCES ALASKA Inc. on the Donlin Gold EIS.

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May 27, 2016

Mr. Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, P.O. Box 6898
Joint Base Elmendorf Richardson, AK 99506-0898

RE: Donlin Gold Project EIS – Draft EIS Comments

Dear Mr. Gordon:

NovaGold Resources Alaska Inc. (NOVAGOLD) submits the following comments for consideration by the U.S. Army Corps of Engineers (Corps) on the Donlin Gold Project Draft Environmental Impact Statement (DEIS). NOVAGOLD owns fifty percent of Donlin Gold LLC, the permit applicant for the Donlin Gold project. NOVAGOLD supports the detailed comments on the DEIS submitted by Donlin Gold and offers these more thematic comments for the Corps' consideration in preparing the final EIS (FEIS) and record of decision (ROD) on Donlin Gold's Section 10 and Section 404 permit applications.

NOVAGOLD commends the Corps for the structured and extensive public engagement program used from the start of the National Environmental Policy Act (NEPA) process. The public scoping meetings held in communities throughout the Yukon-Kuskokwim (Y-K) region, along the pipeline route, and in Anchorage provided valuable information about the issues of primary interest to the public. Early adoption of the Public Involvement Plan ensured consistent and effective communication with the public through a dedicated website (www.donlingoldeis.com), regular newsletters, meeting and conference presentations, follow-up community visits, traditional knowledge workshops, and multiple interviews on KYUK, which is dedicated to serving the rural Alaska and Alaska Native population of the Y-K region. Newsletters 4 titled *How to Get the Most from the Draft EIS* and newsletter 5 titled *Draft EIS Released* prepared the public to participate meaningfully in the DEIS meetings held over the 188-day comment period, including the 16 village and Anchorage meetings. While translating the full DEIS Executive Summary proved impracticable, providing an overview of the DEIS in Yup'ik through podcasts, as well as having a Yup'ik translator at numerous public DEIS meetings, afforded the region's Yup'ik speakers the opportunity to hear and be heard in their native language.

PUB 5

The shareholders of the Calista Corporation (Calista) and The Kuskokwim Corporation (TKC), many of whom live in the Y-K region, have a direct interest in the Donlin Gold project as a result of Calista's ownership of the mineral estate and TKC's ownership of a majority of the surface estate on which the project will be developed. Calista selected the lands at Donlin Gold as part of the compensation granted to Alaska Natives for the relinquishment of their aboriginal rights under the Alaska Native Claims Settlement Act (ANCSA). The lands were selected specifically because of their known mineral potential.

LAND 1

Calista is mandated to responsibly develop the natural resources on the lands for the economic benefit of its shareholders, and the economic benefit of all Alaska Natives through ANCSA's 7(i) and 7(j) revenue

LAND 1

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sharing provisions. Congress enacted ANCSA to "provide for the real economic and social needs of Natives ... with maximum participation by Natives in decisions affecting their rights and property." The unique foundation for the proposed development of the Donlin Gold project must frame the analysis of potential impacts and guide the public interest decisions to be made by the Corps, the Bureau of Land Management, and the Pipeline and Hazardous Materials Safety Administration.

LAND 1

In preparing the FEIS, NOVAGOLD recommends that the Corps reconsider the multiple statements of the purpose and need presented in the DEIS to ensure that the mandate established by Congress in enacting ANCSA is clearly expressed in the purpose and need for the Donlin Gold project.

NEP 3

In addition, NOVAGOLD recommends that the Corps ensure that the multitude of federal laws and regulations referenced in the Regulatory Framework sections of the DEIS do not obscure the signal importance of ANCSA in evaluating the potential impacts of the proposed Donlin Gold project. In particular, recognition of the salutary and compensatory objectives of ANCSA in the FEIS sections on Socioeconomics; Land Ownership, Management and Use; Environmental Justice; Cultural Resources; Subsistence; and Human Health is warranted. For example, the DEIS analysis of the No Action Alternative (Alternative 1) concludes that "Alternative 1 would raise an environmental justice concern." P. 3.19-16. However, the analysis fails to state that the No Action Alternative would contravene the objectives of ANCSA to empower Alaska Natives to meet their "real economic and social needs . . . with maximum participation by Natives in decisions affecting their rights and property." In our view, the impact criteria in Table 3.19-4 fail to acknowledge ANCSA's mandate which results in the analysis understating the potential negative impacts of the No Action Alternative on Alaska Natives. The impact criteria for the other referenced resources also should be revised to incorporate ANCSA's unique mandate to advance the social and economic interests of Alaska Natives.

EJ 4

EJ 4

EJ 4

In addition, Section 3.15.3.1 of the DEIS states "As the land owners, Calista and TKC would likely propose and undertake future plans, separate from the Donlin Gold project, independent of the results of the No Action Alternative." We respectfully disagree with this finding as it relates to developing the mineral potential of the site. Development of the Donlin Gold project has been ongoing for 20 years with approximately $500 million spent to date by NOVAGOLD and its partners to reach this stage. If the Corps selects the No Action Alternative, Calista and TKC are unlikely to propose an alternative mining scenario in the foreseeable future. Therefore, such a decision would have major adverse impacts on Calista's and TKC's plans for land management and use.

LAND 12

NOVAGOLD commends the Corps for the thorough analysis of the potential effects of the proposed project on the physical components of the natural environment. In responding to the DEIS comments received and preparing the FEIS, NOVAGOLD urges the Corps to heed the mandate of the Council on Environmental Quality's NEPA implementing regulations that:

NEP 7

- Ultimately, . . ., it is not better documents but better decisions that count. NEPA's purpose is not to generate paperwork--even excellent paperwork--but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. 40 C.F.R. Sec. 1500.1(c).

NEP 7

- Environmental impact statements shall be analytic rather than encyclopedic. 40 C.F.R. Sec. 1502.2(a).
- Impacts shall be discussed in proportion to their significance. 40 C.F.R. Sec. 1502.2(b).

As documented in the Final Scoping report, the scoping process identified socioeconomics, air quality, subsistence, water quality and quantity, fish, barging, and hazardous materials as the topics of greatest public interest. NOVAGOLD encourages the Corps to focus its resources and analyses on these significant issues related to the proposed project and alternatives in preparing the FEIS.

NEP 7 In preparing the FEIS, the Corps should "present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. Sec. 1502.14. In assessing the relative environmental impacts of the proposed action and alternatives, NOVAGOLD urges the Corps to present

NEP 7 those impacts in the context of the existing environment as described in the EIS. Substantive comparisons of potential impacts from the project or an alternative to existing conditions, rather than the use of statistical comparisons, provide a more meaningful basis for choosing among the options. NOVAGOLD offers the following examples to illustrate this recommendation.

LAND 6 Context of Proposed Development. The potential impacts of developing the Donlin Gold project are described in extensive detail relative to the Crooked Creek drainage. Focusing on this area results in an overstatement of potential impacts in the Calista region, which encompasses 57,000 square miles or an area about the size of New York State (http://www.calistacorp.com/business/frequently-asked-questions). Approximately 75 percent of the land within the Calista Region is owned by the U.S. Fish and Wildlife Service. The Kuskokwim River drainage comprises approximately 50,200 square miles (DEIS, p 3.13-7). Considered in the context of the Calista Region or the Kuskokwim River drainage, development of the Donlin Gold project on approximately 30 square miles of land selected by Calista under ANCSA specifically because of its mineral potential is not material. Development of this land for mining will alter the use of that specific area, but the vast majority of the Calista region will not be affected directly or indirectly by the project. Because of the U.S. Fish and Wildlife Service's land ownership in the region, the vast majority of the region is unlikely to ever be affected by any type of development. Consequently, virtually all of the vast lands of the Calista region will continue to be available for subsistence uses, wildlife, fish, and other resources. Understanding that the local impacts of the project are important, consideration of the regional context should be more determinative when making a decision, especially in light of ANCSA's mandate and the project's benefits to the entire Calista region.

BARG 9 Barging Impacts – Erosion. The DEIS states: "Downriver of Aniak, the river is characterized by low gradient, interconnected meandering channels and sloughs. Tidal influence extends from Kuskokwim Bay upriver to Tuluksak (RM 136). Substantial lateral movement of the channel, which shifts continuously in response to changing levels of flow, has resulted in extensive natural bank erosion, riverbed scour, and high sediment loading. . . . Upstream of Akiak, the river exhibits less lateral movement, although bank erosion is still extensive, and more islands and vegetated sand bars occur than in downstream reaches (AGRA 1998)." P. 3.13-35. The effects of this naturally dynamic river system were dramatically illustrated in September 2015 when about 50 feet of river bank near Akiak eroded in under two hours, threatening Mike Williams, Sr.'s 60 sled dogs. *See*, http://kyuk.org/akiak-man-loses-

about-50-ft-of-land-in-two-hours/ and http://www.adn.com/article/20150923/akiak-dog-team-nearly-killed-rapid-kuskokwim-river-bank-erosion. As reported in the Alaska Dispatch News article:

> Areas along the Kuskokwim are no strangers to erosion, especially in the era of Alaska's climate change. But in Akiak, erosion commonly occurs during breakup season, when the river flows faster, not in late September.
>
> According to [a 2009, the U.S. Army Corps of Engineers erosion] assessment, Akiak is losing about an acre of land a year, and the village's communications hub will be lost within 30 years to erosion.

http://www.adn.com/article/20150923/akiak-dog-team-nearly-killed-rapid-kuskokwim-river-bank-erosion.

BARG 9

This information should be used to provide context to the analysis of barge wake impacts on potential erosion, prop wash scour, and other potential barging-related impacts. Rather than evaluating the Donlin Gold project's impacts in the abstract, we argue that in the context of a dynamic natural system, the relative impacts of the project will be minor, indeed, likely undetectable. This conclusion is supported by the DEIS statement that "On the Kuskokwim River, key factors affecting bank erosion and channel scour are natural flooding caused by spring breakup and intense precipitation during the open-water season." P. 3.13-132. The DEIS also reports that: "Waves from small-boat traffic traveling close to shore have been observed to result in larger and more frequent waves along the shoreline than barge traffic (Camfield et al. 1980)." P. 3.13.132. The evaluation of potential project-related impacts should include a comparison to the impacts of these natural and non-project-related existing uses of the Kuskokwim River.

BARG 6

Barging Impacts – River Use. The DEIS states that: "Extensive gravel extraction and related barging along the main channel and sloughs of the Kuskokwim River take place from Aniak downriver about 47 miles to the Cenaliulriit Coastal District boundary. This area includes the proposed alternative port site at Birch Tree Crossing. Photo interpretive maps indicate there have been well over 100 discrete material sites along this section of river in recent years. Birch Tree Crossing, located about 12 river miles downriver of Aniak, is one of the largest material sites along the river in this area." P. 3.13-35. In addition, smaller boats that tend to travel closer to the shore, at faster speeds, and to be beached near villages and homes are ubiquitous along the Kuskokwim River. This directly relevant information provides important context for evaluating the potential project impacts on current uses of the Kuskokwim River which is ignored by the simplistic statement that barge traffic will increase by 180%.

FISH 6

Potential Impacts on Fisheries. None of the factors[1] identified by the Arctic-Yukon-Kuskokwim Chinook Salmon Research Action Plan (Schindler et al. 2013) as related to the "sharp decline in Chinook salmon abundance and productivity" would be affected by the proposed project. Indeed, the DEIS acknowledges that "Chinook salmon were reported to be harvested in greater quantities in more recent

[1] The factors referenced are: population dynamics; changes in freshwater spawning, rearing, and migration habitat; changes in Bering Sea conditions affecting early marine life cycle; human-caused changes in the ocean affecting salmon growth and survival; loss due to incidental capture by non-salmon marine fisheries; effects of selective fishing and natural mortality on genetic stock characteristics; and effects of pathogens on salmon during upstream migration. Pp. 3.13-39 to 40.

FISH 6 decades, compared to years ago, due to more efficient harvest technologies (e.g., stronger nets and better boats)." P. 3.13-48. Most of the factors affecting salmon productivity are beyond the area that might be affected by the project or are unrelated to conditions that the project may affect. These factors likely dwarf the potential impacts of prop scour, incidental mortality due to barge collisions, or wake stranding.

NEP 7 These examples are intended to illustrate the need for a reassessment of the impact criteria to ensure that they are not so granular that the analysis presented in the FEIS misses the forest for the trees.

PHL 3 Finally, NOVAGOLD disagrees with a number of the effects determinations in the Human Health section of the DEIS. Specifically, the conclusions regarding medium adverse effects related to increases in psychosocial stress, substance abuse rates, family stress and instability fail to consider the positive effects the project will have in each of these areas due to the expected health benefits of locals having good, well-paying jobs and hence, the ability to be contributing members of their respective families and villages. We similarly disagree with the predicted probabilities (10-33 percent) for increases in the rates of suicide, cancer, respiratory disease, and cardiovascular morbidity and mortality. These probabilities are not supported by any data or references applicable to the Donlin Gold project. In revising the analysis for the FEIS, we suggest that the Corps consider Donlin Gold LLC's past track record of bringing meaningful opportunities to improve the lives of residents in the Y-K region. We also recommend that the Corps recognize the social and related health benefits that other natural resource projects like the Red Dog Mine have brought to communities throughout rural Alaska. We further encourage the Corps to consider comments like the following made by Willie Kasayulie in his March 1, 2016 letter to the Corps:

> *Residents will have motivation to give up dangerous vices, which could lead to fewer drug and alcohol related deaths. With fewer deaths in the region, we could experience a brighter future for our communities tormented by tragedies, financial turmoil and broken dreams. The Donlin Gold project has the potential to be a beacon of light for our people.*

NOVAGOLD appreciates the opportunity to present its comments on the DEIS for the Corps' consideration. The company will continue to collaborate with Barrick Gold U.S. Inc. and Donlin Gold to provide the information and analyses requested to complete the robust analysis of the proposed Donlin Gold project in full compliance with NEPA.

Sincerely,
NOVAGOLD RESOURCES ALASKA INC.

Greg Lang
President

NOVAGOLD RESOURCES ALASKA Inc.
Suite 400, 201 South Main Street, Salt Lake City, Utah 84111
Telephone 801 639-0511 • Facsimile 801 639-0509 • www.NOVAGOLD.COM

From: Ed Oberts
To: donlingoldeis, POA
Subject: [EXTERNAL] Donin Gold EIS
Date: Tuesday, May 24, 2016 10:31:54 AM

I support the project!

I have lived in Alaska all my life and was born in Soldotna, Alaska on the Kenai Peninsula. Donlin Gold has done a good job here and in the region working to get the word out about the size and scope of the project.

LAND 4

My only concern is they are proposing to take out the access road and airstrips for the natural gas pipeline. Alaska has millions of acres of land but limited access and very few roads or even trails that connect the areas of the state. We as Alaskans should have the same rights as the rest of the United States and when resource development projects come along too develop access into areas of the state that are a benefit long after the resource development project is closed out.

Again, I strongly support the project and look forward to seeing the benefits it will bring to the region, Alaska and the United States.

Ed Oberts
410 W Riverview Ave Apt B
Soldotna, AK 99669

907-398-8039 cell

International Union of Operating Engineers
LOCAL 302 • Washington and Alaska • AFL-CIO
Daren Konopaski, *Business Manager / General Vice President*
Jason Alward, Vice President and District Six Representative

USACE
RECEIVED
FEB 0 3 2016
AK REGULATORY

Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
CEPOA-RD-Gordon, P.O. Box 6898
JBER, AK, 99506-0898

Dear Mr. Gordon,

Thank you for the opportunity to make public comment on the draft EIS for the Donlin Gold project. While I attended the function at the Egan Center on January 28, I was too far down the list to give public testimony that evening.

My name is Jason Alward and I am with the Operating Engineers, Local 302 and it is our pleasure to support this proposed project.

You may know that IUOE Contractors and Members in the U.S and Canada have built mines and pipelines in both countries and around the world. In Alaska our contractors built Fort Knox, Pogo, and Kensington mines to name a few. IUOE contractors and members built and maintain the Trans Alaska Pipeline as well as much of the infrastructure on the North Slope necessary to drill and produce oil. Our contractors are members of the Associated General Contractors of Alaska. They are Alaskan and many are native owned. Please know that much of the skilled labor necessary to build a gas pipeline and a world class mine in Alaska is here today and more importantly, a model to insure a skilled regional workforce is also here. For over 50 years our contractors have developed a skilled workforce in Alaska through registered apprenticeship. This model offers the best return on investment and is utilized in the U.S and Canada and should be utilized on this project.

It is imperative that the process for Donlin's project keeps moving forward, as the project is vital in supporting the communities of the YK region and also for the entire State during a much needed time of portfolio diversification. The state of Alaska cannot continue to be reliant on oil for 90% of its budget. In addition to a much needed economic boost, this project could help facilitate some basic infrastructure for other critical possibilities in the future. Some of these benefits could be energy relief costs to Western Alaska residents and roads to future resource extraction.

More specific to the draft EIS study, Alternative 1 should not even be considered when we have an excellent partner with an exceptional track record in mining willing to move this project forward. I feel

SVE 1

Sean Jeffries, *President* • **Jason Alward**, *Vice President*
18701 120th Avenue NE • Bothell, Washington 98011-9514
Telephone: (425) 806-0302 • Toll-free: 1-800-521-8882 • Fax: (425) 806-0030
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Washington Branches: Bellingham • Silverdale • Ellensburg Alaska Branches: Anchorage • Fairbanks • Juneau

SVE 1

PAA 4

PAA 5

confident that this project can be performed responsibly and the financial benefits to the people in the region and statewide economic benefits clearly outweigh the negatives. Alternative 3B should also not be an option, as a diesel pipeline with diesel fuel for powering the operation of the mine clearly entails more environmental risk. Additionally, there are clearly higher costs to build, operate, and maintain a diesel pipeline. To the contrary, LNG is clearly the superior option and with excess capacity, it can be used to potentially address the energy needs of the YK region. At this point and time, I don't believe Alternative 3A is the logical choice for LNG trucks if alternative 3B is approved. Typically speaking LNG trucks emit 20 percent less carbon dioxide than diesel trucks and generally cost about 30 percent less to operate. However, the LNG technology is only in the infancy stages. Currently there are only 3500 trucks in the U.S. running on LNG and Japan is building the first LNG marine vessel this year. As such, LNG trucks may be successful for highway trucks in middle America, but how about in the middle of an Alaskan winter at 30-40 below zero? The uncertainties of increased costs, logistics, and technology should clearly be a reason not to support Alternative 3A. As far as Alternative 4A and 6A are concerned, I do not have enough knowledge of the surrounding areas to comment, assist, predict, or speculate about the route selection of the pipeline. The locals in the region should have the largest input on these decisions, as long as costs to do so are not outrageous and the integrity of the pipeline is not compromised as a result of the new location. Lastly, I will defer any comments regarding Alternative mine stacking methods (5A) and leave that up to the Corp of Engineers and Donlin Engineers to figure out when the project gets started.

In closing, for all the above stated reasons I strongly encourage continued support for this project and that we also make sure this project is done with Alaskan's and Alaska Contractors.

Sincerely,

Jason Alward
Operating Engineers, Local 302
Anchorage, AK 99503
907-762-6126

From:	Jason Alward
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Public Comment
Date:	Tuesday, May 24, 2016 11:37:45 AM
Attachments:	Public Comment Donlin Gold.pdf

Thank you for the ability to give public comment on this project.

Sincerely,

Jason Alward
Anchorage, Alaska

Dear Sirs,

SER 5

Thank you for the opportunity to make public comment on the Donlin Gold project.

My name is Jason Alward and I am with the Operating Engineers, Local 302 and it is our pleasure to support this proposed project.

The Donlin Gold Project is projected to produce gold for nearly 30 years. In doing so, it is estimated that nearly 3000 jobs will be created during construction over the first 4 years and 600-1200 jobs will be created over the rest of the mines existence. These will be good paying jobs for people that will develop life-long skills which will enable them to continue living in the region and prosper. This is also a region where few other good opportunities exist. Not only will this project have a significantly positive impact on the economy of the region, but also for the entire state.

It is imperative that the process for Donlin's project keeps moving forward, as the project is vital in supporting the communities of the YK region and also for the entire State during a much needed time of portfolio diversification. The state of Alaska cannot continue to be reliant on oil for 90% of its budget. In addition to a much needed economic boost, this project could help facilitate some basic infrastructure for other critical possibilities in the future. Some of these benefits could be energy relief costs to Western Alaska residents and roads to future resource extraction.

I believe the state has an excellent partner with an exceptional track record in mining willing to move this project forward. Donlin, through the DNR and the EIS process, can be successful on this project. This process can continue to meet the challenges that address environmental, wildlife, and human health concerns. I am also confident that this project can be performed responsibly and the financial benefits to the people in the region and statewide economic benefits clearly outweigh the negatives.

In closing, for all the above stated reasons I strongly encourage continued support for this project. In addition, we also need to make sure this project is done with Alaskan's and Alaska Contractors.

Sincerely,

Jason Alward
Operating Engineers, Local 302
Anchorage, AK 99503
907-762-6126

From:	Greg Roczicka
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin DEIS comments
Date:	Tuesday, May 31, 2016 3:26:40 PM
Attachments:	Donlin comments - 5-27 ed-gr.doc

See attached.

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ONC
ORUTSARARMIUT NATIVE COUNCIL

May 31, 2016

U.S Army Corps of Engineers
Alaska District, CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Re: Proposed Donlin Creek Mine, Draft EIS

Dear Sirs:

The ONC Executive Board would like to express its concerns and opposition to the proposed Donlin Creek mine as put forward through the Draft EIS that has been circulating over the past several months. These concerns include such major items as; 1) inadequate monitoring of mercury emissions and construction/maintenance of a containment dam in perpetuity; 2) unknown effects on out-migrating salmon smolt from increased barge traffic; 3) only brief "snapshot studies" involved in the DEIS determinations of "minimal" effect; and, 4) unaddressed oversight or practical enforcement of the Clean Water Act in bush Alaska such as requirements of bilge/ballast water dumping that could occur from the large increase of ocean going fuel and/or cargo barges associated with the project.

Along with the extreme threat over-all to maintaining the integrity of our subsistence fisheries and water quality in perpetuity that is shared by so many and to which ONC fully subscribes, and other entities with more technical expertise have expressed, this document leaves almost as many significant questions either unanswered, inadequately addressed as minimal impacts, or in some cases, essentially dismissed as "indirect effects", as it attempts to adequately mitigate.

BARG 10

Most glaring in this last category is the "new" Port expansion being proposed at Bethel, whose huge potential impact is addressed only at the most superficial level. ONC raised these issues back when the idea was first presented to the Corps as an independent project back in February & March of 2014 for cargo and fuel storage expansion of the present day Knik Yard Dock. Our questions remained unanswered then, but we trusted, and were assured they would be, by having them included as part of this EIS process. The DEIS has failed to do this!

BARG 10

The navigable channel for large ocean-going freight or fuel barges at the site of this proposed construction is already fairly limited, and has become increasingly so in recent years from accretion that is occurring on the inside of the river bend. The assumption presented in the DEIS that there would be 925 feet of navigable water available from the face of proposed sheet pile bulkhead to the opposite (southerly) riverbank is simply a false one. The google picture in the Draft EIS appears to have been taken during a high water event. The existing and expanding sandbar at this location is not "navigable" by anything but small skiffs even during high water. This proposal in reality would allow approximately only 200 feet or less of navigable channel to

the existing docks that already serve as main ports for goods and services (including bulk fuel storage farms and small barge transfer delivery points) for villages throughout the Kuskokwim River drainage.

Regarding the impeded navigability issue mentioned above, a reverse concern must also be addressed. Should this project result in an accelerated accretion process, downstream access to the 2 existing docks could easily be eliminated for all but the corporate interests of this proposed project in that same 10-20 year time frame. Previous statements that the southerly channel could be used as an alternative access route to Bethel reflects little knowledge or understanding of the high accident potential and difficulty (if not impossibility) involved with docking a large ocean-going freight or fuel barge from an upstream approach in an extremely constricted maneuvering area. The statement is simply unrealistic from the standpoint of safe maritime practice.

Such speculation incorporated into the DEIS does not sit well for confidence levels of its process. And we should not expect or accept that those actually conducting these engineering reviews, study and analyses would have, or be subject to that level of naivety.

BARG 10 Of equal or greater consequence however, is the highly probable effect installation of this bulkhead would have for increasing and redirecting the river current velocity that would inevitably cause increased erosion to occur on the lower end of this river bend: While the DEIS shows and addresses only the immediate footprint of the proposed dock expansion - reflecting the misrepresentation/lack of adequate study mentioned in the previous paragraph. There is a large flood plain area there which encompasses a slough housing many fish camps of our tribal membership (along with several other area villages), and where - at the lower end – resides the community of Oscarville. This slough is relatively protected at present, and accessible at the upstream entrance only during high tide or seasonal high water events.

SUB 16 The change in existing channel velocity and erosion patterns which are highly probable from this project would result in this slough evolving into a much higher stream flow channel through Oscarville Slough, that would subsequently erode these fish camps away along with the entire village of Oscarville in the next 10-20 years. In the past thousands of years of historical use, people could and did simply move their fish camps or entire villages in response to, or avoidance of, naturally occurring erosion. With the advent of new societal land ownership practices over just the last 60 years however, this is no longer available as a realistic option. In addition to Bethel residents, we are aware of at least the village of Oscarville, Kasigluk & perhaps Nunapitchuk, that have maintained historical fish camp sites in the slough that is at risk of becoming a river channel as a long term environmental impact result of this proposed project.

SUB 16 The high potential and probability for loss of an entire village, as well as seasonal fish camps for many others, in the next 10-20 years cannot justifiably be ignored, dismissed or in any other way acceptable to being categorized as an “indirect effect” by the Donlin Gold Project DEIS. The proposed project should not go forward with such matters left unresolved.

BARG 10 In too many respects, the DEIS offers only a cursory review of the impact on the entire river ecosystem as this proposed cargo/fuel handling facility in Bethel exemplifies. And significantly represents a fatal flaw in the DEIS that reflects poorly on the US-Corps of Engineers management of the process. The lack of focus on navigational impacts as they relate to increased erosion, re-channelization and the region’s subsistence economy here is more disappointing in light of the Corp’s national responsibilities in the management of navigable waters.

Sincerely,

Walter Jim, President

US Army Corps of Engineers¶
Donlin Gold Project EIS¶

Please place first-class postage here.

from:

NSB 1

John Oscar
Former Director
— Kusk. River Watershed Council
— Former Director for
Cenaliulriit Coastal Mgt. Program

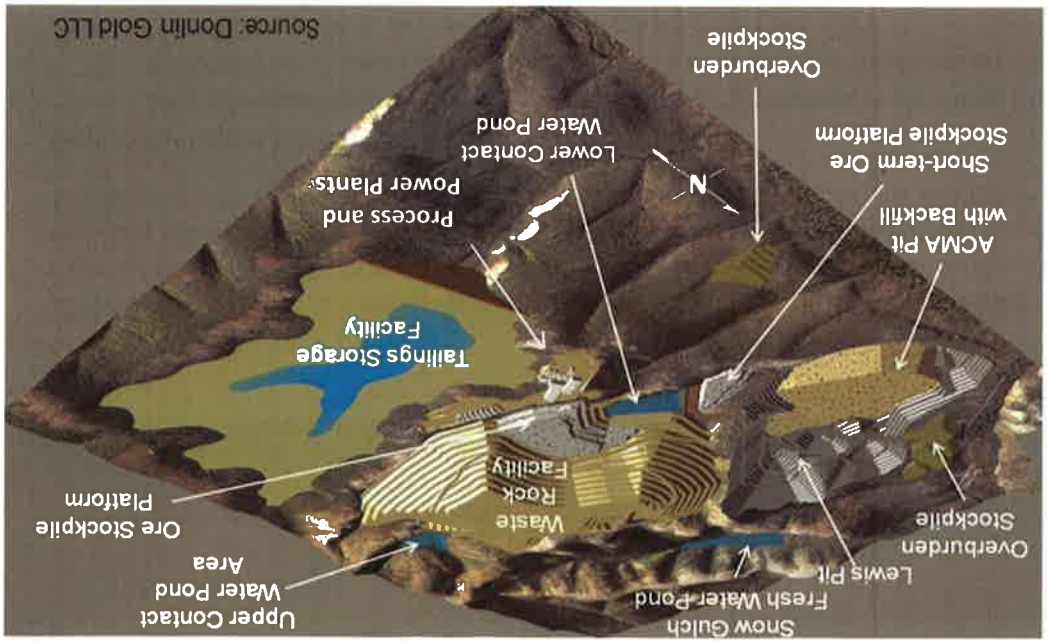
Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, PO Box 6898
Joint Base Elmendorf Richardson, AK
99506-0898

(fold here)

For more information, please visit:
www.DonlinGoldEIS.com

Layout of Proposed Mine Site

The image to the right illustrates the eventual layout of a proposed gold mine, ten miles north of the community of Crooked Creek on the Kuskokwim River in southwestern Alaska, for which the US Army Corps of Engineers is preparing an EIS. The project, proposed by Donlin Gold, LLC, includes a natural gas pipeline and transportation and components. You may use this mail-in form to submit comments.



US Army Corps of Engineers

Donlin Gold Project EIS

Comment Form

The Corps welcomes your comments on the Draft Environmental Impact Statement. If you'd like to mail your comments, please feel free to use this form. Write your comments below then fold this page in thirds so the mailing address shows. Additional pages can be inserted. Remember to affix first class postage. You can also email your comments to POA.donlingoldeis@usace.army.mil, or fax them to (907) 753-5567.

Important topics for comments would include:

- *Comments and questions about the accuracy of information in the Draft EIS.*
- *Comments and questions about the adequacy of methods or assumptions used.*
- *New information to be considered in preparing the Final EIS.*
- *New reasonable alternatives or revisions to current alternatives.*
- *Additional measures to reduce impacts (mitigation).*

Seppi, Bruce <bseppi@blm.gov>

EIS Comments

J O <qatuaq@yahoo.com> Mon, Feb 1, 2016 at 9:11 PM
To: bseppi@blm.gov
Cc: ldemer@alaskadispatch.com

EIS Public Hearing / Bethel

February 1, 2016

Attn: ANILCA 810 Subsistence Public Hearing

BLM-Anchorage Field Office

4700 BLM Road

Anchorage, AK 99507

Subject: Invasive Species and Critical Habitat Areas

The project is upriver and naturally the watershed flows down river. Some base line data had been done mainly to the proposed area.

INV 1

What steps do you propose to mitigate the possible introduction of invasive species by transport vectors and their impacts to ecosystems downriver?

1. Barges will release their ballast along with organisms, other non-native fish, and water-born plants (i.e, elodea, rock snot, shellfish). I understand that there will be in-river barges that will transfer the equipment from Bethel to the barge landing upriver. While sea-bearing barges will make their stops in Bethel. Will there be monitoring in the Bethel area? And are you planning to do a monitoring program in the Bethel area?
2. Thousands of tons of construction equipment, materials and supplies being brought in by both land and air cargo on a yearly basis will be done for decades. Including the current air cargo that are landing at the site. I understand that there will be monitoring in place. The guarantee of insects, plants, rodents, seeds and airborne infestations is of concern. What current steps are there in place today with the monitoring of the current traffic at the site?
3. The potential impacts to subsistence Native Resources and critical habitat areas important for fish and wildlife is another concern. What steps will there be to correct these invasive species once they have taken hold?

INV 1

Not everyone in this region will be hired by this project. There will be people still living off fish and wildlife decades from now, while those who worked on this project will be

INV 1

looking for work and continue to supplement their food off lands and waters once the site closes. And maybe with less of a resource for everyone if corrective measures relating to invasive species are not in place now.

Quyana,

John Oscar

PO Box 2420

Bethel, AK 99559

Email: qatuaq@yahoo.com

Sent from my iPhone

From:	Glenn Ruckhaus
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Monday, May 23, 2016 4:55:00 PM
Attachments:	DEIS comment letter.pdf

Glenn Ruckhaus| **President**
Owl Ridge Natural Resource Consultants, Inc.
6407 Brayton Drive, Suite 204 | Anchorage, Alaska 99507
Direct: 907.891.7265 | **Fax** 907.344.3445 | **Mobile** 907.830.7756
glenn@owlridgenrc.com|Blockedwww.owlridgenrc.com
Confidentiality Notice

May 26, 2016

Don P. Kuhle
U.S. Army Corps of Engineers
CEPOA-RD
P.O. Box 6898
JBER, AK 99506-0898

Dear Mr. Kuhle:

We have reviewed the Draft Environmental Impact Statement (DEIS) for the Donlin Gold Project. Overall, the DEIS appears to document a thorough evaluation of the potential effects of the various project alternatives. We strongly support this project as Donlin Gold has provide detailed science for the evaluation of environmental impacts and demonstrated its commitment to the local communities of the Yukon-Kuskokwim area through its hiring practices and ongoing education and engagement. Approval of this project as proposed will enable continued improvement to local economy that will enable the communities to continue to live the subsistence lifestyles they enjoy. The most productive subsistence lifestyles in Alaska are those that are combined with a strong local economy. In addition to the broad comment of support for the project we offer the specific comments below for your consideration.

SER 15

1. On pages 3.18-36 and 3.18-39, the discussion notes Donlin Gold has expressed a commitment to hiring qualified Y-K region residents during construction (operation) of the mine and other project components. It is important that these discussions disclose that Donlin Gold not just expressed a commitment to hiring qualified Y-K regional residents; rather Donlin Gold has demonstrated a commitment to hiring qualified Y-K residents. Donlin Gold filled many of the jobs available during exploratory and resource data collection efforts with Y-K residents and there is ample data to support this. We feel it is important in the evaluation that readers should understand that Donlin Gold has done more than just "express a commitment to hire qualified Y-K region residents."

GAS 1

2. The discussion of energy effects under Effects on Supply of Public Goods and Services on pages 3.18-47 to 3.18-48 appears to trivialize the Donlin Gold decision to oversize the natural gas pipeline to provide an opportunity for other entities to use the excess capacity that would exist. With an expected 30-year life of mine project, the excess capacity in the pipeline provides a real opportunity for Y-K residents to take advantage of the proximity and availability of natural gas.

NEP 7

3. Section 3.13.3.2. 5, Summary of Impacts for Alternative 2 that starts on page 3.13-165 identifies a number of moderate and major effects to Fish and Aquatic Resources that are not supported by the detailed discussion presented earlier in Section 3.13.3.2. In particular, the summary identifies various impacts to salmon from loss of habitat and barging as moderate or high. The specific discussions earlier in Section 3.13.3.2 identify effects mostly in the range of negligible to minor. How do the effects increase to moderate or high in a summary section when they are not supported by the detailed scientific discussion?

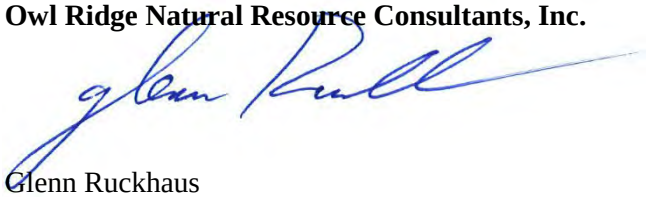
BARG 13

4. The discussion at the top of page 3.13-129 lists approaches that were incorporated to reduce potential impacts of vessel traffic and fuel or chemical spills on the Kuskokwim River. A primary factor not mentioned here is the natural gas pipeline. Donlin Gold's decision to add the pipeline to the mine project substantially reduced the amount of fuel that Donlin Gold would have to barge up the Kuskokwim River, which effectively minimizes the effects of barging on fish and people that rely on the River. The connection between the natural gas pipeline and minimization of barge traffic on the River should be made clear to the reader. This connection is important to a full understanding of the extent of efforts that Donlin Gold made to minimize barge traffic and associated adverse effects. This perspective is especially needed in light of the medium- to high-level of intensity impacts identified for barging in the effects summary.

We appreciate the opportunity to review the DEIS and look forward to your responses to these comments.

Regards,

Owl Ridge Natural Resource Consultants, Inc.



Glenn Ruckhaus
President

Public Comment on the Donlin Gold Project Draft Environmental Impact Statement

By George Owletuck, MA

Egan Convention Center, Anchorage, AK
January 28, 2016

This commentary is offered as an individual from the region, born in Bethel and raised in subsistence lifeways hunting, fishing and gathering at Marshall, AK. This commentary provides a vision to demonstrate how the Donlin Creek project could be leveraged to address the need for infrastructure and low cost energy in the region.

PAA 38 The construction of a natural gas pipeline to Donlin Creek could be extended to add critical energy infrastructure to the region. A cost-benefit analysis should be conducted to extend this base infrastructure to the proposed Birch Tree Crossing Port on the Kuskokwim River and be evaluated as a potential site for mega-wattage electric power generation using electric inter-ties and as a potential site to produce LNG for distribution to the region. Local LNG production will reduce Diesel Barging with the use of LNG-Powered Haul Trucks, which would reduce impacts to fish and subsistence fishing in narrow reaches of the Kuskokwim River.

SUB 23 Local Traditional Knowledge is the best source for unbiased, authoritative expertise in the analysis of subsistence impacts by this project. Any assertions about potential impacts to subsistence should originate from the people who live in the region, not urban agencies with conclusions about subsistence impacts unsubstantiated by baseline data. Any subsistence analysis on ANCSA land under Section 810 of ANILCA should be done by the land owners, not by US Bureau of Land Management bureaucrats who can provide analysis that grossly overstates the proposed projects impacts on subsistence. The Draft EIS completed by the Corps of Engineers better reflects the potential impacts of the project. However, no one understands the importance of subsistence and the economic benefit of this project better than the people who live in the region.

SER 14 Annual Airport Operations at the Mine Airstrip are estimated at 5,154 total annual flight operations for the construction phase and 1,718 flight operations for the Operations phase. These flight operations should be viewed as an opportunity for partnership with the Yuut Yaqungviat flight school in Bethel, AK to recruit, train and hire local residents to begin careers in aviation.

GAS 2

The Donlin Creek ore-body is estimated to produce 34 million ounces of gold over 25 years valued at $37.9 Billion at a $1,114/oz spot-price for gold on January 2016. Industry, the State of Alaska and the federal government should consider using public-private partnerships to underwrite the existing lack of infrastructure in the region for low-cost energy. Federal/State legislation should be introduced to provide for industry tax-credits and other incentives to extend the gas pipeline beyond the Birch Tree Creek Port site, and to underwrite sub-regional mega-wattage electrical power plants to serve multiple villages using high-power electric interties.

Finally, it is noted with gratitude the efforts of the US Army Corps to provide transparency and engage the public on commentary for the Donlin Gold Project Draft Environmental Impact Statement. Thank you for the opportunity to comment.

From:	donlingoldeis, POA
To:	Craig, Bill
Subject:	FW: Donlin Gold Draft EIS comment
Date:	Thursday, February 25, 2016 6:48:40 AM
Attachments:	image001.png Public Comment on the Donlin Gold Project Draft Environmental Impact Statement.pdf

-----Original Message-----
From: George Owletuck [mailto:GOwletuck@calistacorp.com]
Sent: Wednesday, February 03, 2016 10:36 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

George Owletuck, MA

Government Relations Liaison

CALISTA CORPORATION

5015 Business Park Blvd, Suite 3000

Anchorage, AK 99518

Phone: (907) 275-2800

<Blockedhttp://www.calistacorp.com/>

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"22 CFR Part 125.4 (b) (9) applicable."

Patricia Partnow
2936 Captain Cook Estates Cir
Anchorage, AK 99517-1972

ANCHORAGE AK 995

28 JAN 2016 PM 1 L

US Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

99506$0898

USACE
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JAN 2 9 2016
AK REGULATORY

Patricia H. Partnow, Ph.D.
2936 Captain Cook Estates Circle
Anchorage, AK 99517

January 27, 2016

Testimony for Donlin Gold before the U.S. Army Corps of Engineers

I wish to testify in favor of Donlin Gold's application to undertake mining operations in the Yukon-Kuskokwim region. I am familiar with several aspects of their work, aspects that point to responsible development.

SER 15 First, on the human front, Donlin is committed to hiring local people in an area of Alaska that is sorely in need of work opportunities.

PUB 2 Related, Donlin has made huge efforts to involve the local community in the project from its very beginnings. This has taken the form of uncounted trips to villages in the area and meetings in both English and Yup'ik, as well as training for company personnel in the Anchorage office on the cultures of the people who will be most affected by the mine.

Additionally, Donlin management is very aware of the importance of subsistence and, as far as I can tell, is making painstaking plans both to accommodate future workers' subsistence schedules and to ensure that the resources themselves remain healthy and numerous.

Second, on the environmental front, Donlin's plans, as far as I can tell, are environmentally sound in terms of containment of byproducts and the production process itself. A huge amount of planning has gone into the project. They are not trying to rush it through, but seem to be willing to take the time to ensure its benefits to company shareholders, workers, and local residents.

Finally, I have seen literature from the company which demonstrates its willingness to be transparent about plans and progress. This is a project that can withstand public and professional scrutiny.

Smith, Neal

From: Judy Patrick <judy@judypatrickphotography.com>
Sent: Monday, April 25, 2016 2:14 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Comment in strong support of Donlin Mine project Alternative 2

I am in full support of the development of this mine. I have watched Donlin Gold (for several years!) carefully consider each step of the various phases of this project from the watershed to village concerns to far reaching transportation and energy issues. I strongly believe that the development of this mine will only bring positive benefits to the Southwest Alaska region and Alaska Native people statewide.

SER 10

When I think of all the good that has come out of the Red Dog Mine in Northwest Alaska, I can only assume that the same benefits will occur in the Southwest Alaska region after the construction of the Donlin Gold project. Some of these benefits include good paying local year-round jobs which provides steady income which contributes to stable families which leads to a decline in drug and alcohol abuse which leads to a reduction in child abuse and molestation, and it goes without saying that is a benefit that no social program can accomplish at any cost. So it's not just a question of economics, but the positive social impact is priceless.

Please allow, no encourage, development of this mine and it's necessary infrastructure especially the gas pipeline which will provide additional future economic opportunities (not necessarily mining) in the region.

Thank-you for your consideration,
Judy Patrick

Judy Patrick Photography
511 W. 41st Ave. Suite 101
Anchorage, AK 99503
(907) 258-4704

judy@judypatrickphotography.com

From: Bellion, Tara
To: Evans, Jessica
Subject: FW: Comments for Donlin Gold Project DEIS
Date: Friday, May 27, 2016 11:22:28 AM
Attachments: Donlin DEIS.pdf

-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Friday, May 27, 2016 11:11 AM
To: Isaacs, Jon; Bellion, Tara
Subject: FW: Comments for Donlin Gold Project DEIS

-----Original Message-----
From: Mike Heatwole [mailto:mikeheatwole@pebblepartnership.com]
Sent: Friday, May 27, 2016 11:08 AM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>
Subject: [EXTERNAL] Comments for Donlin Gold Project DEIS

Submitting comments on behalf of the Pebble Partnership.

Mike

Mike Heatwole

VP Public Affairs, Pebble Partnership

(907) 339-2600

It all begins with mining!

THE pebble PARTNERSHIP

May 27th, 2016

Keith Gordon, Project Manager
U.S. Army Corps of Engineers
Alaska District CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898
Via email - POA.donlingoldeis@usace.army.mil

Dear Mr. Gordon:

We write today in support of allowing the proposed Donlin Gold project to move forward and specifically in support of Alternative 2 outlined in the draft Environmental Impact Statement (DEIS). Responsible development of a gold mine in this region will provide jobs, economic activity, contributions to the landowner, and revenue for the state of Alaska. Increased mining activity in Alaska will help diversity the state's economy and provide much needed employment in the Yukon Kuskokwim region.

An estimated 3,000 jobs will be created during the approximate four-year construction phase, and between 600 to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the economy of the region and the state.

The Donlin team has committed to training and hiring locals to staff their mining operation. To date, they have "walked their talk" by staffing their exploration work with people from the region. Alaska's mining industry offers some of the highest year-round wage opportunities and the Donlin project will provide this opportunity for the Yukon Kuskokwim region. As noted in the DEIS, lack of development will have a negative social and economic impact on the Yukon Kuskokwim region, particularly as Alaska's economy continues to retract. A responsibly developed project in this part of Alaska could bring decades of good paying jobs to this economically depressed region.

SER 1

To date, the project has had the opportunity to present a comprehensive plan for responsibly developing a mine and to have the plan thoroughly reviewed under the National Environmental Policy Act (NEPA) process. This objective, scientifically based NEPA process resulted in the DEIS now out for public review and comment. All projects should have the opportunity to be evaluated via the NEPA process.

Alaska and the U.S. have a rigorous permitting and review process for mining projects. Proponents entering this process must meet high environmental standards. Upon reviewing the DEIS, we believe the Donlin project can meet these standards and successfully co-exist with clean water, healthy fish and wildlife resources and the traditional ways of life within this region. We support the advancement of this important project.

Respectfully,

Mike Heatwole
Vice President, Public Affairs

3201 C Street, Suite 604 | Anchorage, AK 99503 | 907-339-2600 phone | 1-877-450-2600 toll-free | 907-339-2601 fax | www.pebblepartnership.com

Smith, Neal

From: Joshua Peirce <peirceak@gci.net>
Sent: Tuesday, April 26, 2016 10:16 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Attachments: Draft Donlin Gold EIS comments.docx

Hello,

Attached is a word document containing draft EIS comments for Donlin Gold proposed mine, etc.

Kellie

PO Box 64
McGrath, AK
99627

April 26, 2016

US Army Corp of Engineers
Draft EIS-Donlin Gold

Dear US Army Corp of Engineers,

I am writing regarding the proposed Donlin Gold Mine and would like my comments entered into the record for the draft EIS related to the proposed mine.

My bio includes: a Master of Science degree in Wildlife Biology, Bachelor of Science degree in Terrestrial Ecology, commercial pilot, landowner in the Farewell region, resident of McGrath, small business owner, subsistence user, hunter, trapper, wildlife photographer, recreational user, mother, wife, and gardener. Formerly held positions include but are not limited to Land Condition Trend Analysis Coordinator for the US Army Alaska, biologist in Alaska for the National Park Service, US Forest Service and Alaska Department of Fish and Game, private consultant to the federal government related to wildlife and natural resources management, grant writer for the McGrath Tribe, and data analyst for the Iditarod Area School District.

My comments focus on the proposed pipeline and some are specific to the section of line routing through the Farewell area. The potential impacts from this project are many. Below details an overview which is not all encompassing.

-permanent loss of wilderness value of the land
-permanent loss of scenic value of the landscape
-threats to wildlife
-diminished human experience
-increased human use
-increased competition for limited resources
-destruction of pristine landscape
-contaminants to water systems
-invasive species introduction
-replacement of native species with allegedly native species- but those that do not currently exist in the habitat (reseeding of runways)
-noise pollution
-disturbance/negative influences on critical fish spawning habitat in the upper reaches of the drainages that exist on the north side of the Alaska Range in the proposed development area
--erosion issues

-fault zone issues
-negative consequences to cultural entities that value wildness
-threats to subsistence lifestyles
-threats to the overall ecology of the region (plants, animals, birds, wetland habitats, soils, hydrology, mountain ecosystems, some mentioned above)
-impacts to recreational users, subsistence users, commercial guide operators, hunters, trappers, and residents that use the area
-disturbance within ecological transitional zone habitats, rich in biodiversity, the current proposed routing runs right through this unique area

I will expand upon some of these concerns in the below comments.

Alaska is a wild place. That is what draws people from all over the world here. The human psyche yearns for wildness, peace, solitude and an existence more primitive than what we have become. People pay large sums of money to have a chance to spend time in the wilderness, and that is why many people, of all user groups, come to Alaska and the Alaska Range. Some come to recreate, some come to be alone, some come to bag the big bear, moose or Dall's sheep, while others come to pick berries or hunt or trap for subsistence.

VIS 1

There is a thorough and ample supply of research and data that have been collected on the negative consequences of trails, roads and development built into wilderness areas. Our lower 48 neighbors know all too well what carving up wilderness does to a landscape- it no longer is wilderness. This pipeline, if allowed to be put through, will obliterate the scenic value of the Farewell area and the Alaska Range. People the world over seek out this beautiful region because of its wildness, and to destroy it with a large pipeline and permanent swath running through the landscape is a sad and disappointing proposal indeed. We have people that travel all the way from Norway, Sweden, Germany, Italy, Spain and other European countries to use the Farewell area, the region surrounding the proposed development and the Iditarod Trail that have long since lost most if not all of their true wild areas in their homelands. I have talked and visited with many of these people who are astounded at the awesome resource of wilderness Alaska still holds on to. This pipeline will ruin that wilderness value. The scenic value will be destroyed as well, as who thinks an area is wild when there is a 315 mile long piece of man-made piping in the ground and a permanent swath of man-made, cleared, land to maintain the pipeline right of way? Many guides are not in support of the pipeline either, their clients come from all over the world as well and seek out a true nature experience. Many are hunters seeking game, but most desire the wild experience of being in an untouched land, not altered and manipulated by people to the degree that this proposed pipeline will. TV reality shows abound on Alaska, most focusing on the wild aspects of our great state. There is a reason. People are intrigued about Alaska, her remote areas, breathtaking scenery and undeveloped landscapes.

SUB 8

I have grave concerns about increased numbers of people who will definitely come when the proposed trails, roads and airstrips are developed by Donlin Gold. The people of McGrath, myself, as well as our neighboring communities, live here because it is wild. We subsist off the

SUB 8

land and hunting and gathering from the land is our lifestyle. Farewell and the Alaska Range is our backyard. Many residents here do not want the pipeline and are very concerned about the impacts to the land. The Farewell area is increasingly getting more and more pressure from hunters every year. But this use is limited by the difficulty in accessing the region. Once roads and trails are cut, people will come, crowding the area, putting increased pressure on resources and game populations.

PHL 14

Residents in McGrath and downriver worry about leakage to the massively large and deep proposed tailings pond at the mine site. What will this do to the salmon? How will it impact the other critical fisheries resources people's lives so depend upon? What about the birds the stop over to rest on the pond? The draft EIS states that impacts will be minimum because bird exposure should be minimum. It goes without saying the chemicals used in mining are toxic and deadly. It will not take much exposure to be harmful. If a person were exposed only once to a heroin injection, that is only once and could be construed as minimum exposure, but is it serious? Yes! Furthermore, the track record is bleak for mines being able to successfully contain their waste. Lawsuit after lawsuit have been through the US courts over mine infrastructure failures, leaks, and subsequent spills that leach toxic chemicals, infiltrating water systems. I am not confident that our technology is good enough to prevent a leak. To me, it is not worth the potential damages that could happen.

HAB 1

The pipeline routing goes through extremely sensitive habitats, relatively untouched by humans to date. Physical disturbance of the delicate soils in the range is a concern. Vegetation is slow to regrow in the region, growing seasons are short, the climate is harsh, and the winds are fierce. In my former capacity as a LCTA Coordinator for the US Army, I collected and analyzed data on land disturbance and habitats on military lands in Alaska. It is very difficult to revegetate and repair Alaska landscapes once damaged. Alaska's environment is not like the fertile rich soil types and longer growing seasons of many regions in the USA. It is fragile and does not repair easily. Some areas, such as wetlands, do not recover from disturbance and what was once wet tundra can quickly become a permanent bog pond after just a single pass from heavy equipment.

SUB 8

The subsistence users use the Farewell area to hunt, trap, fish and collect culturally important berries and plants. Critical fish spawning habitat in the upper drainages of the rivers that flow out of the north side of the Range exist and could be negatively impacted by the proposed development.

WILD 1

The proposed routing of the pipeline through the region near Farewell is a terrible routing, ecologically speaking. This area has some of the richest species diversity within Alaska. The Farewell area encompasses burned spruce forest, wet and dry tundra, mountains, rivers and birch/spruce forests. It also includes the transitional zone- an ecologically rich and diverse area for plant species and animal species. The Farewell area is a critical area for wintering caribou as high winds throughout the winter blow snow off vegetation allowing herds to forage successfully. One of the few, free ranging herds of American Bison exist here year round. This herd is unusual because it is genetically a very "pure" bison herd. The majority of bison

WILD 1

remaining in America have mixed with cattle, so this herd represents the closest living relatives to our original plains bison that historically so prolifically roamed our great nation. I am concerned by the proposal to reseed “with native grass species” the airstrips and disturbed areas overlaying the pipeline. If this is done it will be a beacon for the bison, which may at first glance seem desirable. But if they concentrate in the seeded area, as they likely will since grass it is a preferred food, they will likely become “sitting ducks” for the many predators in the area. The bison are a herd animal, but are dispersed and exist in small herds in the area. Putting in freshly seeded areas changes the dynamic and existing nature of their habitat. Seeded areas will be like a dinner bell to them, could increase likelihood of disease, crowding, overgrazing and increased predation. Salmon congregate in small streams to spawn and in bear country, they are heavily preyed upon. A similar scenario exists by reseeding areas with native grass species, if the bison congregate regularly due to new forage, they will be an attractive meal for wolves, bears and other predators.

LAND 5

For personal reasons I am concerned about the direct impact to landowners as a result of the proposed pipeline. The current pipeline routing essentially goes right through the front yard of my land in Farewell. I have saved my entire life, and worked hard to fulfil a dream I have- of one day building a small cabin in the wilderness. I have the land, and the flagging tape is in place to build my remote dream cabin, but if the pipeline goes through, this area will not hold the same value. The scenic value to me will be destroyed. My idea of being in my dream cabin has never included watching bulldozers plow a swath of destruction near my land as I rock on my rocking chair on my front porch. Other land owners have land in the Farewell area due to its wildness and great beauty. We desire to keep it that way.

The proposed Donlin Gold mine, pipeline and infrastructure are enormous in scope and potential impact. I stand confused, wondering why such massive money, resources and time have been spent on this project already. Yet money talks. The operational life span of the mine is incredibly short time wise, estimated at <30 years. Why such enormity of effort is being put forth to construct a lengthy pipeline, mine, camps, airstrips, and other infrastructure as well as incredible effort and money on the taxpayer for the federal government to review and conduct the EIS is astounding when the sole drive here is the acquisition of money for a mere handful of people. Again, money talks.

Could the Donlin Gold mine, pipeline and infrastructure be developed in a way that would not adversely impact the wildlife, subsistence, ecological entities and wildness of the areas involved, among others? That is the multi-billion dollar question at this point.

SVE 5

Is it worth it for a handful of people to gain great wealth at the expense of those people and the natural resources that will be impacted by the proposed project? No, it is not. Is it worth the cost to people’s livelihoods? Their way of life? No, it is not. This proposed project is short lived, benefits very few, and the impacts are extreme and numerous. The end result will be a permanent scar on the land, with potentially abundant long term consequences, simply so a relatively few people can profit economically. Yes some jobs will be created, for a little while, yet is that

enough of a bargaining chip to convince locals to look the other way? Let's keep the Farewell area beautiful. Let's keep our water clean. Let's think about our fisheries and the importance of cultural and subsistence ways. I was surprised to discover while talking with one of the mine owners at a recent meeting, that some involved in wanting to develop this project have never even been on the ground to see the great resource- the beauty of the land, the quiet stillness of a wild area, far from cities, masses of people and the rush of modern society. This discovery caused a sense of wonder within me, it made me even more grateful for the knowledge I have gleaned from Alaska's wilds, and hopeful those who have not learned her ways would come to know them.

Kellie Peirce

From: Amy Peloza
To: donlingoldeis, POA
Subject: [EXTERNAL] INFO: Support for Donlin Gold Draft EIS Alternative 2
Date: Friday, April 29, 2016 8:21:53 AM

USACE~

Please consider my comments below in support of Alternative 2 of Donlin Gold's Draft EIS:

The Donlin Gold project could produce gold for 27.5 years, while providing well-paying jobs in a region where few other opportunities exist. Donlin Gold's project description demonstrates an understanding of environmental concerns, and features vigorous environmental management principles. Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources. As an Alaskan who's worked in the environmental field, I can attest to the State of Alaska Department of Natural Resources and Alaska Department of Environmental Conservation enforces stringent regulations overseeing mining activities statewide that effectively protect the environment, wildlife, and human health.

- New mining operations in the area, should they come to fruition, can be of great economic benefit to Alaska and local communities, as well as Alaska Native corporations and shareholders. This project will likely provide responsible economic prospects for this region and for Alaska, while protecting the subsistence resources. Also consider the social and economic benefits of this project to the region, state, and to the nation;

SER 2
- Through ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations.

SER 11
- The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the YK region and fund traditional subsistence activities.

SER 1
- Rural Alaska is being impacted most by the reduction of state and federal dollars. Alternative 1 (the no project alternative) will likely have a negative impact on the YK region.

IDIT 2
- The proposed pipeline in Alternative 2 is designed to minimize impacts on the Iditarod National Historic Trail. There would be insignificant impacts to the trail and no impacts to the Iditarod Sled Dog race.

SER 5
- The project will offer long-term opportunities for rural Alaskans to develop skills and to enable them to not only continue living in rural Alaska, but to prosper. An estimated 3,000 jobs will be created during the approximate four-year construction phase, and

SER 5

between 600 to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the economy of the region and the state.

Thank you,
Amy Peloza

From:	Danny Seybert
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Tuesday, May 31, 2016 11:05:21 PM

To whom it may concern

PenAir is a locally owned company from Bristol Bay that has successfully run a business in rural Alaska for more than 60 years.

NSB 1

We understand responsible resource extraction both renewable and non renewable and we believe that the plan that Donlin Gold (I have been to the site) is a responsible plan and we support Donlin Golds plan to build a mine.

Danny Seybert
CEO
PenAir

Smith, Neal

From: Craig, Bill
Sent: Tuesday, April 26, 2016 8:19 AM
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: [EXTERNAL] Donlin EIS

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Red Category

-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Tuesday, April 26, 2016 5:48 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin EIS

-----Original Message-----
From: steven perrins [mailto:theperrins@rainypasslodge.net]
Sent: Monday, April 25, 2016 11:47 PM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>; Andraschko, Amanda M POA <Amanda.M.Andraschko@usace.army.mil>
Subject: [EXTERNAL] Donlin EIS

Mr.Keith Gordon,
My name is Steven Perrins and I am the owner of Rainy Pass Lodge In the Alaska range. I am in the direct path of the proposed gas line to the donlin mine site.
I have submitted letters in the past and will attempt to get those copies to you to be a part of the EIS comments. I am headed to Kodiak with a client for one of our bear hunts. Unfortunately I am having serious problems with my personal computer and not able to get access on it to my email and back up information. I am not back from Kodiak until after the proposed deadline for comment. I would like to request that you allow myself and the APHA and the new owners of kiska mine site to submit comments into May. Please.
In brief I have serious concerns about several issues, to name just a few for now:

SER 29
1.) I have asked numerous times of Donlin as to how they plan to take care of our business interruption as the construction will put us out of the guiding business for at least three years. We are more than 1/2 booked for 2018 already and commitments for 2019 and 2020 already. There response has only been that "historically they have taken care of the people in their path". This is not an acceptable answer.

PAA 28
2.)The proposed air strips in our area- Happy river and three mile, would be a huge tragedy to our business and CAN NOT be put back to unusable after they leave. They are not needed as the Whiskey Bravo strip as well as the Puntilla strip would suffice and be upgradeable to accommodate all there needs and therefore not do any more serious detrimental impact to the area and the wildlife for generations to come. Please do not let them put any new airstrips in these areas or anywhere on this side of the Alaska range. This is a huge detriment to the access to this area and would kill our business forever.

WILD 2

3.) The wildlife in this area is going to be negatively effected by all the construction and Ptarmigan valley is a valuable food source and somewhat safe haven for the game in this area of the Alaska range as it is surrounded by mountains on all sides.
The salmon streams are a huge source of feed for the bear and wolf and many other species in the area. The ungulates are finally coming back to their prior numbers and this impact will be a major set-back. This needs to be studied further as to the long term impact the construction may have.

4.) I have several other major concerns, but as I am leaving for Kodiak in the morning, I ask that you allow me to submit further as soon as I return from this hunt approximately May 8th. I would be able to submit a much more detailed concern on my behalf as well as the APHA no later than May 15th.
I will check email in the morning via another computer before I depart, and will have my wife check email while I am gone from another server, until my computer is repaired. Please advise.
My cell service will not work once I am in the field in Kodiak.
Thanks-You
Sincerely,
Steven H. Perrins
The Perrins' Rainy Pass Lodge
907-230-6093 cell
907-770-6304 lodge seasonal

USACE
RECEIVED
MAY 2 6 2016
AK REGULATORY

MAY 20, 2016
P.O. BOX 51
MARSHALL, ALASKA
99585

TO WHOM IT
CONSERN

TO U.S. ARMY CORPS OF ENGINEERS
I WORKED IN DUNLIN GOLD MINE FOR TWO YEARS. AS A HEAVY EQUIPMENT OPERATOR! I WORK FOR NIGHT + DAY SHIFT. LEONARD MORGAN AND BILL BIEBER HIRED ME AT BETHEL INTERVIEW. I WAS LAYED OFF! BUT I LOOK. ~~FOR~~ WORK HARD! WE HAD THE BEST SAFETY CREW! THE WORKERS DID IT IN OUR REGION! THE PROJECT MEANS WORK FOR US. I AM 63 YEARS OLD BUT I AM A CERTIFED HEAVY EQUIPMENT OPER. AS YOU KNOW THE STATE CUT BACKS REALY HURT US NATIVES OR NON NATIVES LIVING IN RURAL ALASKA.

SER 5

YOU CAN CALL ME ANY TIME MY PHONE IS 679-2015 CELL. LAND LINE 679-6273 BECAUSE HIGH FUEL PRICES AND GAS PRICES! NOT MENTION AVEC. LIGHTS YOU KNOW SOME PLACES PROPANE IS 300 BUCKS. TRY LIVE LIKE US. I TELL YOU HOW IT IS.

I WOULD TELL U.S. ARMY CORPS OF ENGINEERS! IN PUBIC. COMMENTS, AND PHONE CALL. I AM NOT AFRAID TO TALK YOU CALL ME OK. I TELL YOU.

I AM FORMER EMPLOYEE
MR. MIKE P. PETERS

U.S Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

From:	Pilot Station Council
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Pilot Station Traditional Council comments
Date:	Tuesday, May 31, 2016 4:07:04 PM
Attachments:	Comments to Donlin Gold 053116.pdf

Dear Sir,

Attached is comments from Pilot Station Traditional Council for the Donlin Gold draft EIS.

Thank you,

Elias Kelly
Council Secretary
Pilot Station Traditional Council

Pilot Station Traditional Council
PO Box 5119
Pilot Station, AK 99650
Phone: (907) 549-3373 Fax: (907) 549-3301 **Rex Nick; President**

Mission *Support our community with our strengths and values.*
Vision *Respect the customs of our way of life, enrich the self-determination of our culture, and empower our community with our traditions.*

May 31, 2016

Comments to Draft EIS Donlin Gold Project

Pilot Station Traditional Council is pleased to present comments and recommendations to the proposed EIS Donlin Gold mine projects. In western Alaska, there are no large existing mining sites. Donlin Gold would be the first.

Mine Site - Tailings Storage Facility

Constructed during phases, the proposed height of the tailings dam at completion will be 464 feet.

As documented in some large scale mine operations, the structural failure of Tailings Storage Facility (TSF) has the most devastating negative impacts to environmental, economic, socioeconomic, and wildlife and fisheries.

The proposed tailings dam footprint would be excavated to bedrock with use of a liner for the TSF. Structural integrity of the tailings dam footprint constructed of compacted rockfill does not provide any assurance of tailings dam failure. The presence of silt and fine grain sandy soil, mixed with clay, is prevalent in the proposed project areas. Mixed with any amount of water, the plasticity of this fine material is susceptible for slippage, soil creep and erosion, more so with the addition of slope and pressure of the proposed size of the TSF. Although the use of a liner provides some assurance of containment, the recommended precautions taken are not assurances for TSF failure.

GEO 6

In comparison, the use of a Dry Stack Tailings Facility (option 5A) would not only provide a larger footprint for construction. This process also requires additional operation procedures, equipment use, and processing requirements that have never been tested or used in Alaska. These extra procedures provide an additional risk for mechanical and operational failure in addition to risk of failure of the TSF.

Similarly, the height of the TSF dam from either option is expected to be well over 400 feet. In the EIS, the highest height of any current TSF dam in Alaska should also be included as a reference. Similarly, a large scale contour map of the proposed mine site and location of the TSF is difficult to find in the EIS.

DAM 9

MIT 30 For either option 2 or 5A construction of the TSF dam, as with centerline designs, additional rockpile fill onto the tailings dam does not guarantee assurance of structural integrity. Most of the bedrock in this region is mainly composed of sedimentary rocks. As an additional structural precaution, Pilot Station Traditional Council recommend Donlin Gold be required to use at least 1 ½ to 2 inch rebar implanted in the tailings dam to help anchor the rockpile fill to bedrock and provide additional structural integrity.

MIT 29 Although the tailings dam design will be subject to a Failure Modes Effects Assessment as required by the State of Alaska Dam Permitting process, EIS comments to help maximize the structural integrity of the dam to minimize tailings dam failure should also be included for testing and that Donlin Gold be required to use the maximum structural integrity design for the TSF dam.

Although Donlin Gold plans to remove the soil and overburden and construct the TSF to bedrock, it seems that most large mine TSF designs tend to be similar in construction.

PAA 51 An alternative that should also be required is for Donlin Gold to excavate additional bedrock to a deeper basin design relative in area to match required construction of the proposed TSF dam to half its height at completion. Additional rock pile material deposited downstream of the TSF.

Waste Rock Facility and Tailings Storage Facility

PAA 52 Donlin Gold should also be required to include an impact summary of exchanging the site of the WSF and TSF as an alternative for the EIS. Since both sites have similar footprints and similar in size. What would be Donlin Gold's proposal for this as an alternative?

Transportation Facilities – Mine Access Road and SWPPP

Water sources for dust control on mine access road include South Fork Getmuna Creek and the Kuskokwim River.

MIT 24 Recommend to apply dust palliative as additional requirement to help minimize dust on all access roads. Since both South Fork Getmuna Creek and the Kuskokwim are anadromous river sources, the amount of sediment material from these water sources will increase fugitive dust exposure on all transportation routes. In a road dust project in Pilot Station, the Pilot Station Traditional Council used water source from the main Yukon River for road dust control. As a result, the amount of fine road dust in Pilot Station increased and our road dust conditions worsened. The Yukon River is anadromous with high sediment concentration of loamy material, including silt, clay, and fine sand. The more Yukon River water applied the more application of dust material with higher evaporation rates and prolonged finer fugitive dust exposure. Our main water source for road dust control is now from a smaller stream with little to no sediment concentration. Although we have never applied any dust palliatives, our road dust conditions have abated.

Although the Pilot Station road project had a SWPPP, use of any specific water source for the road dust project was not included as a requirement. Many SWPPP's do not need to identify source water sediment concentration for road or construction dust projects as

required in any permitting process. ADEC should consider source water sediment concentration as an SWPPP environmental plan prevention requirement, not only for the loss of soil erosion, but also for sediment control of fine fugitive dust material. This requirement should be included in Donlin Gold's Erosion Sediment Control Plan.

Permafrost

Alaska is inundated with continuous and discontinuous permafrost. It is not uncommon for change in temperature of permafrost to trigger soil creep, mudslides and erosion. Every proposed project component from the Donlin Gold mine, transportation, and pipeline, will impact permafrost. In the scoping report, there are many references to permafrost, but in the draft EIS, permafrost is noted as an incidental impact item. Pilot Station Traditional

SOL 8 Council recommends Donlin Gold include a section and categorize permafrost as separate impact and summary item. Although Donlin may summarize that impacts to permafrost may be negligible, each project component will impact permafrost and permafrost will impact each project component, with varying degrees of results. Unlike soils, wetlands, hydrology, or vegetation, the physiology, characteristics, and morphology of permafrost are unique. For example, like a stream is to hydrology, pingos are a unique geologic feature of permafrost and pingos are not caused or created from any other feature. Like soils, wetlands, hydrology, and vegetation, permafrost is a measureable impact item that also can be monitored throughout all phases of the proposed project.

SOL 8 Although permafrost thickness varies throughout the proposed project, what is unsettling is that permafrost in Anaconda Creek, where the only proposed TSF is located, exceeds 100 feet in thickness. Donlin Gold has projected climate change in the future will continue to affect trends and resources in the EIS, and of all the summary items noted, any change in stability of permafrost can exacerbate cumulative impacts to the proposed projects. What is Donlin Gold's proposed action on monitoring and addressing permafrost?

SOL 8 Pilot Station Traditional Council also recommend U.S. Army Corp of Engineers, and the federal cooperation agencies, to submit Permafrost as an EIS physical geologic required impact summary item with the next reauthorization of NEPA.

Socioeconomic Impacts

Socioeconomic impact intensity of project payments to state, local governments, and ANCSA corporations will be medium to high and beneficial. Pilot Station Traditional

G2G 2 Council recommend including federally recognized tribes as primary local governments impacted. Tribes in Alaska are responsible for our tribal members and tribal sovereignty allows us to protect the rights of our members. Federally recognized tribes in Alaska do not receive any benefits, services, or transfer payments from any provisions of ANCSA. ANCSA does not apply to the federally recognized tribes. The EIS should note the fact that

G2G 2 every Alaska Native corporation shareholder created from ANCSA is eligible for tribal membership with any federally recognized tribe, but not all tribal members will ever be eligible to be ANCSA corporation shareholders. Eligibility for corporation membership

and membership privileges depends on the bylaws of the corporation and discretionary approval of majority of the current shareholders.

Alaska Native Allotments

According to State of Alaska (http://gov.alaska.gov/Walker/priorities/first-people.html), BLM has estimate about 244 remaining Alaska Native Allotments that had been erroneously conveyed from the federal government to the State of Alaska. BLM has requested the State of Alaska to convey these Alaska Native Allotments back to BLM so that the pending Alaska Native allotments can be conveyed to the original applicants or their heirs. For the proposed pipeline route, Donlin Gold EIS has estimated at least 65% of land in the construction ROW is managed by State of Alaska as state-owned, tentatively approved, or pending as land selection.

MIT 25 Since BLM is also listed as a cooperative federal agency in this EIS project. As a mitigation measure, Pilot Station Traditional Council require BLM identify, and resolve ownership, of pending Alaska Native allotments that were applied for within any of the proposed projects and erroneously conveyed to the State of Alaska. Alaska Native Allotment selections preempt and have precedence over Alaska Statehood Act, ANCSA, and ANILCA, land selections. Since BLM is also responsible for many other areas in Alaska, these pending Native Allotment land selections should also be included and addressed in existing land management plans, such as the Bering Sea – Western Interior RMP and associated EIS.

Environmental Justice

The concept of disproportionate impacts of environmental justice to minority and low income communities will most likely result to the burden, task, and responsibility of the federally recognized tribes as a local government entity. Pilot Station Traditional Council

G2G 2 recommends federally recognized tribes as primary local governments to help mitigate adverse impacts, organization assistance, health and welfare, to our tribal members. An example of tribal involvement with similar natural resource issue is with the ADF&G Summer Season Yukon River salmon manager and Pilot Station Traditional Council. In 2013, the State of Alaska issued a disaster declaration for our Yukon River salmon fisheries, disaster assistance was only provided to eligible Yukon River commercial salmon fisherman. No assistance was provided to any subsistence fisherman or their families. All our subsistence families are Pilot Station Traditional Council tribal members.

When disaster salmon fishing assistance was provided to Yukon River commercial fishermen, the commercial fish buying companies, the State of Alaska, and the U.S. Government, turned their back on our subsistence families and our tribal members. ANCSA corporations only represent their shareholders, ANCSA corporations are not federally recognized tribes and ANCSA corporations have no obligation to help tribal members. Pilot Station Traditional Council was the only local government to try and help our subsistence tribal members. In working with the State manager, we have educated the State of Alaska with the relationship that when subsistence fishing harvest restrictions are

issued, the numbers of emergency food donation requests from our tribal members escalate. We do not have much to offer, all our donation funds are the limited proceeds earned from gaming and bingo. As a result of our responsibilities, we have learned that people who need the most help… will not ask for it.

G2G 2

Please prioritize federally recognized tribes as primary local government involvement. Unlike municipal governments that provide municipal services, federally recognized tribes represent tribal members who are entitled to receive services that exemplify the duties of state and federal governments with doctrines of trust, obligation, and responsibilities of our respective citizens. All other regional organizations and entities in this region of Alaska are all NGO's with no sovereign tribal government responsibilities.

There have been discussions of creating a borough government in portions of the AYK region of Alaska. A borough government has no tribal sovereignty responsibility or obligations to help tribal members. Calista Corporation had donated funds and efforts to help unify the tribes in the region and create a regional tribal entity. Pilot Station Traditional Council commends Calista Corporation for this effort. As more tribal members are educated in Calista's endeavors of a sovereign regional tribal government, this task is not only dependent on leaders of the region, but on every individual tribal member in the Calista region who would have an opportunity to select the leaders and create such an entity. AVCP Inc. is a regional non-profit organization and has no tribal government powers. AVCP is an NGO and the tribal members in the region do not select the leaders of this organization.

In April 2015, to help alleviate and provide means for assistance to our tribal members, Pilot Station Traditional Council levied a tribal fish tax to the commercial fish buying companies in our Yukon River portion of Alaska. With the exception of municipal governments, Donlin Gold EIS recognize that many small communities in the potentially affected area do not levy taxes with the fact that there are no existing economic development resources for tax revenue. Although this is a fish tax on proceeds of fish buying companies, Pilot Station Traditional Council recognizes that any other individual community tax will infringe on the limited income of many of our tribal members and we oppose this as source of income.

Tribal Governments and Resource Management

In Alaska, the role, organization, and responsibility of many federally recognized tribes are in a current state of disarray. Some tribes are actively involved and assertive within their communities, tribal members, and structural development of their entities, including responsibility of harvests of our subsistence resources. Many residents have a misconception that tribes in Alaska are similar, or in fact, are the existing Alaska Native village corporations created from ANCSA.

Pilot Station Traditional Council has corresponded and met with State of Alaska management in subsistence harvest issues of our community. In the past, when we wrote letters to the Governor, testified to Board of Fish meetings regarding regulatory changes, and met with State of Alaska Commissioners and Regional Supervisors on use of our

subsistence resources. The result of these encounters would cite and reference Alaska State Statue regulations and legislative requirements that need to be followed as part of the management process. In our endeavors, we have also been educating the State of Alaska that the role of tribes in tribal management of our subsistence resources is a legacy of our traditional management practice and has sustained all our subsistence resources since time immemorial. With this traditional knowledge, we have been encouraging the State of Alaska that tribal involvement needs to be utilized as a management practice. A traditional management practice in which fish and wildlife harvests for subsistence was never based on principals of maximum sustained yield. It seemed that all this was all a charade. Every State of Alaska representative that we tried to work with was bound by their duties and responsibilities, until we realized that there is only one decision maker that we needed to convince and work directly with – the ADF&G manager. The ADF&G manager is the only one person that decides when, where, and how, tribal subsistence harvesters can go and fish and hunt.

The active role of federally recognized tribes are already recognized and included in many provisions of the Alaska State Statues. Including the fact that consultation with tribes in Alaska are noted, or have been noted, in many State of Alaska department mission and vision statements. It seems that the recognition and level of participation of tribal involvement depends on the sentiments and legal interpretations, of current department Commissioners and elected Governor. In the legal provisions for hunting and fishing, Title V of the Alaska State Statues, the role of federally recognized tribes is completely excluded and nonexistent.

As government entities, there are many public trust doctrines and principals that Pilot Station Traditional Council agrees with the State of Alaska, including three main legal constraints that have limited the ability for tribes and the State of Alaska to cooperatively manage tribal harvests of all renewable resources.

The first is that the Pilot Station Traditional Council agrees with the State of Alaska that stewardship of all our renewable resources is based on sustained yield principals of traditional harvests as a management practice to help meet the needs of all our respective citizens. The State of Alaska has recognized this in its State Constitution as sustained yield. Unlike the practice of the U.S. Department of Interior in which principals of management doctrines are guided by preservation and conservation measures, and harvests of any renewable resources are only legally determinable within entitlements of the U.S. Code of Federal Regulations, such as harvests of eligible federally qualified users as defined by Title VIII of ANILCA.

The second principal that Pilot Station Traditional Council agrees with the State of Alaska, and we are pleased to recognize, that provisions of ANCSA had legally extinguished and exterminated aboriginal title to hunting and fishing. Pilot Station Traditional Council does not represent aboriginal members, and we have met with ADF&G managers with the intent to help management resource harvests of our tribal members. We understand that ANCSA and ANILCA were Congressional land claim settlement acts to legally develop resource

projects in Alaska. ANCSA and ANILCA do not apply to the tribes or tribal members we represent.

The third principal that Pilot Station Traditional Council agrees with the State of Alaska is the disclaimer that any federal or state agency may point out that the notion that tribes in Alaska do not own lands or reservations to claim management responsibility. Yes, we agree with everyone on this notion. Pilot Station Traditional Council does not own large tracts of lands. Unlike the colonial concept of ownership before obligations of stewardship, Pilot Station Traditional Council has been educating ADF&G managers that sustained traditional resource harvest management has always been people management, regardless of who owns or claim ownership of the land and resources. Pilot Station Traditional Council is responsible for our tribal members, and tribal sovereignty allows us to protect the rights of our tribal members, and tribes in Alaska should be able to be responsible for the actions of their tribal members.

In the last several years, there has been emphasis on co-management of resources between tribes and the State of Alaska, in which everyone share the same responsibility. An example is the recent creations of inter-tribal fish commissions for the Yukon and Kuskokwim Rivers. Shared responsibility sounds promising, but jurisdiction is one misconception that will need to be settled and agreed on. Although co-management will continue to allow the State of Alaska to have jurisdiction title to the actions of tribal members, which has been the same entitlement since statehood, the same entitlement would now allow the tribes to have jurisdiction and endow management title to the actions of tribal members and non-tribal members. Alaska residents and the State of Alaska may never concede or agree to this entitlement of jurisdiction and Pilot Station Traditional Council agrees. Under co-management, no management changes would be required for the State of Alaska. For the tribes, co-management will extend jurisdiction of tribal sovereign powers beyond our respective tribal citizens who we represent. In this case, the State of Alaska and federally recognized tribes would share jurisdiction of tribal and non-tribal members, Alaska and non-Alaska residents, U.S. Citizens, illegal aliens, and commercial harvests. Pilot Station Traditional Council does not want this.

Pilot Station Traditional Council has extended an offer to help the ADF&G manager to manage the subsistence harvests and harvest actions of tribal members. Tribes in Alaska should be held responsible, not only for the welfare and wellbeing, but also for the actions and behavior of tribal members towards stewardship of all our resources. In lieu of tribal management as a wise management tool, Pilot Station Traditional Council has requested the State of Alaska to continue management and responsibility of harvests of non-tribal members, non-residents, and commercial activities.

Since Alaska Statehood and the notion of government ownership of land and resources, the current duel management of Alaska Native subsistence users has existed between the State of Alaska and the federal government. No other U.S. citizens have been more regulated by two separate government entities with their daily activities and the livelihood of their families. As we had explained in a letter to the ADF&G manager, it seems that the presence and actions of the Federal Subsistence Board is a middleman between the tribal

governments and the State of Alaska. All FSB does is relay and reconfirm the need for harvests of federally qualified users and remind the State of Alaska of duties and who is responsible for what. To the ADF&G manager, we have extended an invitation in tribal management of our subsistence harvests of our tribal members, with ADF&G to manage non-tribal members, non-residents, and commercial activities, and we have recommended USFWS as consultants and provide recommendations and intervene with actions when subsistence harvest resources should become a conservation concern.

In the same letter to the ADF&G manager, Pilot Station Traditional Council provided an analogy of management restrictions placed on subsistence harvests of our tribal members. Imagine a State of Alaska manager telling the small family farms in the Matsu region when and how much of their crops that they can harvest. When the manager tells tribal members to harvest salmon late in the salmon season, for traditional preservation method of drying and smoking, the likelihood of mold and insect infestations will ruin all our efforts. The dried salmon are inedible and all preservation efforts are wasted. Our cultural traditions and practices have sustained our way of life. We trust our traditions and practices. If the ADF&G manager tells subsistence harvesters when to go and fish, the manager should be liable for subsistence harvests that ruin. Because of the current salmon harvest restrictions, in July 2015, Pilot Station Traditional Council tribal members requested a letter to the ADF&G summer season manager to declare disaster assistance of Yukon River king salmon for subsistence harvesters. In the last five years, we have had five different summer season salmon ADF&G managers for the Yukon River that have quit and left the department, because of the burden of State of Alaska regulation restrictions placed on tribal subsistence harvests. A new ADF&G manager was just recently hired. No disaster assistance was declared.

EIS Distribution

PUB 4 Regardless if there is a slight decline of cost of goods and services in urban Alaska, the cost of goods and services in rural Alaska follow an eminent escalating scale. Although the U.S. Army Corp of Engineers issued the draft EIS available for public comment, including a website copy available for digital download, there is a burden of cost that is now required. There are many chapters and EIS items of large digital sizes, Pilot Station Traditional Council was only able to afford to download Chapter two of the draft EIS because of usage fees for internet use and access. We would like to thank AECOM for sending a digital disk copy of the complete draft EIS documents through the U.S. Postal Service. Please plan to send a digital copy of any additional or final EIS to our address listed.

Elias Kelly, Council Secretary
Pilot Station Traditional Council

DEIS Comments – Response to Agency Comments: 3.25 Pipeline Reliability and Safety
PHMSA Comments - May 23, 2016

Commenter	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)	Comment Addressed Adequately for Final EIS?
CLA 2 PHMSA	3.25 Pipeline Reliability and Safety	3.25-14	To prevent corrosion, the majority of the pipe would be externally coated with a three-layer polyethylene coating before delivery. . . .	A three-layer polyethylene coating is referenced in following DEIS locations: • Executive Summary Section 2.2.3.7, page ES-1-16 • Chapter 2: Alternatives, page 2-109 • Chapter 3: Environmental Analysis, 3.25 Pipeline Reliability and Safety, page 3.25-14 a) The compatibility of a three-layer polyethylene pipeline coating system and the pipeline's cathodic protection system is a concern. Mutli-layer polyethylene pipeline coating systems have a track record of shielding cathodic protection current. In areas of coating defects, such as disbonded coating, the polyethylene coating can prevent (shield) cathodic protection current from reaching the steel pipeline surface. A cathodic protection system will not mitigate corrosion of the steel pipeline surfaces which are shielded from cathodic protection current in disbonded situations. If a 3-layer coating is used, how would cathodic protection surveys such as close interval surveys be conducted to ensure the pipeline is properly protected from corrosion? b) A fusion-bonded epoxy (FBE) pipeline coating system is referenced in DEIS Appendix E – PHMSA Enc B DEIS. What type of pipeline coating system is being considered for this project? FBE and/or three-layer polyethylene?		
CLA 2 PHMSA	3.25 Pipeline Reliability and Safety	3.25-14	In addition to the pipe coating, a current-passive, zinc ribbon cathodic protection system would be used for the length of the pipeline. Zinc ribbon would be installed after pipe lowering-in and before backfill. . . .	A zinc ribbon galvanic anode cathodic protection system is referenced in the following DEIS locations: • Executive Summary, Section 2.2.3.7, Page ES-1-16. • Chapter 2, Alternatives, page 2-123 • Chapter 3: Environmental Analysis, 3.25 Pipeline Reliability and Safety, page 3.25-14) a) Verify that the galvanic anodes will not be directly connected to the pipeline and the galvanic anodes will be installed with a means to disconnect the galvanic anodes for the pipeline such that accurate pipe-to-soil potentials can be determined. These systems must have a disconnect from the pipeline so that proper cathodic protection surveys can be conducted along the pipeline. b) What type of cathodic protection system will be used to cathodically protect pipeline sections installed by Horizontal Directional Drilling?		

Tom Pickler
Bemali Drilling Inc.
8240 Petersburg St.
Anchorage, AK 99507

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Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska
District
CEPOA-RD-Gordon, P.O. Box 6898
JBER, AK 99506-0898

99506$0898 B900

USACE
RECEIVED
MAR 2 1 2016
AK REGULATORY

(1) I AM INTERESTED TO HEAR/SEE & CONFIRM THAT THE NATURAL GAS SUPPLIES IN COOK INLET ARE AMPLE TO SUPPLY DONLIN CREEK MINE FOR THE DURATION 30+ YEARS WITHOUT AFFECTING THE SUPPLY REQUIRED TO OPERATE THE CITY OF ANCHORAGE & KENAI PENINSULA?

GAS 6

(2) HAS TITLE BEEN ANY PUSH BACK FROM U.S. FISH & WILDLIFE SERVICE OR ADF&G REGARDING POTENTIAL DAMAGE TO FISHERIES?

(3) IS DONLIN GOLD CONFIDENT THAT THIS MINE IS CURRENTLY AND IF PERMITTED TO PROCEED TO DEVELOPMENT WILL BE AN ECONOMIC BENEFIT TO ALL PARTIES INVOLVED?

SER 3

(4) IS IT POSSIBLE TO "TOTALLY RECLAIM" A MINE LIKE THIS AT THE END OF ITS LIFE?

BER 4

From:	Michael Podolak
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Letter in Support of Donlin Gold
Date:	Thursday, April 21, 2016 10:38:15 AM
Attachments:	In Support of Donlin Mining Projects.docx

Please find the attached letter in support of Donlin Gold. If you would like to contact me, please feel free to do so.

Sincerely,

Mike Podolak

To Whom It May Concern:

NSB 1

I am supporting Donlin Gold project in the State of Alaska. Alaska has a rich history centered on mining. It has always been a mainstay of our States economy, and it is crucial that we continue to support responsible mining efforts in our State. Donlin Gold will help do just that by continuing responsible mining efforts in our state while employing thousands of Alaskans, and creating much needed State revenue.

Many examples of successful, responsible mining projects exist currently in our State. From the SE panhandle to the Aleutian, Nome, and above the Arctic Circle, this State and its people have long depended on mining. Let's not be foolish here. Let's move ahead with the Donlin Gold project and help shore up the future of many Alaskans, and our States future.

Sincerely,

Mike Podolak

5701 De Armoun Rd.

Anchorage, AK 99516

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: Donlin Gold Draft EIS comment
Date: Wednesday, March 16, 2016 8:02:49 AM

Bill Craig
Environmental Department Manager
D 1-907-261-6703 C 1-907-441-7207
bill.m.craig@aecom.com

AECOM
700 G Street, Anchorage, Alaska 99501
T 1-907-562-3366 F 1-907-562-1297
www.aecom.com

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, March 14, 2016 12:32 PM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: Dwight Poffenberger [mailto:DPOFFENBERGER@whe-law.com]
Sent: Tuesday, March 08, 2016 5:24 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

BIRD 3 Please do not allow this gold mine. The idea of a permanently polluted lake is horrible. It would poison migratory birds in violation of a federal treaty. Please stop this project.

Sent from my iPad

Ben Porterfield M.Sc.
PO Box 112527 Anchorage Alaska 99511 (907)947-5739 porterfield57@gmail.com

USACE
RECEIVED
APR 27 2016
AK REGULATORY

4-22-2016

U.S. Army corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

Hello,

NSB 1 I would like to support the Donlin Project and Alternative 2.

I have worked in mineral exploration and mining in the Kuskokwim area since 1984, when I worked on the Nixon Fork project. I have seen firsthand the positive effect an exploration project can have on the economy of the area. Donlin would have a long term positive effect.

I was working out of McGrath last summer and I was amazed how badly the town was faring. Donlin would be a huge benefit to the town and the region.

Regards,

Ben Porterfield

From:	Bellion, Tara
To:	Evans, Jessica
Subject:	FW: Donlin Gold Draft EIS comment
Date:	Tuesday, March 08, 2016 9:56:54 AM
Attachments:	image005.png img-160229071603.pdf

-----Original Message-----
From: Steve Post [mailto:stevep@northstarak.com]
Sent: Monday, February 29, 2016 6:19 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Good Leap Day Monday Morning,

Please find attached a letter in support of the development of the Donlin Gold Mine. This project will provide much needed jobs, a source of natural gas for southwest Alaska, revenue for the State and gold for the world's economy.

I personally have been involved with the project for over ten years and am confident the right planning is being done to insure the mine can be developed in an environmentally responsible way.

Thank you for your attention,

Steve

Steve Post

Vice President

907-263-0117

907-227-5897 cell

790 Ocean Dock Rd

Anchorage, AK 99501

All access to and or use of any North Star Terminal and Stevedore Co., LLC terminal facilities and or the terminal services of its operating entity shall be subject to NSTS's Marine's Federal Maritime Commission MTO Schedule of Rates, Regulations and Practices, available at the main office and on the internet at Blockedwww.northstarak.com <Blockedhttp://www.northstarak.com/> .

This communication, including any attachment(s), may contain privileged, confidential or private information intended for a specific individual or purpose, and is protected by law. If you are not the

person for whom this information is intended, please delete it, destroy any attachment, notify me immediately, and do not copy, use or send this message or attachment to anyone else.

NORTH STAR TERMINAL & STEVEDORE CO., LLC
NORTH STAR EQUIPMENT SERVICES
Contracting Stevedores Terminal Operators Materials Handling
Operated Crane Services Drilling/Driving VSM's & Pile Bare Equipment Leasing
OWNERS AND OPERATORS OF ANDERSON TERMINAL
790 Ocean Dock Road · Anchorage, AK · 99501 · TEL (907) 272-7537 · FAX (907) 272-8927 · www.northstarak.com

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

February 29, 2016

Subject: Comments in support of the DEIS for the responsible development of the Donlin Creek Gold Mine.

Review Team,

North Star Terminal & Stevedore Co LLC and North Star Equipment Services has operated in Alaska since 1950. Our livelihood in great part depends on responsible resource development. We have been active in developing solutions in support of the marine cargo handling needs and construction of the infrastructure for the Donlin Gold Mine Project for over ten years. We have seen firsthand the careful attention being paid to environmentally responsible development solutions for the project. This project could generate many high paying jobs for our company and needs your support.

Considerations for your support include:

- Donlin Gold has conducted extensive studies to develop an environmentally and socially responsible gold mine project.
- The natural gas pipeline proposal is a result of conversations with the region about reducing the amount of diesel barges on the Kuskokwim River. The use of natural gas for power generation, instead of diesel, will also reduce air emissions.
- Donlin Gold will be the first large mine in Alaska to use a synthetic liner underneath its entire tailings impoundment. Additionally, dry closure of the tailings storage facility at the end of the mine's life is a "best practice" Donlin Gold is proposing to ensure an environmentally responsible mining project.
- The tailings dam will be constructed of engineered rock fill and use a downstream construction method that is the most stable of all tailings dam types, designed for water storage and to withstand earthquakes.
- Donlin Gold will employ state of the art mercury emissions controls. To ensure the mercury emissions are well below air quality standards.
- Donlin Gold will construct an active water treatment plant to ensure that water that is discharged from the site is treated to meet water quality standards.

Job Opportunities and Economic Stimulant

SER 12
- Improved transportation and communications infrastructure to support the mine, including port and pipeline facilities, can provide better services and lower cost of energy, goods and services to local residents.

- More than $480 million has been spent on exploration of the property, engineering and environmental studies, camp support, flight services, fuel and other supplies, with most of that expended in the last 10 years
- Donlin Gold will support organizations that offer job skill training for a prepared workforce.
- 3,000 construction jobs for 4 years and between 600 and 1,200 jobs for the 27.5 estimated life of the mine, will have a significant and positive impact on the economy of the region and the state.
- In addition to direct employment and contracting opportunities associated with Donlin Gold, many indirect business opportunities are anticipated in areas such as logistics, transportation, training, education and health care.

Transparent Operations

- Donlin Gold has a proven record of discussing the project's plans with the people of the region and listening to what they have to say about the region and the proposed project, including meetings and materials in the Yup'ik language.
- Donlin Gold is committed to developing a project consistent with the values of the Yup'ik and Athabascan cultures of the region.

SER 5 We strongly support the development of the Donlin Gold Mine. It will mean jobs, revenue for the State of Alaska and production of gold for the world's economy to digest.

Respectfully Submitted,

Steve Post
Vice President
stevep@northstarak.com

HOOKEDION SAFETY

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: [EXTERNAL] comments
Date: Wednesday, March 30, 2016 10:22:43 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Wednesday, March 30, 2016 6:22 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] comments

-----Original Message-----
From: Charles Prince [mailto:uppaq@yahoo.com]
Sent: Thursday, March 24, 2016 12:30 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] comments

First of all I would like to ask donlin gold why another gold mine? aren't there enough gold mines in the world and why don't they consider retrieving the gold that exists instead of ending up in dumps all over the world, worse yet ending up in the ocean.

DAM 7

Now the impacts the mine faces to the Mother Earth: tailing dams poise a risk to the environment, with the way the global warming is happening, I believe that this shows more danger to all subsistence foods, food chain will be effected from mosquitoes to humans.

FSR 1

The considered pipeline: how will they detect the smallest leak (natural gas will impact the ozone and oil will effect all subsistence foods, would you like taste this on your plate of food)? and what will happen to the pipeline after the mine close?

SUB 15

I personally see that this mine poise more risks to the environment and to our precious subsistence foods, this will not only effect the fish and game, it'll eventually end up effecting the humans that live in and around the area (can't imagine how big of an area it will effect), a spill occurs (either from the dam or pipeline) this will effect all the salmon that the natives rely on since all the waters flow to the Bering Sea where all fish species eat and grow (not only the Kuskokwim River, Yukon River but also the Bristol Bay fish) then go back to there respected rivers to spawn.

FISH 5

Also the barges will have an effect on the native species of fish (not only salmon utilize the river, but whitefish, pikes and so on), where or what data shows that they don't have an effect to them.

BARG 10

The barges will play a big role in changing the channels, from where they are parked to load and unload, they have to keep the propellers turning to avoid being washed up on the beaches, I see this happen on the Andreafski River where we get a few barges compared to what is being proposed.

MON 3

How is the clean water act taking place?

They say the water will be cleaner then discharged, who will be monitoring this and where will the results be posted?

I DO NOT support Donlin Gold, with just 27 years lifespan compared to decades of us humans living off the land.

Charles Prince
St. Mary's, AK

From:	Sarah Lukin
To:	donlingoldeis, POA
Cc:	Hugh Short; Mead Treadwell; Cameron Eggers
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Tuesday, May 31, 2016 5:30:57 PM
Attachments:	Pt Capital_Donlin Gold EIS Comments 05-31-16.pdf

To Whom It May Concern,

Please find attached Pt Capital, LLC comments on the Donlin Gold Draft EIS.

Thank you,

Sarah L. Lukin
Chief of Staff
Pt Capital, LLC

_____
Office: 907.433.6600 | Cell: 907.227.0803 | Fax: 907.433.6650
Slukin@ptcapital.com | Blockedwww.ptcapital.com
188 West Northern Lights Boulevard, Suite 920 | Anchorage, AK 99503

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Pt
CAPITAL

May 31, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, Alaska 99506-0898

SUBMITTED ONLINE AT
DonlinGoldEIS.com/Comment.aspx

RE: Donlin Gold Mine EIS Comments

To Whom It May Concern:

Pt Capital, LLC is pleased to provide comments on the proposed Donlin Gold Mine EIS. By way of introduction, Pt Capital is the only Private Equity Fund headquartered in Alaska that works closely with Global Investors and local indigenous communities to responsibly develop the Arctic. Given our firms' focus, we are uniquely positioned to provide comments on the proposed Donlin Gold Mine.

SER 4 The Donlin Gold project is an environmentally responsible project that will provide much needed economic opportunity in Yukon Kuskokwim region of Alaska. The direct job creation and economic boost to industry support services, will positively impact our State at a time of financial need.

Please contact me at mtreadwell@ptcapital.com if you would like to discuss Pt Capital's comments further.

Thank you for your time and consideration.

Sincerely,
PT CAPITAL, LLC

Mead Treadwell
President

188 West Northern Lights Boulevard, Suite 920
Anchorage, Alaska 99503
907.433.6600 | www.ptcapital.com

From:	Jean Public
To:	donlingoldeis, POA; vicepresident@whitehouse.gov; americanvoices@mail.house.gov
Cc:	info@idausa.org; foe@foe.org; info@wildearthguardians.org; flh@all-creatures.org
Subject:	[EXTERNAL] Fw:public comment on federal register gold mines in alaska to destroy it
Date:	Thursday, January 07, 2016 9:30:20 AM

HZM 2

i oppose this area of alaska public land being mined for gold, putting down mercury when you mine gold means poisoning the entire area for life for about 500 years. or more. i am sick of america being turned into poison country. i want nature preserved. its time to stop the profiteers from poisoning all of earth. we have no other planets to go to to live and stay alive. we die from these poisons. this comment is for the public record. please receipt. jean publee jeanpublic1@yahoo.com

> [Federal Register Volume 81, Number 4
> (Thursday, January 7, 2016)]
> [Notices]
> [Pages 761-762]
> From the Federal Register Online via the Government
> Publishing Office [Blockedwww.gpo.gov]
> [FR Doc No: 2016-00042]
>
>
> ----------
>
> DEPARTMENT OF DEFENSE
>
> Department of the Army, Corps of Engineers
>
>
> Public Meetings and Public Hearings Related to the Draft
> Environmental Impact Statement for the Proposed Donlin Gold
> Mine
> Project, North of Crooked Creek, Alaska
>
> AGENCY: Department of the Army, U.S. Army Corps of
> Engineers, DOD.
>
> ACTION: Notice.
>
> ----------
>
> SUMMARY: The U.S. Army Corps of Engineers (USACE) is
> providing
> notification of public meetings to obtain comment on the
> Draft EIS
> noted above to facilitate compliance with, in part, the
> National
> Environmental Policy Act of 1969. The Bureau of Land
> Management (BLM)
> is providing notification of Alaska National Interest Lands
>
> Conservation Act (ANILCA) Section 810 Hearings related to
> the
> preliminary ANILCA 810 Findings contained in the above Draft
> EIS.
> Section 810 of the Alaska National Interest Lands
> Conservation Act
> requires the BLM to evaluate the effects of plans presented
> in this

> Draft EIS on subsistence activities in the area of the
> proposed action
> and its alternatives, and to hold public hearings if it
> finds that any
> alternative may significantly restrict subsistence
> activities. The
> analysis of environmental consequences indicates the
> proposed action
> may significantly restrict subsistence in some portions of
> the proposed
> project area. Therefore, the BLM is holding public hearings
> on
> potential subsistence impacts in conjunction with the public
> meetings
> discussed below. BLM's preliminary ANILCA 810 Findings are
> contained in
> Appendix N of the Draft EIS.
>
> DATES: See SUPPLEMENTARY INFORMATION section for meeting
> dates.
>
> ADDRESSES: See SUPPLEMENTARY INFORMATION section for meeting
> locations.
>
> FOR FURTHER INFORMATION CONTACT: Mr. Keith Gordon, Project
> Manager,
> U.S.
>
> [[Page 762]]
>
> Army Corps of Engineers, Alaska District, CEPOA-RD-Gordon,
> P.O. Box
> 6898, JBER, AK, 99506-0898; via email at
> POA.donlingoldeis@usace.army.mil
> or; at 907-753-5710. Or, Mr. Alan
> Bittner, Anchorage Field Manager, U.S. Department of
> Interior, Bureau
> of Land Management, 907-267-1285.
>
> SUPPLEMENTARY INFORMATION: Communities in which public
> meetings and
> hearings are scheduled are as follows (all communities are
> in Alaska):
> Aniak--January 20, 2016, Crooked
> Creek--January 21, 2016,
> Anchorage--January 28, 2016, Bethel--February 1, 2016,
> Akiak--February
> 2, 2016, Nunapitchuk--February 3, 2016, Quinhagak--February
> 16, 2016,
> McGrath--February 26, 2016, Holy Cross--March 30, 2016,
> Tyonek--To be
> determined, Lower Kalskag--To be determined. Please note
> that no
> preliminary 810 finding of potential substantial significant
>
> restriction of subsistence has been made for Holy Cross. An
> 810 Hearing
> will be held due to its proximity to the proposed project
> and the
> existing level of subsistence use information (mapping)

> available.
> Communities in which only public meetings are
> scheduled, as no
> preliminary 810 finding of potential substantial significant
>
> restriction of subsistence has been made, includes (all
> communities are
> in Alaska):
> Kipnuk--February 17, 2016, St. Mary's--March
> 1, 2016, Emmonak--
> March 2, 2016, Toksook Bay--March 15, 2016, Hooper
> Bay--March 16, 2016.
> Any changes to these dates and locations, as
> well as specific
> meeting and hearing locations and times in each community
> can be found
> at Blockedwww.donlingoldeis.com.
>
> Dated: December 30, 2015.
> Shelia Newman,
> Deputy Division Chief, Regulatory Division.
> [FR Doc. 2016-00042 Filed 1-6-16; 8:45 am]
> BILLING CODE 3720-58-P
>
>

From: Ken Puchlik
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Sunday, May 01, 2016 7:05:47 PM

SER 5

I believe the draft EIS provides enough due diligence to allow the project to continue. Please help approve this project and supply much needed jobs to the Native Peoples.

Ken Puchlik
Geology Manager-Exploration and Development
Sumitomo Metal Mining-Pogo Mine-Alaska
(907) 895-2754

D. Quillman
200 W. 34th Ave #834
Anchorage, AK 99503

11 MAR 2016 PM 1 L

Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska
District
CEPOA-RD-Gordon, P.O. Box 6898
JBER, AK 99506-0898

99506$0898

USACE
RECEIVED
MAR 2 1 2016
AK REGULATORY

9 March, 2016

Dear Sir or Madame:

I am writing today in support of the Donlin Gold Project. This project offers tremendous potential for the economic growth of the state and the immediate area of the project. It represents an opportunity for education as well as jobs for interior communities in the region.

SVE 1

The responsible extraction of resources is feasable and can be executed in an environmentally responsible manner. This process will mean the development of technology resulting in jobs for residents of the state. Technology will promote additional jobs and further training that is necessary to develope Alaska's natural resources.

As a country we can no longer be dependent on other countries for raw materials necessary for manufacture. We have already become dependant on China to a degree we cannot justify.

Please give this project every opportunity to succeed for our present economy and those of our children yet to come.

Sincerely,

Donald Quillman
200 W. 34th Ave # 834
Anchorage, Ak 99503

Smith, Neal

From: Craig, Bill
Sent: Friday, April 22, 2016 1:13 PM
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: [EXTERNAL] Supporting Mineral Resource Development

Follow Up Flag: Follow up
Flag Status: Flagged

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, April 22, 2016 12:45 PM
To: Craig, Bill
Subject: FW: [EXTERNAL] Supporting Mineral Resource Development

-----Original Message-----
From: dqalexp2003@aol.com [mailto:dqalexp2003@aol.com]
Sent: Friday, April 22, 2016 11:38 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Supporting Mineral Resource Development

Dear Sirs:

NSB 1

I want to urge you to approve the Donlin Gold permitting process. As a nation we are failing to see the need both economically and strategically to pursue mineral development in Alaska and the U.S. as a whole. WE have become dependent upon foreign sources for raw materials, stagnating our ability to manufacture and develop environmentally adequate methods for mineral refinement.

This path holds no future for the hope of manufacturing within the United States. It is fantastically short sided and economically devastating to our country and our society as a whole.

Please make the approval of the permits related to Donlin Creek a priority issue for 2016.

Sincerely,

Donald P. Quillman
200 W. 34th Ave. #834
Anchorage, Ak 99503

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Thursday, February 25, 2016 6:59:01 AM

-----Original Message-----
From: Melissa Raphael [mailto:melissa_raphael@lksd.org]
Sent: Wednesday, February 17, 2016 10:17 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

My name is Melissa Raphael, I'm from the kuskokwim area where fishing and hunting is important from one of our traditional ways. We were taught to respect the land and teach the next generation of how we do things and why. I'm against the Donlin Gold mine digging because losing what we already have isn't worth taking away just for gold.

The process for digging gold spends a lot of money just to get more. Building camps and getting the tools to get it started takes a lot of time and money. The mine developer already has spent $480 million on exploration and studies. The digging can and will most likely ruin the land. It can create massive amounts of toxic waste and cause global mercury pollution. Other than that, plants are being removed. Ruining the land will cause us to lose our traditional ways slowly. If the land gets ruined, animals die and we won't be able to go hunting. If fish die during the process of gold mine digging, then there would be no fishing for us either. We wouldn't be able to go berry picking if the land gets ruined. We count on these traditional ways, It's what we do and we love to do them. But slowly losing all them just for gold isn't worth it.

TWL 1

The Donlin Gold mine digging can make the sources we use to something bad. After the process of doing the work of it can cause leakages in the water, or the air becomes polluted from the waste they leave on the land, or from their factories that they built to start processing it. And to get to where they want to mine, they remove plants to get started on the camp and then they die.

The company of Donlin Gold mine digging spends a lot of money just to try and get more. It's like they aren't satisfied with what they already have, which is our land. Our land is our gold, but they can't see that.

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Thursday, February 25, 2016 6:57:01 AM

-----Original Message-----
From: Melissa Raphael [mailto:melissa_raphael@lksd.org]
Sent: Wednesday, February 17, 2016 10:12 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

I'm against the Donlin Gold mine digging because losing what we already have isn't worth taking away just for gold.
The process for digging gold spends a lot of money just to get more. Building camps and getting the tools to get it started takes a lot of time and money. The mine developer already has spent $480 million on exploration and studies. The digging can and will most likely ruin the land. It can create massive amounts of toxic waste and cause global mercury pollution. Other than that, plants are being removed. Ruining the land will cause us to lose our traditional ways slowly. If the land gets ruined, animals die and we won't be able to go hunting. If fish die during the process of gold mine digging, then there would be no fishing for us. We wouldn't be able to go berry picking if the land gets ruined. We count on these traditional ways, It's what we do and we love to do them. But slowly losing all them just for gold isn't worth it.
The Donlin Gold mine digging can make the sources we use to something bad. After the process of doing the work of it can cause leakages in the water, or the air becomes polluted from the waste they leave on the land, or from their factories that they built to start processing it. And to get to where they want to mine, they remove plants to get started on the camp and then they die.
The company of Donlin Gold mine digging spends a lot of money just to try and get more. It's like they aren't satisfied with what they already have, which is our land. Our land is our gold, but they can't see that.

TWL 1

From: Jack Rasmussen
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin
Date: Friday, May 27, 2016 11:30:05 AM

To:
Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Via email: POA.donlingoldeis@usace.army.mil

Sir,
I would like to make a few personal comments in addition to the comment letter you received from Lynden. My employer is Bering Marine Corporation - 100% Lynden company.

NSB 1

All of the comments and information in the Lynden letter are accurate, but I would also like add some comments about interaction among the residents and between the marine operators.
I have been involved in marine transportation throughout Alaska and the Kuskokwim River, both tug/barge and hovercraft, for well over 30 years. In all my experience, the interaction and professionalism of the captains and commercial operators on the river has been respectful and they have always operated with a desire to minimize impact while serving the villages throughout the region. Also, these are people who live and work here, but also fish, hunt and have families and friends along the river. They are careful to minimize impacts to the river, everything from avoiding human created erosion to habitat damage are of utmost importance. The balance between living and working in the area is treated with respect and can be done in a way that allows development without harming the very environment that is important to the way of life in the region.

Kind Regards,
Jack Rasmussen

A, John (Jack) Rasmussen
Vice President
Bering Marine Corp
907-229-1521
jackr@lynden.com

From: Don Rearden <donrearden@gmail.com>
Sent: Wednesday, June 01, 2016 7:39 PM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To Whom It May Concern:

SVE 4 The Donlin Gold Mine will be an environmental catastrophe for the region. So many factors aren't being taken into consideration, including the relentless winds and storms of the area that will blow debris, dust, and wastewater into the air and water drainage.
This area has sustained people for tens of thousands of years. No amount of gold or mineral is worth risking this pristine environment.

Thanks for your consideration,

Don Rearden
907-301-5315

Sent by Raven
DonRearden@gmail.com
Blockedwww.donrearden.com

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Thursday, February 25, 2016 6:48:16 AM

-----Original Message-----
From: Wade Renfro [mailto:renfrosalaskanadventures@gmail.com]
Sent: Friday, February 12, 2016 2:16 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To whom it may concern,

SER 5 As a resident and business owner operating out of Western Alaska since 1999, I'm in full support of the Donlin Gold project. The local Native communities have very limited employment opportunities available in the area. The project would allow them to be financially independent and help bring economic stability to the region.

Feel free to contact me with any questions.

Best regards,

Wade Renfro
Renfro's Alaskan Adventures
Blockedwww.renfrosalaskanadventures.com <Blockedhttp://www.renfrosalaskanadventures.com> Hunting
Blockedwww.tikchikadventures.com <Blockedhttp://www.tikchikadventures.com> Fishing
907-543-1954 Office
907-545-4135 Cell

From:	Marleanna Hall
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin Gold Project Draft Environmental Impact Statement
Date:	Tuesday, May 31, 2016 3:52:35 PM
Attachments:	RDC Comments-Donlin Gold DEIS.pdf

Good afternoon:

Please find RDC's comments for the Donlin Gold Project Draft Environmental Impact Statement attached.

Thank you,
Marleanna Hall
Executive Director
Resource Development Council for Alaska, Inc.
121 West Fireweed Lane, Suite 250
Anchorage, AK 99503

907-276-0700 ext. 1 | akrdc.org
Facebook: Resource Development Council | Twitter: @alaskardc

Growing Alaska Through Responsible Resource Development

Founded 1975

Executive Director
Marleanna Hall

2015-2016
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RESOURCE DEVELOPMENT COUNCIL

Growing Alaska Through Responsible Resource Development

May 31, 2016

Keith Gordon, Project Manager
U.S. Army Corps of Engineers
Alaska District CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK, 99506-0898

Via email POA.donlingoldeis@usace.army.mil

Re: Donlin Gold Project Draft Environmental Impact Statement

Dear Mr. Gordon:

The Resource Development Council for Alaska, Inc. (RDC) is writing to urge the U.S. Army Corps of Engineers to adopt Alternative 2 of the Donlin Gold Project Draft Environmental Impact Statement (DEIS).

RDC is a statewide business association comprised of individuals and companies from Alaska's oil and gas, mining, forest products, tourism, and fisheries industries. RDC's membership includes Alaska Native Corporations, local communities, organized labor, and industry support firms. RDC's purpose is to encourage a strong, diversified private sector in Alaska and expand the state's economic base through the responsible development of our natural resources.

Mining and the Alaskan Economy

RDC knows resource development projects in Alaska can be done responsibly, with a strong focus on protecting the environment, including cultural activities and wildlife, providing well paying jobs, many of which require training and offer a lifetime of opportunity, and improving the long-term economic future for Alaska.

The Alaskan economy is dependent on natural resource development, and will continue to be indefinitely. Article VIII, Section I of the Alaska Constitution mandates "the settlement of Alaska's land and the development of its resources by making them available for maximum use consistent with the public interest," to encourage economic prosperity for Alaska's peoples.

Alaska, and Alaskans alike, depend on the development of natural resources to diversify and support the economy. Further, economic opportunities in rural Alaska are often scarce. The lack of family wage jobs in many regions has resulted in an outmigration of Alaska Natives from the lands their ancestors have lived on for thousands of years.

121 West Fireweed Lane, Suite 250, Anchorage, Alaska 99503
Phone: 907-276-0700 • Fax: 907-276-3887 • Email: resources@akrdc.org • Website: akrdc.org

Today, the mining industry in Alaska pays an average wage of over $100,000 per year. Some of these jobs require technical skills and often offer training that can be used for similar or future jobs.

Lands under ANCSA

LAND 1 Under the Alaska Native Claims Settlement Act (ANCSA) the Calista Corporation (Calista) selected the mineral rights at the Donlin Gold project site and The Kuskokwim Corporation (TKC) selected the surface estate, both in efforts to benefit shareholders from the development and production of the mineral resources. This economic opportunity for shareholders and descendants of Calista is precisely the purpose behind Congress' grant of entitlement of these lands to Calista and TKC. LAND 1

SER 2 There are many social and economic benefits of this project to the region, state, and to the nation, including:

- Through the ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations.

SER 11
- The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the Yukon-Kuskokwim (YK) region and fund traditional subsistence activities.

SER 1
- Rural Alaska is being impacted most by the reduction of state and federal dollars. Alternative 1 (the no project alternative) will likely have a negative impact on the YK region, as it would be a missed economic opportunity for both the region and Alaska to halt the Donlin Gold project.
    - As noted earlier, the mining industry in Alaska pays an average wage of over $100,000 per year.
    - Due to the low price of oil and the decreased oil production in Alaska (until recently, North Slope oil production saw an annual decline of seven percent), state government is expected to reduce funding to communities across the state.

GAS 1
- The potential for lower cost energy options to the region such as the proposed natural gas pipeline which will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YK region.

Project Employment Projections

SER 8 An estimated 3,000 jobs will be created during the approximate four-year construction phase, and up to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the local economy and the state, especially in a region that experiences some of the highest unemployment rates. This will likely lead to reduced out-migration, helping to maintain rural schools and culture, including a traditional way of life in the YK region.

SER 15 Through the exploration stages, Donlin has shown a strong commitment to local hire and for supporting communities and cultures in the region. A project like this truly is a rare opportunity to improve the local economy where few, if any, other opportunities exist.

SVE 1 If developed, RDC believes the mine will be done in a way that creates opportunity for local employment and economic growth, while protecting the subsistence resources and culture of the region, and coexisting with the environment.

Alaska's Rigorous Permitting Process

Alaska has a rigorous permitting process that has already permitted the five large mines under the review of NEPA and the scientifically-based process which includes over 60 major state and federal permits and authorizations. Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources. The Donlin Gold project description demonstrates an understanding of environmental concerns, a strong working relationship with members of the local communities, and features vigorous environmental management principles.

Conclusion

RDC appreciates the opportunity to comment in strong support of Alternative 2 of the Donlin Gold Project Draft Environmental Impact Statement, and looks forward to further participating in the public process for this important project.

Sincerely,

Marleanna Hall
Executive Director

Seppi, Bruce <bseppi@blm.gov>

Donlon Gold

Margie Revet <margie_revet2015@outlook.com> Sat, Feb 13, 2016 at 6:07 PM
To: "bseppi@blm.gov" <bseppi@blm.gov>

To whom this may concerns;

SVE 6

Donlin Gold at present may have given out huge amounts of funds to promote school activities or other apparent entities to keep afloat.

I've heard so many negative reports and have seen on reports or TV the end results of what mining have done to environment. It poisons whatever tailings it runs into and have killed animals and plants that were in its path or surroundings.

FISH 9

Kuskokwim River's sources has been breeding areas for salmon from time immemorial. What gains will mining do for killing the most important component of native subsistence way of life? I think money is more important than keeping salmon runs.

SVE 6

I am strongly opposed to the start of mining. No matter what it's doing now to be visible in giving out funds.

Checks and money from the mine will not be able to allow net fish, cut it up to dry, then smoke for winter's use.

Glum future if mining goes through and starts.

Sent from my iPhone

USACE
RECEIVED
APR 2 7 2016
AK REGULATORY

Robert B. Robinson
Box 163
Kingston, ID 83839

April 17, 2016

Mr. Keith Gordon
Project Manager
U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
Box 6898
JBER, AK 99506-0898

Dear Sir:

I am writing in support of the Donlin gold mine development. The project will be a great benefit to wage-earners in Alaska. Mining traditionally provides living-wage, nonseasonal employment. These are the kind of job opportunities that the U.S. needs so badly. The project's operators have shown that they will make every effort to work with, and provide good jobs for, the people of the region. For nine years I worked at Red Dog mine. I saw how a mining operation can be very beneficial to the regional economy, both at the level of individual workers, and the local government. I also saw how mining operations go to great lengths to minimize impacts on the environment.

SER 5

Donlin represents a large investment that will significantly impact the economy of Alaska. During these years of weak job growth, mining jobs are just the type of living-wage jobs that will be so beneficial to U.S. workers. At this time, who else is willing to make an investment of this size that will create well-paying jobs in Alaska? While mining projects must have some environmental impact, the regulatory procedures and operators' desire to stay in compliance result in minimal amounts of degradation and risk.

NEP 5

I hope the ACE is able to expedite and improve the permitting process for the Donlin project. I feel the permitting process should be condensed and streamlined to bring projects into development with less delay. The permitting process has become too time-consuming and costly. I hope the permitting process for Donlin will demonstrate a less onerous procedure.

Your consideration is appreciated.

Sincerely,

Robert B. Robinson

From:	Rick Rogers
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Comments on Draft EIS for Donlin Gold Project
Date:	Tuesday, May 31, 2016 3:05:28 PM
Attachments:	Donlin DEIS comment 5-31-16.pdf

Mr. Gordon,

Attached please find comments in pdf form regarding the Donlin Gold DEIS. Thank you for this opportunity to provide input.

Regards,

Rick Rogers
akrrogers57@gmail.com

Rick Rogers
16001 Wind Song Drive
Anchorage, AK 99516

May 31, 2016

Keith Gordon, Project Manager
U.S. Army Corps of Engineer
Alaska District CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK, 99506-0898

Via Email: poa.donlingoldeis@usace.army.mil

RE: Comments on Donlin Gold Project Draft EIS

Dear Mr. Gordon:

I am writing in support of alternative 2 as outlined in the draft EIS for the Donlin Gold Project. I believe this is the appropriate alternative because the project will have significant economic benefits in western Alaska and throughout the State, and the project can be developed, operated, reclaimed and monitored to mitigate potential adverse impacts to the environment.

The Donlin project is located in the Yukon-Kuskokwim (YK) Region. The Kusilvak census area (formerly known as the Wade Hampton census area) includes much of the YK Region and has a per-capita income that makes it the fourth poorest county-equivalent in the United States. In 2014, it had the highest percentage of unemployed people of any county or census area in the United States, at 23.7 percent. Rural Alaska is being impacted most by the reduction of state and federal dollars. Alternative 1 (the no project alternative) will likely have a negative impact on the YK region, and make economic conditions there even worse.

SER 1

SER 5 While no one project can resolve all the economic hardships of this region, the Donlin project has the potential to dramatically improve the lives of many in the region for decades to come. The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the YK region and fund traditional subsistence activities.

GAS 1 While the YK per-capita income is among the lowest in the nation, the cost of energy is among the highest, further straining household budgets. The Donlin project holds potential for lower cost energy options to the region, as the proposed natural gas pipeline will have excess capacity

should there be an interest in accessing natural gas to address the energy needs of the YK region.

The economic benefits with be felt beyond the YK region. Through ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations. An estimated 3,000 jobs will be created during the approximate four-year construction phase, and between 600 to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the economy of the region and the state. The project will offer long-term opportunities for rural Alaskans to develop skills and to enable them to not only continue living in rural Alaska, but to prosper.

SER 6

In addition to these economic reasons in support of alternative 2, the project can be developed, operated, reclaimed and monitored to mitigate potential adverse impacts to the environment.

The State of Alaska Department of Natural Resources along with partner agencies the Alaska Department of Environmental Conservation and the Alaska Department of Fish and Game enforce stringent regulations overseeing mining activities statewide that effectively protect the environment, wildlife, and human health. The proposed pipeline in Alternative 2 is designed to minimize impacts on the Iditarod National Historic Trail. There would be insignificant impacts to the trail and no impacts to the Iditarod Sled Dog race. Construction of the gas pipeline would be sensitive to the timing of the Iditarod and Iron Dog races as well as hunting season.

In summary, the NEPA process gives Alaskans and other stakeholders adequate time to fully review the project documents, and to provide input on the plans. Donlin Gold's project description demonstrates an understanding of environmental concerns, and features vigorous environmental management principles. Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources and have provided significant regional and state-wide benefits. For these reasons I encourage the final EIS to reflect alternative 2 as the preferred alternative and for the Corp and other permitting agencies to move forward in timely issuance of the permits necessary for the development and operation of the project.

Sincerely,

Rick Rogers, Anchorage

Comment Form

The Corps welcomes your comments on the Draft Environmental Impact Statement. If you'd like to mail your comments, please feel free to use this form. Write your comments below then fold this page in thirds so the mailing address shows. Additional pages can be inserted. Remember to affix first class postage. You can also email your comments to POA.donlingoldeis@usace.army.mil, or fax them to (907) 753-5567.

Important topics for comments would include:

- *Comments and questions about the accuracy of information in the Draft EIS.*
- *Comments and questions about the adequacy of methods or assumptions used.*
- *New information to be considered in preparing the Final EIS.*
- *New reasonable alternatives or revisions to current alternatives.*
- *Additional measures to reduce impacts (mitigation).*

NSB 1 Confusion in Stream Crossing

Method of Counting ie over, alongside

Clearing Define of crossing

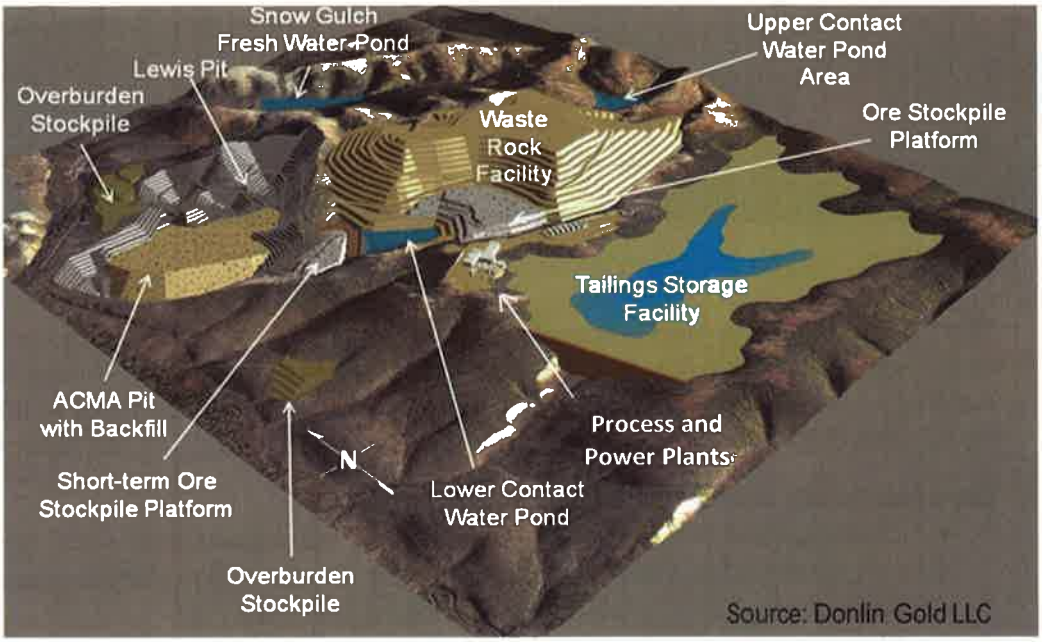
Counts of Anadromous Stream from independent Database, doesn't [illegible] to some cond

Victor Ross at Anch Public Mtg - Recorded (by Taylor Brelsford

Layout of Proposed Mine Site

The image to the right illustrates the eventual layout of a proposed gold mine, ten miles north of the community of Crooked Creek on the Kuskokwim River in southwestern Alaska, for which the US Army Corps of Engineers is preparing an EIS. The project, proposed by Donlin Gold, LLC, includes a natural gas pipeline and transportation and components. You may use this mail-in form to submit comments.

For more information, please visit:
www.DonlinGoldEIS.com



(fold here)

Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, PO Box 6898
Joint Base Elmendorf Richardson, AK
99506-0898

from:

Donlin Gold Project EIS
US Army Corps of Engineers

Place first-class postage here.

From:	Mark Cline
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Thursday, April 21, 2016 8:43:54 AM
Attachments:	ltr to donlin from wilfred ryan.pdf

Dear Sirs:

Please find attached letter expressing my concern and support for the Donlin Mine Project. Please feel free to contact if any question or concern arises.

Respectfully
MCline

RYAN AIR

6400 Carl Brady Drive
Anchorage, Alaska 99502

907 562 2227

ryanalaska.com

April 14, 2016

US Army Corp. of Engineers
Alaska District
2204 3rd St.
Elmendorf AFB, Alaska 99506

To whom it may concern:

Donlin Gold proposes to develop a gold mine project, located north of the village of Crooked Creek, Alaska. Ryan Air, Inc., an Alaskan based commuter air carrier founded in 1953 with over one hundred employees, supports the proposed gold mine project because it appears to be environmentally responsible, a job and economic stimulant and benefits The Kuskokwim Corporation (TKC), Calista and all Alaskan Natives.

Although we cannot forecast the environmental impact that spans three decades of production and subsequent years of inactivity, it appears that Donlin Gold is prepared to protect the environment and river systems. Donlin Gold proposes to utilize up-to-date mining products, such as a synthetic liner under tailings, stabilized downstream construction dam materials and reduced mercury emissions which ultimately cares for the ecological surroundings of a sensitive stream that leads into a major river system, the Kuskokwim River. Land and water pollution remains inherent to mining activity, especially over years of dormancy, but the planned use of a state-of-the-art water treatment plant and well-constructed dams and settling ponds appears that it would mitigate potential risk.

Donlin Gold forecasts that 3,000 jobs will be created during construction and between 600 and 1,200 jobs will be created during production, all jobs located in one of the most economically depressed regions in the State. Jobs support a subsistence way-of-life, critical to the preservation of the Native value and culture. When comparing the Lower Yukon-Kuskokwim area to the North Slope and the Northwest Arctic regions where oil and zinc are extracted, the quality of life between the three regions are noticeably varied. Where jobs exist, individuals are able to purchase goods and products that expands their reach into subsistence rich areas, providing food for their families and promoting self-reliance while improving the quality of their lives. The income derived from mining or resource extraction jobs indirectly promotes and preserves a culture that is currently compromised.

SER 11

SER 2

The land and resources belong to the shareholders of TKC and Calista. Developing the Donlin Gold mine project provides economic opportunity not only for their shareholders, but through the Alaska Native Claims Settlement Act (ANCSA) every native corporation shareholder realizes revenue sharing opportunity through the ANCSA 7 (i) and (j) provisions. In addition, service providers and transportation organizations will benefit from increased opportunity created with construction and production. The gold mine project directly and positively impacts more than 60,000 natives throughout Alaska and abroad and benefits local service organizations.

Donlin Gold promotes transparency, sharing plans with stakeholders and conducting regional meetings to listen to public concerns. They are responsible and sensitive to the value and culture of all Native people, evidenced with their local hire practices.

History has depicted mining with insensitivity to local populations and tribes; however, Donlin Gold understands the potential environmental risks and attempts to mitigate that risk. Donlin Gold understands the dire economic situation that exists in the proposed mining area and plans to utilize a qualified local workforce. Lastly, Donlin Gold understands that the revenue derived from mining not only improves their financial performance but through revenue sharing provisions of ANCSA 7 (i) and (j), all Alaskan natives benefit.

Respectfully submitted,

Wilfred P. Ryan

Wilfred P. Ryan
President

Smith, Neal

From: Craig, Bill
Sent: Friday, April 15, 2016 1:56 PM
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: Donlin Gold Draft EIS comment
Attachments: image001.png; Signed DonlinGold comments.pdf

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, April 15, 2016 1:17 PM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: Wilfred Ryan [mailto:wryan@ryanalaska.com]
Sent: Friday, April 15, 2016 10:52 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Cc: Chimegalrea, Vernon <vchimegalrea@DonlinGold.com>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

US Army Corp of Engineers:

Attached please find my comments submitted to you for your consideration.

Respectfully submitted,

Wilfred P. Ryan

Wilfred P. Ryan

President

(907)771-2314 direct

(907)351-0466 cell

RYAN AIR

6400 Carl Brady Drive
Anchorage, Alaska 99502

907 562 2227

ryanalaska.com

April 14, 2016

US Army Corp. of Engineers
Alaska District
2204 3rd St.
Elmendorf AFB, Alaska 99506

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Respectfully submitted,

Wilfred P. Ryan
President

From: Salazar, Tony
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Monday, December 07, 2015 8:50:23 AM

I have reviewed the draft EIS on the Donlin Gold Project in its' current form as of 12/7/2015.

I believe this project is well thought out and as long as execution of the project achieves the goals and statements in the EIS it will be a huge success for the state of Alaska.

SER 4 This project is very important to the economy of local area where it is being developed and the economy of the state of Alaska. With oil and gas revenues leaving the state with such a large budget deficit in 2015 it is very important that the projects in the state that can be safely developed, should be safely developed. Donlin gold is one such project. Donlin Gold should be moved forward.

Thank you for the opportunity to comment.

Tony Salazar

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From: Bruce Salley
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Project
Date: Monday, May 30, 2016 1:42:42 PM

My name is Bruce Salley, known locally in Aniak as Buck, I owned and operated a small business in Aniak from 1975 until 2003. I still maintain a part time residence there.
During my time in Aniak, I have witnessed the change in the Kuskokwim River Fisheries go from a viable subsistence and commercial fishery to a "What Can We Do To Save Our Salmon" one. The economy has been a beggar's list of lost commercial fishing, few permanent positions, seasonal firefighting jobs, and short term construction positions.

SVE 2 It is the economy that has made me hesitate on a decision regarding the hazards vs benefits of the Donlin Project. While the proposed mine would benefit the area economy for a short period, I cannot believe that the potential for long term to permanent loss of fisheries and associated way of life on the Kuskokwim are worth the risk. I do believe it is a chance at best for a successful mine venture of this scale.

FISH 5 Common sense would indicate that putting that much barge traffic with the associated power on the River could and most likely would be harmful, if not devastating to the fishery.

DAM 2 I also believe it to be no more than a pipe dream to think that the massive tailings, dams, and lakes would pose no problem to the environment.

MON 12 I cannot begin to believe that anyone is, in reality, going to monitor and maintain the pumps and systems required long-term after the mine closure. Once the money is made and gone, so will be the care, along with any recourse.

Despite the favorable and sometimes admirable support Donlin has shown the Kuskokwim and Middle Yukon area, I MUST recommend
OPTION 1.

Sincerely,
Bruce E. Salley
P.O. Box 1
Aniak, Ak. 99557

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April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15

Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

IDIT 1

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

LAND 1

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Darlene Sam
Signature

Darlene Sam
Print Name

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment
Date: Thursday, February 25, 2016 6:46:01 AM

-----Original Message-----
From: Debra Samson [mailto:Debra_Samson@ykhc.org]
Sent: Monday, February 01, 2016 6:15 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Ok, now that I realize how to send in my comment...

SUB 15

Since I can't make it to the Bethel meeting, but I'm listening to it closely on the radio, I just need to say again and again, that the people of the communities all the way up and down the river are very dependent on the fish in the river! If you see the Ak Dept of Fish and Game statistics, they show that the subsistence users of the fish are the #1 harvesters of the fish. They depend on the fish as a way of life and survival.

I once told one of my friends, that Ak Fish and Game has published an advisory recommendation that pregnant women and young children, should limit how much pike they should eat in a week, due to the mercury levels. Her response was: We have been depending on these fish over all the centuries, and that she was not about to start to limit how much she should eat because come outsiders come and tell her to limit her fish intake.

Please help us protect the fish so they don't get contaminated any more than they are already exposed to!

FISH 5

The river is the lifeline of fishing and travel for all the communities. Fish drifting already competes with the barges as it is already, and I can't imagine how much worse it would get with all the extra barges that would be required for this project.

Thank you for hearing our concerns.

Debra Samson

Bethel Alaska resident

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From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment
Date: Thursday, February 25, 2016 6:45:24 AM

-----Original Message-----
From: Debra Samson [mailto:Debra_Samson@ykhc.org]
Sent: Monday, February 01, 2016 6:51 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] RE: Donlin Gold Draft EIS comment

FISH 4

I also want to say that we are already cooperating with Ak Fish and Game when they tell us not to fish, or to do our part to save the King salmon.

We should not be the only ones to try to save the King salmon. Everyone should be doing their part. EIS should help us protect the fish too.

Donlin Gold should respect all these conservations efforts and allow us time to protect the fish as well, until the King salmon levels are at a more sustainable level.

Thank you again for hearing our concerns.

Debra Samson

Bethel Alaska resident

From: Debra Samson
Sent: Monday, February 01, 2016 6:15 PM
To: 'POA.donlingoldeis@usace.army.mil'
Subject: Donlin Gold Draft EIS comment

Ok, now that I realize how to send in my comment...

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Please help us protect the fish so they don't get contaminated any more than they are already exposed to!

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Debra Samson

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SVE 1

ne public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

Given The existing technology and strict adherence TO EPA compliance requirements and Zero Tolerance for NON compliance, There must be some common ground targets The project started and adjust when The need arises. Develope a compromise That insures The highest degree for success. If it pencils out to be profitable and doesn't violate The EPA guidelines.

GO FOR IT.

Hank

Hank E. Schaub
9401 Arlene Dr.
Anchorage, AK 99502-1631

ANCHORAGE AK 995
20 MAY 2016 PM 1 L

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MAY 2 3 2016
AK REGULATORY

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

From: Genevieve Schok
To: donlingoldeis, POA
Subject: [EXTERNAL] Support Donlin
Date: Tuesday, May 24, 2016 9:24:41 AM

Donlin is a HUGE opportunity for Alaska. Please know that as an Alaskan, I support resource development! See more talking points below.

- The Donlin Gold project could produce gold for 27.5 years, while providing HIGH paying jobs in a region where few other opportunities exist.
- The State of Alaska Department of Natural Resources enforces stringent regulations overseeing mining activities statewide that effectively protect the environment, wildlife, and human health.
- New mining operations in the area, should they come to fruition, can be of great economic benefit to Alaska and local communities, as well as Alaska Native corporations and shareholders.
- This project will provide responsible economic prospects for this region and for Alaska, while protecting the subsistence resources.
- The proposed pipeline in Alternative 2 is designed to minimize impacts on the Iditarod National Historic Trail. There would be insignificant impacts to the trail and no impacts to the Iditarod Sled Dog race.

IDIT 2

- Construction of the gas pipeline would be sensitive to the timing of the Iditarod and Iron Dog races as well as hunting season.
- The EIS process gives Alaskans and other stakeholders adequate time to fully review the project documents, and to provide input on the plans.
- The project will offer long-term opportunities for rural Alaskans to develop skills and to enable them to continue living in rural Alaska and to prosper.
- An estimated 3,000 jobs will be created during the approximate four-year construction phase, and between 600 to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the economy of the region and the state.

SER 5

- Donlin Gold's project description demonstrates an understanding of environmental concerns, and features vigorous environmental management principles.
- Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources.
- Potential for lower cost energy options to the region exist, such as the proposed natural gas pipeline which will have excess capacity.

GAS 1

Genevieve Schok Jr.
Flowline Alaska
1881 Livengood Ave.
Fairbanks, AK 99701
W (907) 456-4911
C (480) 209-0029

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: Concerning the donlin Mine
Date: Friday, April 22, 2016 8:56:16 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, April 22, 2016 6:12 AM
To: Craig, Bill
Subject: FW: Concerning the donlin Mine

-----Original Message-----
From: Thomas Scott [mailto:tscott@stgincorporated.com]
Sent: Friday, April 22, 2016 12:32 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Concerning the donlin Mine

To whom it may concern

My name is Thomas Scott, Ive Been with Stg incorporated now for seven years, and I'm a lifelong Alaskan. I'm writing this Letter in support of the Donlin mine project. I would like to begin this by saying I am not writing this for personal gain. This is much bigger than that, I'm writing this in the support of the many friends and their families that I've been so fortunate to meet in the dozens of villages across the yk delta in the last seven years.

SER 10 Ive seen first hand the negative affects that living below the poverty level has on people that struggle every day,on their families, their villages, their people.

I am fortunate to work for a company that has an unwritten policy to hire as many locals as a job can support. Its this practice that has led to lifelong friendships with some truly incredible people. Unfortunately, our projects rarely last for more than a few months in one area or village, but in those few short months, Ive seen some amazing transformations in the men and women that worked with us. They walk their kids to school with a smile, there is a sparkle in their eyes and pride in their walk.They can provide for their families, and their future begins to open up in front of them, and Like cogs in a wheel, their life begins to fall into place.

The worst part of this is when the job ends. Ive seen this first first hand, as quickly as they had built up their lives, as hard as they've worked to claw themselves up, they slide back down. The promise of a better life that was right there, is gone.The future they could see on the horizon fades until it is nothing more than a memory. Their old life, the one they never wanted to be in again, starts over.

SER 5 The Donlin mine project could be the biggest economic boom western Alaska has ever seen. It would provide strong jobs, wages that could raise families, support communities, and provide a better future for a lot of people in an area that offers very few opportunities to very few people a chance for a better life.

As stewards, Donlin has a proven track record as wards of the land. As they should , they live their too!

Thank you for your time

Thomas Scott

This information is intended only for the use of the individual (s) or entity (ies) named above and may contain confidential or privileged information. If you are not the intended recipient or have received this information in error, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this transmitted information is strictly prohibited. If you have received this transmission in error, please delete it and any attachments from your system and notify me immediately.

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''22 CFR Part 125.4 (b) (9) applicable.''

SEWARD IDITAROD TRAIL BLAZERS, INC.

Keith Gordon, Project Manager
Army Corps of Engineers, Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898
POA.donlingoldeis.@usace.army.mil

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Whereas the Seward Iditarod Trail Blazers is a private, non-profit corporation incorporated in 1982 and;

Whereas the Seward Iditarod Trail Blazers was formed to:
1. promote the establishment of a connected trail from Seward to Nome,
2. support historical societies and government agencies in the establishment, maintenance and preservation of historic sites, cabins, and other objects related to the Iditarod National Historic Trail System,
3. oversee the location, construction, maintenance and promotion of the Iditarod National Historic Trail from Seward to Crow Pass; and

Whereas the Seward Iditarod Trail Blazers:

- is the longest, continuous Trail Blazer organization in existence
- monitor and advise USFS from Seward to Girdwood
- provide on-going trail maintenance, improvements and clean-up
- is active in promoting the INHT from Seward to Nome

Whereas activities within the 1000 foot trail corridor for the Iditarod National Historic Trail should be consistent with the INHT Comprehensive Plan and;

Whereas the scenic integrity objectives and landscape character goals for the Iditarod Trail generally provide for only ecological changes in natural landscapes and complete intactness of landscape character in cultural landscapes;

IDIT 8 Now therefore, by Resolution 2016-02, the Seward Iditarod Trail Blazers supports the Iditarod Historic Trail Alliance Resolution16-01. We concur that the pipeline project permanently and irreversibly changes and destroys the integrity and scenic quality of the INHT in all of the affected segments. We urge the USACE to preserve the integrity of the world class Iditarod National Historic Trail corridor by managing it for its scenic, historic, and cultural characteristics consistent with the INHT Comprehensive Plan.

Signed,

Linda Sewall, Secretary
Seward Iditarod Trail Blazers
Date: 3/26/16

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

05/21/2016

DEAR STAN FOD,

YOU HAVE MY SUPPORT
IT WOULD CREATE
THOUSAND OF JOB
FOR THE ALASICA NATIVES
THERE.
I WOULD LIKE TO
APPLY IF YOU HAVE
ANY OPENINGS FOR
THE JOBS THAT WOULD
BE COMING-UP!

QUYANA.

ALFRED SHELDEN
701 S. GLACIER DR
WASILLA, AK
99654

(907) 707-8681 CELL PHONE.

Place Postage Here

SER 5

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

USACE RECEIVED JUN 01 2016 AK REGULATORY

From: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Sent: Thursday, February 25, 2016 7:02 AM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment
Attachments: image001.jpg; image002.png; image003.jpg

-----Original Message-----
From: Neil Shibe [mailto:nshibe@mfcpinc.com]
Sent: Friday, February 19, 2016 2:00 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Cc: Jay Higgins <JHiggins@mfcpinc.com>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To whom it may concern,

As a material supplier for the Alaska mining industry, Motion & Flow Control Products couldn't be a larger supporter of Donlin Creek and their successful mining venture. We understand the massive undertaking that an open pit mine encompasses. The level of environmental and economic impact is undeniable but a safe and sophisticated operation, like Donlin Creek represents, can provide massive opportunity for the local and state economy.

Dolin Gold has kept the environmental stability in mind throughout the entire design phase of the project. The natural gas pipeline proposal to supply fuel to their power plant stems from studies determining the impact on the barge traffic up the Kuskokwim hauling diesel. Financially it's more costly than the barging of fuel but the impact would be drastically less on the Kuskokwim riverbanks. This is a cost they are willing to consider keeping environmental sustainability at the top of their priority list.

SER 12

Donlin Creek Mine could bring in new sources of revenue for hundreds of local businesses. From material suppliers, contractors, engineers, laborers, support staff, and hospitality, are examples of the positive economic impact of what this project could support. The local economy of the Kuskokwim delta could have sustained year round jobs to people who never would have the opportunity in their region.

I write this letter to implore the doubters that this mine will work, and it is good for the Alaska economy. They have the means to conduct a safe and sustainable mining operation that has state of the art safety measures and infrastructure. Motion and Flow Control Products supports Donlin Gold to operate this mine.

Neil Shibe

Parker Store Manager

Motion & Flow Control Products Inc.

360 E. Int'l Airport Rd. #12

Anchorage AK. 99518

Ph. 907-561-3630

Fax 907-561-5636

Blockedwww.mfcpinc.com <Blockedhttp://www.mccoysales.com/>

AUTOMATION - FILTRATION - FLUID CONNECTORS - HYDRAULICS - INSTRUMENTATION - PNEUMATICS - SEALS

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From: Craig, Bill
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: [EXTERNAL] Donlin DEIS
Date: Thursday, April 21, 2016 8:07:50 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Thursday, April 21, 2016 7:58 AM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin DEIS

-----Original Message-----
From: John Shively [mailto:jtshively@att.net]
Sent: Wednesday, April 20, 2016 4:10 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin DEIS

I write in support of Alternative 2 as proposed in the Draft Environmental Impact Statement (DEIS) for the Donlin Gold Project (Donlin). Donlin is a very important project for the state of Alaska, and, more particularly for the people of the Calista region. The Yukon Kuskokwim Delta suffers from extremely high unemployment and this project will bring much need jobs to the area.

SER 5

The construction period will provide about 3,000 jobs and the operations phase will create between 600 and 1200 good paying jobs. It is estimated that these jobs will last for almost three decades given what is currently known about the resource in the area. However, experience with similar mines around the world shows that the resource often expands over time with addition exploration, so the jobs will likely last much longer. It is important to note that these are some of the best paying jobs in Alaska and will likely average around $100,000 per year.

An important aspect of Donlin is that it is on lands owned by Alaska Native Corporations, so the project will bring some direct economic benefits to the shareholders of those corporations. In addition, because of the provisions of Section 7(i) and 7(j) of the Alaska Native Claims Settlement Act, the royalties from the project will be shared throughout the state of Alaska.

I would also like to point out that the project proposes to bring natural gas to the region. Rural Alaska has the highest energy costs in the nation. The expansion of the gasline infrastructure to other parts of the region could substantially reduce those high costs, thus improving the standard of living throughout the area.

GAS 1

In conclusion, I urge you to adopt Alternative 2 as described in the DEIS and to complete the Final Environmental Impact Statement as expeditiously as possible.

Thank you for considering my comments.

Sincerely yours,

John Shively

2301 Loren Circle

Anchorage, AK 99516

Email: jtshively@att.net

Dear Mr. Gordon,

Thank you for the opportunity to express my full support of the Donlin Gold project, specifically, alternative **two** of the Draft EIS.

As a 5th generation Alaskan, a small business owner, and the son of a placer mining family, I believe that Donlin Gold has the potential to significantly impact the State of Alaska and Yukon-Kuskokwim Region in several positive ways. With Alaska's current budget crisis and the oil and gas industry in such turmoil, it is imperative that Alaska diversify its economy and develop our natural resources responsibly.

SER 4

Donlin Gold will not only provide stable, high-paying jobs to residents in one of the poorest regions in our state, but the trickle down effect of a project of this magnitude has the potential to provide opportunities for small business owners like myself. Donlin has committed to using as many local Alaskan businesses as possible, bringing more business and profits to Alaska's economy during the construction and lifespan of the mine.

Donlin Gold has gone above and beyond with community outreach, encouraging conversation and suggestions from any and all impacted regions or groups, including residents and tribal leaders of the YK region, the Iditarod Trail Committee, and the Iron Dog Organization. Alternative two of the DEIS is a product of those discussions, incorporating alternatives that don't necessarily make the best business sense, but is best for the region, land, and various user groups. We should be proud to have such a responsible and committed company doing business in our state.

Environmental responsibility is something that Donlin Gold takes very seriously, which means a lot to me as a resident of Alaska and an avid fisherman. They have conducted fishing activity and river use surveys on the Kuskokwim River, so mining operations to not disturb residents' subsistence way of life and practices. The project was designed to reduce the overall footprint of the mine and allow for safe management of water over the mine life and post closure.

The Donlin Gold Mine will provide significant benefits and opportunities to our state while upholding a commitment to responsible development and land stewardship. Again, thank you for the opportunity to express my support for the Donlin Gold project Draft EIS, alternative two.

Respectfully,

Daniel Siira
Owner
Latitude 61 Technologies
907-223-0019
dan@lat61.com

daniel & alicia
4021 Iona Circle
Anchorage, AK 99507

14 MAR 2016 PM 1 L

Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska
District
CEPOA-RD-Gordon, P.O. Box 6898
JBER, AK 99506-0898

99506@0898

From:	GLORIA SIMEON
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Donlin Gold DEIS comment
Date:	Tuesday, May 31, 2016 9:45:47 AM
Attachments:	Gloria Simeon 5-31-16.pdf

Dear Mr. Gordon,

Please find attached, my comment on the Donlin Gold DEIS.

Sincerely,

Gloria Simeon

Gloria Simeon
P.O. Box 308
Bethel, Alaska 99559
Tel: (907) 543-5676
Cell: (907) 545-4463

31 May 2016

U.S. Army Corps of Engineers
www.DonlinGoldEIS.com

In regards to the Donlin mine project.

This project cannot be allowed to proceed. The impact of this development will certainly have an impact on this region. It may seem that the positives outweigh the negatives in the short run, but the uncertainty and the threats to the lives of every living being are too much at risk to take. We depend on the land, water and air to sustain our very lives. This is not just our subsistence, which is not a "way of life", it is our life. The Donlin mine project is a cancer that cannot be allowed to take hold and metastasize in our region.
I fear for a future of dead rock and poisoned water spreading throughout the region if this is allowed.
Let me preface my statements by the obvious. Alaska is at ground zero for the impacts and effects of climate change on the environment. Weather patterns are changing unpredictably every season, extreme heat with dry conditions leaves the tundra very vulnerable to lightning strikes and fire. Water levels on the river are constantly in flux and undependable. There is not guarantee that tugboats and barges can reach the upper Kuskokwim during season to deliver much needed goods and supplies.

LAND 3 The proposed 315 mile LNG pipeline, with its 12 airstrips and 9 camps, notwithstanding the monitoring posts that will be needed to maintain and operate will open the region up to questionable human traffic that we are not prepared to deal with. Competition for natural resources that we are dependent on can and will increase. Additionally, the entire 315 mile

HAB 1 pipeline will be located in an area that is generally pristine and remote wilderness. It will be impossible to mitigate the scars of this development.

Mining as we all know is the most environmentally destructive form of development. The

AIQ 1 process used to extract that precious one (1) gram of gold per ton of rock affects the very air, land and water that we need to sustain our lives. The prevailing winds will spread not only the dust resulting from blasting the mountain, layer by layer, but also the chemicals used to roast and toast, basically kill, the rock to extract the gold. There will be additional dust and emissions from the 70 trucks traveling the 30 mile road from the mine to the river 24/7. Additionally, loaders, graders and other huge equipment are needed to move, process and remove the now dead rock.

WILD 2 The constant blasting of the mountain will affect all wildlife in the immediate area.

WAQ 8 The millions, perhaps even billions of gallons of water that is critical to the mine operations has to come from somewhere. Once it is used, it is never safe again.

PHL 16 Arsenic and mercury, both known to be global pollutants and health threats, will be used for extraction purposes. Transportation, storage and use of these hazards pose threats to life, present and future. Air, land and water.

BARG 12 With the climate change we are experiencing, the Kuskokwim River is experiencing high spring, but lower summer water levels. Increased barge traffic, transporting massive container loads will negatively impact the returning salmon and other fish species we depend on. Increased erosion is of great concern.

WAQ 8 I do not believe that Donlin or its subsidiaries can comply with the Clean Water Act in its entirety. Besides the obvious concerns over mining development in general, we must think long and hard about water. Our rivers and lakes are the life blood of our land, just as our blood flows and nourishes our bodies. We must protect our water.

Any failure of even one of the environmental protections that Donlin assures us of will be the end of life as we know it. Once the river is poisoned, it can never be contained. It will spread to every living thing on the delta and further on.

BER 7 Whatever surety bonds the company promises, should be in the billions, but that still will never be enough.

SVE 2 Despite all the reassurances from the company that the mine can and will be operated without jeopardizing our land, resources and lives and recognizing the need for jobs and economic development in our region, I believe the risks are too great. Recent examples of the Polley Mine in British Columbia and the clean-up breach at the Gold King Mine releasing 3 million gallons of toxic water into the Animas River, affecting not only Colorado, but Utah and New Mexico and all connecting rivers.

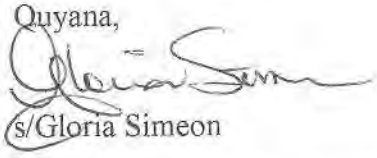
DAM 7 I also wonder about the tailings lake liners and the reassurances we received that they can withstand extreme anything. Well, this past summer we were faced with extreme weather, the likes we have never seen before. I wonder how these "indestructible" liners will stand up to lightening strikes and fires.

MON 12 The tailings lakes and other waste will need to be monitored and treated forever. What is Donlin's definition of "perpetuity"? Where are these "forever" plans? Is every village downriver from the mine prepared for the unexpected? Donlin isn't. They are only prepared for the expected. The environment is changing so fast. Can we allow this development on a maybe?

SUB 13 I remind you that the federal government has a special obligation to protect Native subsistence hunting and fishing rights. It is your duty and responsibility to vigorously enforce environmental statutes which protect species necessary for our survival. This mine project is a threat to our already diminishing fish harvests, not to mention all other species that we depend on.

EJ 1 Furthermore, I believe the federal government must begin to thoroughly vet foreign entities, their parent companies and subsidiaries. Their human rights and environmental practices investigated before they are allowed to operate in the United States. Barrick's international record on human rights violations and environmental degradation is atrocious. It is shameful that these companies are even allowed to exist.

Quyana,



s/Gloria Simeon

cc: Raina Thiele, Office of Intergovernmental Affairs

From: Marce Simeon
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Wednesday, April 13, 2016 4:09:23 PM

Army Corps of Engineers,

My name is Marce Simeon and I am a shareholder of The Kuskokwim Corporation and Calista Corporation. I was born and raised in the Kuskokwim region, living in both Crooked Creek and Aniak until I graduated in 1998. I am a tribal member of Crooked Creek and a board member of The Kuskokwim Corporation (since 2006), currently serving as vice-chair.

I currently reside in the Copper River Region and have not lived on the Kuskokwim since 1998 but most of my family still does. I visit Aniak usually on an annual basis and sometime more often. Even though I may not reside there, my heart lives there and always will. That is my home.

Now that you know a little bit who I am, I wanted to share why I am in support the Donlin Gold project. We are a region that is economically deficient and have high rates of both unemployment and poverty. The opportunity to work within the region is something that is desirable for many residents. Jobs alone are not the reason I support mining or this project specifically.

SER 5

I believe that there are responsible ways to develop and extract natural resources. We have come a long way and many regulations, laws, and requirements encourage the safe and environmentally friendly ways for resource development. The draft EIS examines many different scenarios in which something may go wrong. This is important to know but to put into prospective. Just because there may be a multitude of things that can happen does not mean it will or to the maximum effect described. Fear is something that usually causes reaction; predominantly negative reactions.

FSR 7

So how do we move forward without fear? We play an active role in what is going on in our region. TKC (The Kuskokwim Corporation) has been invited and had a seat at the table with many of these environmental decisions. We are encouraged to talk about environmentally sound mining strategy, alternatives that are less impactful on the surroundings, as well as long term reclamation plans. This doesn't seem to be the position of a company (Donlin Gold) that is not committed to working with the people and finding the best solution to mine responsibly.

PUB 2

Donlin currently employs many hard working and intelligent people that continue to be a voice and presence in our region. Many of them are shareholders. They are committed to having their own personnel be an accurate representation of the communities in our region. I do not think that these individuals love the Kuskokwim any less than I do. I certainly don't think that these individuals would have a job that actively destroys the place they call home.

PUB 2 There are risks and will continue to be things we need to be mindful about to be sure that we are taking the best path. Based on the agreements in place, we will always have a seat at that table and be involved with the decisions that effect our lands, river, and wildlife. If responsible development were not possible this would not even be a discussion for our board of directors or our shareholders.

I wanted to end by saying that as a Copper River resident for the last 14 years I have been able to observe first hand how resource development can play a great role in long term viability. Here we have had decades of mining from the Nebesna (upper Copper River region) all the way down to the mouth of the river with resource extraction that included copper, gold, and other minerals. We have the pipeline running through our back yard. Yet people and wildlife continue to live here and thrive here. We boast having world renowned fishing, hunting, and untouched scenery. I point this out because it is possible to have a balance between development and subsistence.

SVE 1

I appreciate you taking the time to hear my comments. Please note that these comments are solely for the purpose of public comment to the Army Corps of Engineers on the draft EIS for the Donlin Gold project. They may not be taken out of context or used for any other purposes with my permission.

Thank you for your time and dedication.

Marce Simeon
(907)822-4249

Comment Form

The Corps welcomes your comments on the Draft Environmental Impact Statement. If you'd like to mail your comments, please feel free to use this form. Write your comments below then fold this page in thirds so the mailing address shows. Additional pages can be inserted. Remember to affix first class postage. You can also email your comments to POA.donlingoldeis@usace.army.mil, or fax them to (907) 753-5567.

Important topics for comments would include:

- *Comments and questions about the accuracy of information in the Draft EIS.*
- *Comments and questions about the adequacy of methods or assumptions used.*
- *New information to be considered in preparing the Final EIS.*
- *New reasonable alternatives or revisions to current alternatives.*
- *Additional measures to reduce impacts (mitigation).*

very spectacular project for Region tax.

PAA 3 I support Alternative 2 primarily because of the details of the natural gas pipeline proposal. Impacts to the Iditarod Trail

IDIT 2 will be minimal, and the benefits to the region will be great. -Jobs & economy Alternative 2 contains appropriate barging plans, but the draft EIS, mischaracterizes barge traffic.

PAA 3 Alternative 2 is the preferred alternative because mitigation of impacts is clearly described. Not all mining projects will result in the worst case scenario. I firmly

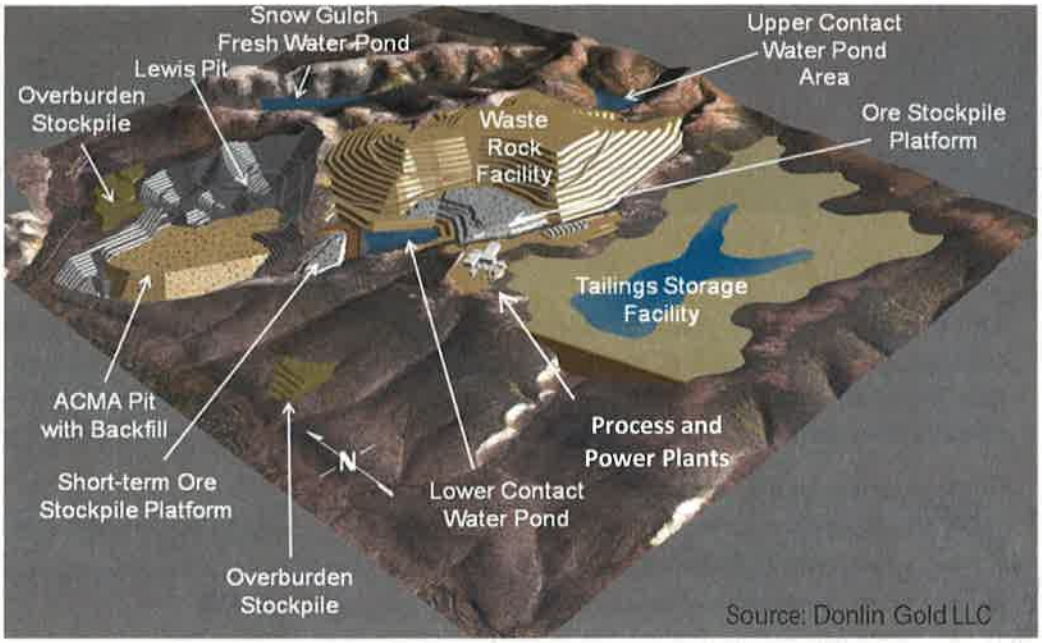
PHL 2 believe that an HIA based approach to address human health issues is a horrible approach and is easily misconstrued and misapplied. The EIS should be guided by and focus on the specific issues identified during scoping as required by NEPA.

Lorali Simon

Layout of Proposed Mine Site

The image to the right illustrates the eventual layout of a proposed gold mine, ten miles north of the community of Crooked Creek on the Kuskokwim River in southwestern Alaska, for which the US Army Corps of Engineers is preparing an EIS. The project, proposed by Donlin Gold, LLC, includes a natural gas pipeline and transportation and components. You may use this mail-in form to submit comments.

For more information, please visit:
www.DonlinGoldEIS.com



(fold here)

(To mail, fold below blue line. Photo: Dave Cannon)

Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, PO Box 6898
Joint Base Elmendorf Richardson, AK
99506-0898

from:

Donlin Gold Project EIS
US Army Corps of Engineers

Place first-class postage here.

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Mining Opinion
Date: Thursday, February 25, 2016 6:55:15 AM

-----Original Message-----
From: Kenlynn Slats [mailto:kenlynn_slats@lksd.org]
Sent: Wednesday, February 17, 2016 9:59 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Mining Opinion

Kenlynn Slats

PO 2006

Bethel, Ak 99559

Kenlynn_Slats@lksd.org <mailto:Kenlynn_Slats@lksd.org>

907-545-4099

February 17, 2016

U.S. Army Corps of Engineers

Blockedwww.poa.usace.army.mil <Blockedhttp://www.poa.usace.army.mil>

Keith Gordon, Project Manager

Keith.Q.Gordon@usace.army.mil <mailto:Keith.Q.Gordon@usace.army.mil>

907-753-5710

To Whom It May Concern:

Hello, my name is Kenlynn Slats and I am a resident of Bethel, Alaska. My father is from Chevak and my mother is from Kongiganak. Gold mining had been around for many years, but have you ever wondered how it effects our surroundings? The gold companies use harmful chemicals such as cyanide during the process of mining. Is it worth it to destroy our land just for wealth? In my opinion, I am opposing against the Donlin Gold mining project. There are potential risks for the gold mining that could ruin the land, the water, and our health.

SUB 15

Since they use cyanide solutions to extract gold from other minerals, there's a chance that the cyanide would leak into the environment. If this happens, our water would be contaminated because of this poison. According to the Fraser Institute, fish would die off, which interferes with our subsistence lifestyle that's been in our culture for centuries. Another one is that there would a problem with the

SER 3

SER 3

economy because of the money that's being put in this project.

FSR 1

The Donlin Gold Company is going to do open-pit mining by Crooked Creek. One of their plans is to make a 315 mile gas pipeline using diesel fuel that stretches from the mining site to Anchorage. This pipeline terrifies me because what if the pipe gets damaged and it starts to drain diesel on the tundra. Union of Concerned Scientists says that the effects of diesel can contaminate the water, which disturbs the aquatic life. If Donlin Gold places the pipeline on the surface of the tundra or below it will erode the land. The UCS said that the surface waters would decrease in size.

PHL 16

Mercury is toxic to the body and our environment so why is it going to be barged on the Kuskokwim River? The amount of mercury that's going to be barged on the Kuskokwim is about 17 tons. It would be a tragedy if the mercury leaked into the river. Being exposed to mercury such as inhaling or ingesting it is fatal for us and wildlife animals. World Health Organizer says, "Top ten chemicals or groups of chemicals of major public health concern."

DAM 8

On January 24, 2016, earthquake of 7.1 magnitude struck Anchorage, Alaska. The result of the earthquake damaged property and horrified many people. I don't think that the Donlin Gold should mine because a catastrophe could happen near the site. Lisa Demer wrote an article about the Donlin Gold mining and mentioned that they are going to pump out the waste after the mining. If an earthquake disturbs the tailings, I believe that there's an increased risk of hazardous chemicals spilling onto the land.

TWL 1

"Only when the last tree has died and the last river poisoned, and the last fish been caught, will we realize we cannot eat money," said by the Cree Indian Proverb. Money sounds good for now but you can't take back what they are going to do to the land after the destruction. It's your choice to side with Donlin Gold or to be against it with me. So what's your opinion about the mining now?

Sincerely,

Kenlynn Slats

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

SVE 4

I think that the Donlin Gold Project would benefit the people of the CALISTA and the Yukon/Kaskokwim region, as long as our rivers do not get polluted from the waste by products from the mine. I think that the Donlin Gold Mine as well as the owners do not pollute the land and take extreme measures to make sure that all pollutants will be contained and not leak into the rivers and the land we do subsistance on. Food from the land and rivers sustain us and that is why we take care of it. Stores are too expensive, so we supplement our foods by subsistance. The jobs generated by Donlin will help the economy in the Y-K Delta.

Thank you,

Albert Smith

Albert S. Smith
Palmer Correctional Center
P.O. Box 919
Palmer, Alaska
99645-0919

ANCHORAGE AK 995
24 MAY 2016 PM 1 T

USACE
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U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

USACE
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April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15

Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

IDIT 1

LAND 1

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Signature

Dennis E Smith Jr

Print Name

From: Dave Snider
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Tuesday, May 31, 2016 11:13:01 PM

Dear Sir or Madam

Large mine operations leave long histories of damage and reclamation in their wake.

SUB 16 With the most vulnerable of our state's subsistence communities in the path of environmental changes or worse, accidents and destruction, it does not make logical sense to put additional risk on our state.

Please do not allow Donlin to move forward with this project.

Thank you.

Dave Snider
907-980-6759
Sent from my iPhone
--

Dave Snider
907 980 6759
Sent from my mobile device. Please excuse any typos.

From: Patrick Snow
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Tuesday, May 31, 2016 5:27:22 PM

My understanding is that (in all scenarios) once the mine is closed/shut down the waste materials (i.e. heavy metals, and other toxic chemicals) will continue to be the responsibility of the people of the state of Alaska in perpetuity.

WAQ 20 The contaminants would be at the head of a watershed and would jeopardize the health of water dependent resources downstream of the mine area if containment measures failed.

The risks to renewable state resources are not worth the short term gains. It wouldn't be sound management.

SOLSTENXP

USACE
RECEIVED
MAY 17 2016
AK REGULATORY

10-May-2016

Keith Gordon, Project Manager
U.S. Army Corps of Engineers
Alaska District CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK, 99506-0898
POA.donlingoldeis@usace.army.mil

Re: Donlin Gold Public Comments – Support for Alternative 2

Dear Mr. Gordon:

SolstenXP Inc. is an Alaskan company with approximately 150 employees that provides consulting, logistical, operational, engineering and environmental support to Alaskan natural resource projects. SolstenXP supports the Donlin Gold Proposed Alternative (Alternative #2) as an environmentally and socially responsible project that can stimulate Alaska's economy for decades to come.

As the evaluation of the Donlin Gold Draft EIS proceeds, we respectfully request that USACE consider the following comments in support of the Donlin Gold Proposed Alternative.

SER 4

Economic Benefits for the Yukon Kuskowkim (YK) Delta and the State

Economic times are difficult throughout Alaska as the state deals with a $4 billion deficit and a 75 percent decline in the State's income. Rural Alaska in particular is heavily impacted by the reduction of state dollars. The Donlin Gold project could produce gold for 27.5 years, augmenting the State's revenues while providing well-paying jobs in a region where few other opportunities exist. An estimated 3,000 jobs will be created during the approximate four-year construction phase, and between 600 to 1,200 jobs for the estimated mine life of 27.5 years. These jobs could help sustain communities in the YK Delta region as well as provide employment for many Alaskans around the state. Additionally, the royalties paid to Calista Native Corporation would also be shared with other Alaska Native corporations, pursuant to the 7(i) and 7(j) provisions of ANCSA, bringing much needed financial support to Native Alaskan communities across the state.

Social Responsibility

PUB 6

Donlin Gold has worked in good faith with the local communities and interest groups for many years. They have made extensive efforts to travel to numerous villages and to present information in both English and the local Native language. In response to local concerns about impacts to fisheries on the Yukon River, Donlin Gold incorporated a natural gas pipeline into their project design to minimize fuel barge traffic on the river. By designing excess capacity into the gas pipeline, Donlin Gold also created potential for local communities to access natural gas to address their future energy needs in the YK region. Working closely with residents and the Iditarod Trail Committee, Donlin Gold further optimized the pipeline design by aligning it to minimize impacts to local subsistence use areas and the Iditarod National Historic Trail.

GAS 1

IDIT 2

Environmental Responsibility

NEP 4

Donlin Gold's project description demonstrates an understanding of environmental concerns and compliance with the State's stringent environmental regulations. It features vigorous environmental management principles including a fully lined tailings impoundment.

Thank you for considering our comments in support of the Donlin Gold Project during this public comment period.

Sincerely,

SOLSTENXP INC.

Jesse Mohrbacher
President & CEO

From: Bill Stamps
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Project
Date: Tuesday, May 24, 2016 1:01:54 PM

Dear Sir or Madam,

Please let this serve as my show of support for the Donlin Gold project.

The mining industry in Alaska has shown for many years that projects in this industry can be done in a safe and environmentally sound manner. The State of Alaska DNR regulates the mining industry and provides oversite to the industry.

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Given the financial problems of the State of Alaska it should be a priority to get the Donlin Gold project approved and underway as soon as possible. It is estimated the Donlin Gold project will provide upwards of 3,000 jobs during the construction phase and over 600 jobs for the life of the mine which is expected to be in excess of 20 years. This project would be an important boost to the economy of the region as well as the State of Alaska and provide opportunities to the people of the region they otherwise would not have.

Bill Stamps

From:	Bruno, Jeff J (DNR)
To:	Newman, Sheila M POA; Gordon, Keith POA
Cc:	Isaacs, Jon; Craig, Bill; Brewer, Jason D POA
Subject:	[EXTERNAL] State of Alaska consolidated draft EIS comments on Donlin Gold Mine
Date:	Tuesday, May 31, 2016 5:08:02 PM
Attachments:	Donlin Gold draft EIS SOA comments.pdf

Keith and Sheila,

Thank you for the opportunity to comment on the Donlin Gold draft EIS. Attached are the State of Alaska's consolidated comments. As stated in the cover letter please note that I am submitting these consolidated comments on behalf of Governor Walker's Office. Please contact me with any questions that you might have.

Jeff Bruno
Deputy Director
Office of Project Management and Permitting
State of Alaska
Department of Natural Resources
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Governor Bill Walker
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May 31, 2016

Mr. Keith Gordon
Alaska District
U.S. Army Corps of Engineers
CEPOA-RD-Gordon
P.O. Box 6898
Joint Base Elmendorf-Richardson, AK 99506-0898

RE: State of Alaska consolidated comments on Donlin Gold draft EIS

Dear Mr. Gordon:

The State of Alaska (State) has reviewed the draft of the Environmental Impact Statement (EIS) for the Donlin Gold mine and is pleased to provide the attached comments.

As you know, exploration and development of Alaska's natural resources plays an important part of our past, present, and also our future. The five large mines currently active in our state provide excellent jobs for Alaskans and stimulate and diversify Alaska's economy. Responsible development of the proposed Donlin Gold project will continue this tradition and enable the Calista Corporation (Calista) and The Kuskokwim Corporation (TKC) to generate employment, business opportunities, and revenues for their shareholders and the shareholders of other Alaska Native corporations throughout the state, as well as for the State of Alaska.

More than twenty years have passed since Calista first entered into a mining lease for the mineral lands it selected under the Alaska Native Claims Settlement Act (ANCSA). Over that time, Donlin Gold has been extremely active with community outreach and involvement. As a resource development state, we have a long history of understanding the challenges of responsibly developing our natural resources and economy while protecting subsistence resources and cultural values. Experience has shown a balance of needs can best be met with direct and substantive involvement of the local communities and tribal governments. This type of stakeholder engagement is essential to balancing those needs and will be necessary through all phases of the proposed project.

In 2013 Donlin Gold was named National Employer of the year by the National Association of State Workforce Agencies, recognizing businesses that demonstrate outstanding accomplishments resulting in a positive impact on its workforce, industry, and community. If developed, the Donlin Gold mine would create a variety of exceptional jobs in the Yukon-Kuskokwim region, which will be required to sustain a modern, responsible mine. Donlin Gold has described many of these jobs in an employment booklet, which also describes the qualifications for those jobs. I am proud to note

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that Alaska has the universities and technical programs that provide the education and training required to qualify for those positions. Alaskans, trained in Alaska, will be able to work to help ensure that the Donlin Gold mine will be accomplished with the highest regard for our land, air, water, fish, and wildlife.

PUB 6

The State has been encouraged by Donlin Gold's willingness to explore and adopt major changes in their project design to meet public and regulator concerns. This type of stakeholder interaction, and the ability to respond and adapt, ensures that the design of such an important project is a collaborative effort. Donlin's demonstrated ability and willingness to respond to stakeholder concerns with tangible, substantive design changes, whether it be to the pipeline alignment or to the mine site operations, are an invaluable trait for any project proponent. Donlin Gold has been proactive in working with State agencies to discuss concerns early on in the process in order to design a project that balances the needs of all stakeholders and resources.

The State has been a cooperating agency on the development of this draft EIS and has been heavily involved in the process since 2012. The release of the draft EIS is a major milestone for the USACE and the rest of the EIS team. I ask that the USACE continue to be efficient in their development of a defensible EIS and National Environmental Policy Act (NEPA) process and look forward to a timely release of the final EIS and subsequent Record of Decision(s).

For these reasons, I support the responsible development of this project and look forward to continuing a partnership with the USACE, the cooperating agencies, and Donlin Gold to ensure a project designed with the highest regard for the surrounding environment and communities. Additionally, the responsible development of these resources assures that Calista and TKC are allowed full enjoyment of their lands as was intended by the Alaska Native Claims Settlement Act, while potentially extending and providing critical infrastructure and utilities to rural Alaska. As this project moves through the federal and State permitting processes, we look forward to additional discussion on a number of aspects of the project to ensure responsible development through the entire life of the project. Thank you for the opportunity to comment on the Donlin Gold draft EIS.

Sincerely,

Bill Walker
Governor

Enclosure

Donlin – Draft EIS State comments

	Department/Division/ Section	Section # (i.e. 2.1.4)	Page #	Figure # / Table #	Comment
CLA 7	**ADEC**	All	All		GENERAL DISCUSSION This comment is for informational purposes only. DEC Division of Water, Wastewater Discharge Authorization Program (WDAP) is currently working on issuing General Permit AKG332000 – Statewide Pipeline Construction, Operation, and Maintenance (Pipeline GP), which will authorize wastewater discharges associated with hydrocarbon pipeline Construction, Operations and Maintenance. The following discharges are being considered for authorization in the Pipeline GP: Domestic Wastewater, Gravel Pit Dewatering, Excavation Dewatering, Hydrostatic Test Water, Secondary Containment, Mobile Spill Response, Horizontal Directional Drilling, and Storm Water.
MIT 9	**ADEC**	2.2.3.9 Executive Summary	ES-24		Authorization under the Pipeline GP for the discharge of hydrostatic test water assumes summer discharges and no chemical additives (e.g., no antifreeze or biocides). In addition, Best Management Practices for sediment and erosion control at the point of discharge would be required.
EDIT 1	**ADEC**				For the road, airport and mine site, authorization under AKR100000 (Construction General Permit), in conjunction with AKR060000 (Multi-Sector General Permit), will address soil disturbance in the uplands while the Corps 404 Permit will cover soil disturbance in the waters of the U.S.
EDIT 9	**ADEC**	DEIS Appendix J		Table A-1	Include a requirement for revegetation of growth media stockpiles and erosion control as needed at the following facility locations (Number is the facility number from Table A-1): a. 3 Jungjuk Port Growth Media Stockpile b. 27 Airstrip (Northwest Clear Zone/Growth Media Stockpile) c. 28 Airstrip (Southeast Clear Zone/Growth Media Stockpile) d. 71 Stockpile #1 (Growth Media)/Wetland Mitigation Area e. 74 Stockpile #3 (Growth Media)/Wetland Mitigation Area

EDIT 9	**ADEC**	DEIS Appendix J		Table A-1	Include a requirement for erosion and sediment control at overburden stockpiles: a. 44 Terrace Borrow Site 3/North TSF Overburden Stockpile and wetland b. 50 North Overburden Stockpile 2028 & Reclamation Area c. 63 Terrace Borrow Site 4/Central TSF Overburden Stockpile and wetland d. 64 Terrace Borrow Site 4 & 5/South Overburden Stockpile 2019 e. 81 Terrace Borrow Site 7/South Overburden Stockpile 2033
EDIT 9	**ADEC**	DEIS Appendix J		Table A-1	Include a requirement for sediment control for large pads that may have significant runoff, or are near sensitive areas (Post-construction storm water control measures): a. 1 Jungjuk Port 18.7 ac b. 39 Plant Site Crusher Facility Access Road & Parking 21.1 ac c. 42 Primary Crusher Pad 43.6 ac d. 75 Construction Laydown Area 1 76.2 ac e. 76 Construction Laydown Area 2 70.1 ac f. 77 Construction Laydown Area 3 28.9 ac g. 78 TSF Construction Laydown Area 4 88.7 ac h. 114 Millsite/Plant Site Pad (also Construction Camp) 123.5 ac
EDIT 5	**ADEC**	3.7	3.7-5		Paragraph six on this page discusses the Corp's regulatory authority for issuing 404 permits. It should be noted in this paragraph that the Alaska Department of Environmental Conservation (ADEC) issues a Certificate of Reasonable Assurance under Section 401 of the Clean Water Act and the Corp's 404 permit is not valid until ADEC issues a 401 Certification or waives its authority.
WAQ 29	**ADEC**	3.7.3.2.2	3.7-148		The first sentence in paragraph three is not as clear as it could be. Please consider rewording the sentence to read: *"As a result of the wetlands removal that would occur under Alternative 2, elements that are associated primarily with the particulate fraction, such as arsenic, mercury, lead, and zinc, could increase **in concentration** within the **waters of the** project area, specifically at Category 3 sample locations that drain the proposed project area."*
CLA 31	**ADEC**	3.7.3.2.2	3.7-157		The title for the section at the bottom of the page should read: *"Tailings Storage Facility and Seepage Recovery System Water Quality"* Abbreviations should be avoided in section titles in order for the public to understand the issues clearly
GRD 14	**ADEC**	3.7.3.2.2	3.7-156		Paragraph one in the Closure, Reclamation, and Monitoring section on this page discusses how water from the tailing storage facility and seepage from the waste rock facility would be directed to the bottom of the pit lake. First, the waters in question would be pumped to the pit rim, then flow by <u>gravity-fed pipe</u> to the bottom of the pit lake. It is not clear how gravity-fed flow could overcome the hydrostatic pressure at the bottom of the pit lake. Please confirm or explain more clearly
	ADEC WAQ 29	3.7.3.2.3	3.7-167		The title of the paragraph at the bottom half of the page should read "*Summary of Mine Site Impacts **to Groundwater***"

	ADEC WAQ 23	3.7.3.2.4	3.7-169		This section discusses "Sediment Quality", but it is not clear why this topic is included in a discussion of Water Quality. Please provide a brief introductory statement explaining how sediment quality can impact water quality.
	ADEC EDIT 5	3.8.3.1	3.8-35	3.8-15	The far right column in the table (HAPs) appears to have a footnote (b) in the column referring to Title V New Major Significant Threshold, but there is no footnote (b) at the bottom of the table. Please correct.
EDIT 5	**ADEC**	3.8.3.3.1	3.8-41		Paragraph five on this page discusses the potential for triggering Title V permitting. Sentence three in this paragraph mentions that the **CAM Rule** would be applicable to the project approximately 5 years after startup. Please spell out "Compliance Assurance Monitoring" Rule so that the information is clearer to the general public.
EDIT 5	**ADEC**	3.24.1.4	3.24-7		Paragraph one of this section notes that "*Alaska is one of the few states that does not have the authority to administer hazardous waste regulations and, therefore, defers to federal RCRA regulations."* Please note in this paragraph that the Environmental Protections Agency has the authority to administer the hazardous waste regulations.
CLA 24	**ADEC**	3.24.2.5	3.24-11		Paragraph one in this section notes that "*This area is not currently being mined; therefore, no plan or capacity for response is presently available for this area."* Since placer mining also takes place in this region, you may want to change the sentence to read "*This area is not currently being mined **in a manner which produces mine tailings;……"***
	ADEC CLA 25	3.24.3.1.2	3.24-14		The first sentence in the final paragraph on this table discusses the location of tank farms associated with the project. While the fuel tanks located at the airstrip may not be considered a tank farm, you may want to mention the fuel tanks at the airstrip in this paragraph.
FSR 10	**ADEC**	3.24.5.4.2	3.24-43		This paragraph describes the impacts of a tanker truck collision and diesel spill on the roadbed. The description further notes that "*A very small amount of diesel would reach the road and it would remain on the roadbed" and "all diesel would be recovered minus any lost to evaporation."* It is not clear how all diesel would be remain on the roadbed, since it would be an unpaved gravel road. Some percentage would soak into the road, so all diesel would not be recovered unless the contaminated gravel in the roadbed was removed.
SOL 10	**ADEC**	3.24.5.7.3	3.24-47		This section describes the impact of a vehicle collision and cyanide spill. The description notes that "*To remediate impacted soils, the soil would be tested for WAD cyanide. If the testing indicates a WAD level of less than 10ppm, the soil will be left in situ. If the WAD level of cyanide is more than 10ppm, the soil would be excavated.* Please explain how this cleanup level would comply with state cleanup standards found at 18 AAC 75
WAQ 27	**ADEC**	3.24.6.7	3.24-79		This section describes the impact of a tanker truck release of 13,500 gallons of diesel fuel to the environment. The description notes that "*The duration of the impacts would be considered temporary because concentrations of total aqueous hydrocarbons **would return to below threshold levels** specified by the most stringent applicable water quality criterion…**within a***

WAQ 27					***period of several days*** *following the accidental release."* It is not clear how the concentrations of hydrocarbons would return to below threshold levels in such a short amount of time. A similar spill on the Richardson highway on December 9, 2014 resulted in contaminated snow and impacts to groundwater. Environmental conditions in the early spring and late fall season may result in concentrations of hydrocarbons lasting in excess of several days.
AIQ 5	**ADEC**	3.24.6.8	3.24-108		This paragraph describes air emissions associated with spills. The final sentence in this paragraph notes "*In all cases, the magnitude of emissions for spills is estimated to be low, as there are no permit thresholds for fugitive or mobile emissions that would occur in a spill scenario."* It is not clear why spill emissions are being discussed this way. The spills being described are low probability, high consequence occurrences. It should be noted that due to the low risk of spills that describing air emissions resulting from oil spills would remote and speculative. Only foreseeable effects need to be considered under NEPA and mixing speculative and foreseeable effects in this discussion is confusing to the reader.
AIQ 5	**ADEC**	3.24.6.8.1	3.24-108-113		General comment: Throughout the discussions on these pages, air emissions are discussed in the context of spill scenarios. A recurring statement is made "*Although difficult to predict…..the overall impacts to air quality would likely be negligible."* As noted above, remote and speculative spills that are difficult to predict should not be discussed in the same context as foreseeable effects.
	ADEC CLA 8	3.24.6.9	3.24-113		It is not clear why there is a section named 3.24.6.9 Noise and Vibration in the spill risk section.
CLIM 2	**ADEC**	3.26.3.1	3.26-7	Table 3.26-1	This table references ADEC's 2008 *Draft Summary Report of Improvements to the Alaska Greenhouse Gas Emission Inventory.* Please note that the department has issued "*Alaska State Greenhouse Gas Emissions Inventory 1990-2010"* this report was published as of March 12, 2015 and is available at http://dec.alaska.gov/air/anpms/Projects&Reports/DOCS/GHG-Inventory-Report-2015.pdf
	ADEC CLIM 2	3.26.4	3.26-24	Table 3.26-8	This table also references ADEC's 2008 *Draft Summary Report of Improvements to the Alaska Greenhouse Gas Emission Inventory.* See above comment for update information.
	ADEC CLIM 2	3.26.4.2.1	3.26-26		Paragraph two on this page references ADEC's 2008 *Draft Summary Report of Improvements to the Alaska Greenhouse Gas Emission Inventory.* See above comment for update information.
	ADEC CLIM 2	3.26.4.2.1	3.26-27	Table 3.26-9	This table also references ADEC's 2008 *Draft Summary Report of Improvements to the Alaska Greenhouse Gas Emission Inventory.* See above comment for update information.
	ADEC CLIM 2	3.26.4.2.1	3.26-29	Table 3.26-10	This table also references ADEC's 2008 *Draft Summary Report of Improvements to the Alaska Greenhouse Gas Emission Inventory.* See above comment for update information.
	ADEC CLIM 2	3.26.4.2.1	3.26-31	Table 3.26-11	This table also references ADEC's 2008 *Draft Summary Report of Improvements to the Alaska Greenhouse Gas Emission Inventory.* See above comment for update information.

WAQ 29	**ADEC**	4.3.1.7.2	4-29		Paragraph one, sentence two notes that "*Surface water quality within mite site watersheds would be affected by the creation of the WRF, TSF, and pit lake; however, due to perpetual management and water treatment,* ***water from these facilities would not leave the onsite watersheds.****"* It is not clear how this can be true when the following sentence states that "*Effects from mine site waters on the environment would be mostly of low intensity, as* ***all water would be treated to meet water quality standards prior to discharge to Crooked Creek****."* Perhaps the second sentence should be revised to say "*water from these facilities would not leave the onsite watershed* ***without treatment****."*
AIQ 7	**ADEC**	4.3.1.8.1	4-35		Paragraph two, sentence four notes that "*There would be* ***emissions above permit thresholds*** *for the mine site during the operations phase, but the impact would not exceed ambient standards or increments."* This language could be read to imply that the operator intends to emit pollutant in violation of the permit conditions. If this sentence means to say that emissions for activities outside of those permitted (such as truck traffic) would result in pollution above the amounts anticipated in permitted activities, then the sentence need to be reworded.
WAQ 29	**ADEC**	5.7	5-37	Table 5.7-1	The entry under Monitoring I.D. "Mon 8" notes that "*The monitoring plan and data evaluation details should be elaborated upon to describe the proposed approach to statistical comparisons with baseline data and how it will be determined that water quality standards have been met and management activities can change."* To make this clearer the sentence should read "*The* ***water quality*** *monitoring plan and data evaluations details……"*
PHL 12	**ADEC**	5.7	5-37	Table 5.7-1	Mod 24 addresses the development of site-specific bioaccumulation factors for methylmercury evaluation of fish tissue monitoring. ADEC is listed under the column for Permit & Agency authority, but it is not clear what role ADEC would play. The Environmental Health Division operates a laboratory that conducts fish tissue monitoring, but to my knowledge does not develop site specific bioaccumulation factors.
FISH 15	**ADF&G**	3.2	3.2-53		". Of these, about 30 are associated with fine-grained soils considered particularly vulnerable to erosion, and about 20 of those have known or potential fish habitat." EIS should make it clear that erosion at these areas could potentially lead to sedimentation into fish streams both near and at a significant distance downstream from the source. This could cause direct impacts to fish and fish habitat. Since many of these sites will be remote, without an access road, timely remediation could be difficult.
SOL 1	**ADF&G**	3.2	3.2-76		"Soil disturbance during these activities would be localized and involve low to medium intensity compaction, fill placement, or grading." EIS should address that ditch maintenance activities may not be localized. Fill placement may

SOL 1					include long overland travel and temporary roads to access the sites that need to be stabilized. EIS should also provide more detail as to how they will address fill placement/ditch maintenance in remote sites.
SOL 2	**ADF&G**	3.2	3.2-85		"Edges of water bodies (stream crossings and wetlands) would be more susceptible to retrogressive thaw where ice-rich frozen soil conditions exist." EIS should address that this could lead to large amounts of sedimentation in streams both at the site and downstream. Remediation may be difficult due to remoteness of the pipeline.
SOL 2	**ADF&G**	3.2	3.2-90		"Areas with exposed ice-rich, fine-grained permafrost could result in isolated cases where sedimentation reaches downstream water bodies. However, planned mitigation measures at or near water body crossings, described under Construction, are expected to be largely effective in maintaining effects to medium intensity." This issue has the potential to have more than just medium intensity effects. Much of this sedimentation into streams would occur post construction and could potentially require years of maintenance and large amounts of fill and compaction to stabilize these areas. Due to the remoteness of these sites, remediation may be difficult.
SOL 6	**ADF&G**	3.2	3.2-90		"Measures to reduce permafrost thaw and facilitate reestablishment of seasonal active layers and thaw equilibrium would include placement of backfill or other form of ground insulation, natural rehabilitation, or RECPs, as appropriate and practicable." The term "natural rehabilitation" should be defined. If it means not to do anything then it should not be considered a measure taken to reduce permafrost thaw.
SOL 2	**ADF&G**	3.2	3.2-90		"These measures are expected to reduce areas of medium to high intensity thaw erosion to low to medium levels." EIS should acknowledge that the effects of stabilization efforts may not be localized due to the remote location and difficult access to these sites. Large amounts of backfill placement, compaction and ground insulation techniques would require heavy equipment that may also require long overland travel and temporary roads to access the sites that need to be stabilized. This access would most likely not be timely and may result in a large amount of sedimentation before it could be taken care of. EIS should address in more detail how they would timely address these stabilization efforts in remote sites and include any potential effects of this in their intensity analysis.
	ADF&G FISH 15	3.2	3.2-111		"Long-term indirect erosion effects by recreation and ORV usage could occur along the pipeline ROW following construction."

FISH 15					EIS should discuss potential effects of streambank erosion and sedimentation in fish streams from ORV stream crossings along ROW.
HYD 1	**ADF&G**	3.5	3.5-1, 2		"Under this alternative, surface water amount and flow would be altered during every project phase in Snow Gulch, Lewis Gulch, American Creek, Omega Creek, Unnamed Creek SE1, and Anaconda Creek (Figure 3.5-1) through damming, pit dewatering, and other diversions." The EIS should include Crevice Creek since it will also be affected post-closure due to the Anaconda Creek diversion.
HYD 1	**ADF&G**	3.5	3.5-126		"Overall impacts to surface water resources associated with the natural gas pipeline under Alternative 2 would be considered minor." EIS should explain why overall surface water impacts would be considered minor when individual impacts would be mostly low to medium with some impacts presumably higher.
WAQ 16	**ADF&G**	3.7	3.7-163		"The extent of potential impacts resulting from hydrostatic testing (for pipeline pressure testing, Section 3.2.2.3.1, Soils) would be limited because the amounts of water required for hydrostatic testing would be small compared to potential sources from rivers and small lakes along the route." EIS should quantify how much water may be released and its impact, per segment during hydrostatic testing. Just because the amount is small compared to what is in the river or lake certainly does not mean the potential release impacts would be small. Impacts should also be identified.
WAQ 16	**ADF&G**	3.7	3.7-163		"Impacts to surface water quality would likely be negligible, provided that freeze depressants or other contaminants of potential concern are not present in discharged hydrostatic test water." EIS should identify if freeze depressants would be used as well as the type and potential effects if released.
WAQ 24	**ADF&G**	3.7	3.7-163		"Thus, most impacts from pipeline construction on surface water quality would be low in magnitude, because they would be mitigated to be within ranges specified by regulatory limits, with isolated occurrences of high intensity effects." The vast majority of streams are proposed to be open cut. This will likely have a short term high intensity effect on water quality every time this method is used no matter what BMPs are in place. This should not be addresses as an isolated occurrence.

WAQ 24	**ADF&G**	3.7	3.7-163		"The effects would be local, as water quality would only be affected at discrete locations (e.g., stream crossings) within the project area." Sedimentation impacts could occur a significant distance downstream and not just at the stream crossing.
MIT 31	**ADF&G**	3.7	3.7-164		"Restoring banks at stream crossing sites - use an excavator to grab entire riparian vegetation for stockpiling keeping it intact and use it again in the same area to restore the bank where feasible;" Successful bank restoration may require more than just "grabbing" existing riparian vegetation and putting it back. Donlin should use and the EIS should identify techniques described in ADF&G's "Streambank Revegetation and Protection Guide for Alaska" as well as ESC BMPs.
WAQ 16	**ADF&G**	3.7	3.7-164		"Verifying that water withdrawals for hydrostatic testing meet permit requirements;" EIS should outline actual mitigation measures for water withdrawal.
WAQ 16	**ADF&G**	3.7	3.7-164		"Verifying that any water discharges from hydrostatic testing meet discharge permit requirements;" EIS should outline actual mitigation measures for water discharges.
MIT 19	**ADF&G**	3.7	3.7-164		"Sampling all material sites to check the potential for acid generating rock." Acid generating sites should be avoided (i.e., not used).
WAQ 24	**ADF&G**	3.7	3.7-164		…"considered low, because water quality would meet applicable regulatory standards due to planned BMPs and ESC measures designed to limit effects on water quality." The impacts to water quality to the region as a whole may be low; however EIS should describe localized intense effects at open cut stream crossings as well as in areas needing ditch maintenance. Timely remediation could be difficult due to remoteness and difficult access.
MIT 31	**ADF&G**	3.7	3.7-174		"In general, the open-cut method would be used for • Streams and rivers so large that no isolation method can be used." If streams are too large for isolation methods, HDD should be used for pipeline crossing. If HDD cannot be used because of a technical reason, then the EIS should describe the effects and mitigation if a large stream is open cut.

WAQ 24	**ADF&G**	3.7	3.7-174		"Resulting impacts to sediment quality would be of low intensity because concentrations of constituents of concern in sediments would be unlikely to exceed chemical SQGs recommended by ADEC, and sediment grain size in depositional areas downstream of the ROW are likely to be similar to that of the construction area." Sedimentation would not be of low intensity during open cuts or instream work with heavy equipment. No matter what BMPs are used there will likely be a significant sedimentation plume associated with this work as long as flowing water is present.
SOL 2	**ADF&G**	3.7	3.7-175		"After installation, erosion control measures would be regularly inspected and maintained in effective operating condition throughout the duration of construction, until soil sediment stabilization is achieved and reclamation is complete." EIS should address that timely remediation may prove difficult due to remoteness and difficult access to the sites post-construction.
FISH 1	**ADF&G**	3.7	3.7-175		"Silt or sand resuspended as a result of construction activities could fill interstices in gravel and reduce water flow through substrate" EIS should address that this reduced flow through the substrate could lead to a reduction of flow to fish eggs in redds as well as the availability of spawning gravels.
WAQ 23	**ADF&G**	3.7	3.7-175		"the resulting impacts to sediment quality would not exceed regulatory limits," This is a goal but EIS should not suggest that sediment quality would never exceed regulatory limits.
MIT 24	**ADF&G**	3.7	3.7-175		"would be minimized through winter construction and the use of BMPs and ESC measures" In many cases, fish and fish eggs in gravel will be more susceptible to disturbance in the winter especially at spawning and overwinter locations.
WAQ 24	**ADF&G**	3.7	3.7-179	Table 3.7-45	"Low (increased turbidity controlled by BMPs)" Effects to water quality will be intense at localized areas where open cuts stream crossings are performed when water is present as well as potentially at areas needing ditch maintenance at wetland, stream, and floodplain crossings
	ADF&G WAQ 24	3.7	3.7-185		"Impacts to surface water quality resulting from operations and termination of the diesel pipeline under Alternative 3B would be negligible."

	WAQ 24				Water quality impacts would not be negligible at the localized areas adjacent to fish streams that need repeated ditch maintenance.
NOI 1	**ADF&G**	3.9	3.9-65		"Metering stations would be located at the BPL tie-in (MP 0) and at the pipeline terminus (MP 315) at the mine site." EIS should go into more detail on what kind of facilities, footprint, and power needs will be required at the metering station at MP 0 in the refuge.
HAB 1	**ADF&G**	3.12			**General Comment:** The proposed pipeline route traverses transitional wildlife habitat from approximate milepost 150-194 on the north side of the Alaska Range on State lands. This habitat is important to caribou, moose, bears, cranes and other species during migration and is utilized by guides and subsistence hunters. ADF&G continues to work with the State Pipeline Coordinator's Section on their analysis of the proposed route through this section, and the subsequent State authorization for alignments on State lands
VEG 3	**ADF&G**	3.12	3.12-35		"Vegetation clearing for all aspects of the project would likely take place outside of the nesting seasons…" Is this part of a written policy? EIS should explain why vegetation clearing will take place outside of nesting season.
WILD 6	**ADF&G**	3.12	3.12-35		"Black bears and brown bears can be attracted to human garbage and food supplies, which often brings them into conflict with humans and results in bears being shot in defense of life or property." There are other animals that can be attracted to garbage and food such as foxes, coyotes, squirrels, ravens etc.
FISH 15	**ADF&G**	3.12	3.12-35		"Another potential indirect effect of the Donlin Gold mine development common to all phases of the project is the possibility of increased hunting and trapping pressure on the area's wildlife. This could arise due to two main factors: 1) improved public access to previously difficult-to reach areas along construction roads and the natural gas pipeline corridor, and 2) the influx of workers and new residents attracted to the employment opportunities of the mine." This concept is also applicable to the fisheries section and should be addressed.
FISH 15	**ADF&G**	3.12	3.12-35		"New mine employees and associated contractors would likely be well paid and could afford offroad vehicles, river boats, airplanes, and guide services to hunt on their off-duty hours." This concept is also applicable to the fisheries section.

WILD 1	**ADF&G**	3.12	3.12-42		"The combination sequence of open trench, pipeline laid out on the ground, lines of construction equipment, and construction camp facilities could be very effective localized barriers to wildlife movement primarily for small species with limited mobility in relation to all animal terrestrial species potentially affected." Provisions should be made in the form of design criteria and specifications which limit the amount of open ditch and the length of strung pipe to maintain access for wildlife species.
FISH 13	**ADF&G**	3.13	3.13-1		"Fish Habitat, Abundance, and Diversity:" Section only addresses the Kuskokwim and its tributaries affected by mine site and transportation corridor. Should add additional language on the watersheds (Susitna, Yentna & Cook Inlet?) throughout the pipeline corridor.
FISH 13	**ADF&G**	3.13	3.13-2		"Fisheries: The Kuskokwim…" Section only addresses mainstem Kuskokwim River fisheries. Pipeline corridor would potentially have effects on fisheries on Kuskokwim drainages as well as Susitna, Yentna, and Cook Inlet drainages.
SUB 19	**ADF&G**	3.13	3.13-2		"Subsistence salmon fishing on the Kuskokwim has not involved licenses or permits beyond the requisite year of Alaska residency" Recommend deleting this statement as the relevance of this statement is unclear.
FISH 6	**ADF&G**	3.13	3.13-3		"Alternative 3A (LNG-Powered Haul Trucks) would decrease the total number of barge trips per season from 122 to 83. This would result in a proportionate decrease in potential impacts on young-of-year seaward migrating salmon, incubating rainbow smelt eggs, and other life stages of resident and anadromous fishes in certain segments of the Kuskokwim River as a result of barge-generated propeller forces, waves, bank erosion, and riverbed scour." The EIS should recognize that although there will be a decrease in potential impacts, it is the timing of the barges rather than the quantity of them that may impact out-migrating fishes. For instance it may only take one barge train to have impacts on rainbow smelt since they have such a short and consolidated spawning event, and as larvae they drift downriver with the current making them susceptible to impact barge-generated propeller forces. See Table 3.13-10 Run

	FISH 6				Timing pg. 37.
FISH 7	**ADF&G**	3.13	3.13-3		"…six streams used by Chinook, coho, and chum salmon would be crossed with full-span bridges resulting in potential minor, temporary degradation…. " Only one of the bridges is a full-span, the others are proposed to be bottomless arches.
FISH 15	**ADF&G**	3.13	3.13-3		"Effects would be limited and mitigated by horizontal directional drilling (HDD) at five of eight crossings constructed during summer months; timing pipe installation at most crossings in winter when salmon are not typically present, resulting in least disruption to aquatic resources; and employing best management practices during and post construction to minimize potential effects." The EIS should also address that over 100 fish streams are proposed to be crossed using open cut trenching.
FISH 2	**ADF&G**	3.13	3.13-3		"The overall effect of the pipeline component on fish and aquatic resources is expected to be minor." Effects may be temporary; however, there will likely be substantial changes during construction and at locations where stabilization is needed during operations.
FISH 7	**ADF&G**	3.13		3.13-5	There are several inconsistencies associated with this figure: -The text on pg. 58 states that this figure represents the abundance of the Chinook run from 2008-2013, yet the figure title is "Cumulative Chinook CPUE in the Bethel Test Fishery, Kuskokwim River, 2009-2014". -In the graph itself only 2010-2015 are presented. -The caption below the figure has 2009, which is not included in the figure, and does not include 2015, which is on the figure.
FISH 7	**ADF&G**	3.13	3.13-27		"The upper reaches of Getmuna Creek have been identified as a probable borrow material site for the proposed project (Figure 3.13-1, and Figure 2.3-12 in Chapter 2, Alternatives)." Instead of referring to the upper reaches of Getmuna Creek, a more accurate description of the Getmuna Creek material site is that it is located in the Getmuna Flats between the North and South forks.

FISH 7	**ADF&G**	3.13	3.13-35		"Extensive gravel extraction and related barging along the main channel and sloughs of the Kuskokwim River take place from Aniak downriver about 47 miles to the Cenaliulriit Coastal District boundary…." Recommend deleting this paragraph as the relevance of this statement is unclear in this section (Aquatic Habitat within Kuskokwim River Transportation Corridor).
FISH 7	**ADF&G**	3.13	3.13-62		**General Comment:** For the PFEIS this section and any other sections that rely on fisheries data should be updated to include data from the most recently available report which is currently the "2013 Kuskokwim Area Management Report" http://www.adfg.alaska.gov/fedaidpdfs/fmr15-46.pdf.
FISH 7	**ADF&G**	3.13	3.13-64		"A saltwater commercial fishery exists for saffron or "tomcod," but harvest numbers are unknown." Those are two different species of fish.
FISH 13	**ADF&G**	3.13	3.13-73		"Streams along the proposed pipeline route also provide habitat to native fish (e.g., slimy sculpin, longnose sucker, stickleback [spp.], and rainbow smelt). " Consideration should be given to listing higher profile resident native species such as Dolly Varden char, rainbow trout, northern pike, round whitefish, and burbot. Rainbow smelt are anadromous like Pacific salmon – they are not a resident species.
FISH 15	**ADF&G**	3.13	3.13-110		"During the closure period, surface runoff and in-stream flows in the Anaconda Creek drainage upstream of the reclaimed TSF would be collected and diverted into Crevice Creek by diversion channels. …..Energy dissipating structures would be used to control discharge velocities and streambank stabilization measures would be implemented at select locations where bank scour or excessive down-cutting is anticipated to control effects of erosion and sedimentation." In second paragraph why is there not mention of such mitigation measures (energy dissipating structures) for the 287% increase that Omega Gulch may experience when American Creek is diverted to it?
CLA 28	**ADF&G**	3.13	3.13-113/114		**General Comment:** This section is difficult to follow because there are some inconsistencies about what is actually being discussed. At the beginning of page 113 water temperature appears to be the focus, but in the last paragraph the focus goes back to winter flow conditions, and then on the next page it goes back to water temperature. The EIS should consider moving the last paragraph on page 113 to a more appropriate section,

	CLA 28				perhaps the section that discusses Streamflow changes and Freezing of Spawning Substrates.
CLA 31	**ADF&G**	3.13		3.13-7	**General Comment:** This figure is referenced during the discussion of the impacts of temperature on salmon. In that discussion the definition of degree days is defined and both Celsius and Fahrenheit are used, at times, interchangeably. The EIS should consider putting Celsius on the secondary axis in Figure 3.13-7 to remain consistent with the text.
	ADF&G	3.13		3.13-8	Is this figure supposed to be identical to Figure 3.13-7? CLA 31
FISH 7	**ADF&G**	3.13	13.13-73		"A single-season 12-mile ice road would be developed during construction from Crooked Creek Village to the mine site vicinity along Crooked Creek valley as a temporary late-winter access to material borrow sites for road construction." Recommend deleting this paragraph and moving it to a more appropriate section.
MIT 24	**ADF&G**	3.13	3.13-157		"Potential construction effects on fish and fish habitat would be minimized by using site-specific stream crossing methods; limiting work to prescribed in-water work windows;" Typical work window for protecting anadromous fish is May 15-July 15. This is the period typically after eggs have hatched and before new eggs are deposited. The majority of construction is planned for the winter which would be outside of this work window.
MIT 31	**ADF&G**	3.13	3.13-157		"Where feasible, crossings would be constructed using open-cut methods that would be appropriate for three different types of waterbodies: 1) smaller drainages, intermittent streams and ditches, and non-sensitive water bodies where potential impacts from sedimentation are not anticipated; 2) frozen rivers or streams in winter where there is no surface flow; and 3) rivers/streams that are so large that no isolation method is feasible." If the river/stream is so large that isolation method is not feasible then an HDD should be the construction mode.
FISH 10	**ADF&G**	3.13	3.13-158		"HDD methods would be implemented based on a site-specific HDD Plan that would include a Drilling Mud Disposal Plan for management and disposal of drilling cuttings and drill mud." The aspect of HDD that could impact fish and aquatic resources is not the proper disposal of dill cuttings and mud but rather the risk of a frac out of drilling mud into the stream and associated increased turbidity. .
	ADF&G FISH 13	3.13	3.13-158		"Approximately 20 stream crossings would occur in permafrost terrain with potential vulnerability to erosion both during and post-construction."

FISH 13					EIS should analyze effects of erosion to aquatic resources including the possibility that timely remediation for ditch maintenance may be difficult due to remoteness and difficult access to site.
FISH 13	**ADF&G**	3.13	3.13-159		"open-cut pipeline construction would require crossing of streams inhabited by anadromous or resident fish populations during sensitive seasons, including winter. Construction at such crossings would be based on site-specific plans and design measures that would minimize potential impacts to fish migration, rearing, and spawning activities and aquatic habitats. This would primarily occur by isolating the in-water work area from surrounding waters and, where practical, removing and transferring fish to downstream waters prior to construction." EIS should include impacts to fish eggs in the gravel as well as fish migration, rearing, and spawning activities particularly since so many open-cut stream crossings will occur in the winter. Summer construction at many of these fish stream crossing should be considered as an effective way to minimize adverse effects (e.g., fish have access to a lot more habitat in the summer than they do in the winter).
__MIT 24	**ADF&G**	3.13	3.13-160		"open-cut pipeline construction would require crossing of streams inhabited by anadromous or resident fish populations during sensitive seasons, including winter. Construction at such crossings would be based on site-specific plans and design measures that would minimize potential impacts to fish migration, rearing, and spawning activities and aquatic habitats. This would primarily occur by isolating the in-water work area from surrounding waters and, where practical, removing and transferring fish to downstream waters prior to construction." This sentence refers to sensitive seasons and winter. Moving fish during winter is simply not a good idea as one could expect high mortalities. Also downstream waters where the EIS is suggesting they transfer the fish to is where the effects of sedimentation will occur. This should not be considered a primary method to minimize potential impacts to migration, rearing and spawning. EIS should either clarify or explore other methods to minimize adverse effects.
FISH 10	**ADF&G**	3.13	3.13-160		"Depending on the nature, location, and duration of the release, a medium to high level intensity of impacts to streambed gravels, anadromous and resident fish populations, and other aquatic biota could occur." EIS should address that a frac-out during a winter HDD as is proposed on the Kuskokwim River could have an adverse effect to overwintering fish.
	ADF&G	3.13	3.13-160		"alternative open-cut methods at locations where HDD was intended." WAQ 24

WAQ 24					An open cut at locations where HDD was intended such as the Kuskokwim would likely have major negative effects to water quality. If this is going to be an alternative then the EIS should address the potential impacts. This alternative may not be permitted by ADF&G.
FISH 13	**ADF&G**	3.13	3.13-161		First paragraph on page describes a single river (Big River) that the proposed pipeline will cross and goes into detail on the use of this river by sheefish and two other species of whitefish as well as times that both these species could be susceptible to disturbance as well as the timing of a local fishery. The EIS should identify if the proposed pipeline will be crossing the Big River during these times as well as the method that will be used to cross the stream. The pipeline as proposed would cross well over 100 fish streams and not just the Big River. The EIS should go into similar detail on stream crossing impacts to sheefish as well as other important fish species.
FISH 7	**ADF&G**	3.13	3.13-161		The second paragraph of this page describes the life history of a single species (burbot) and concludes that since they spawn in winter, any winter open cut crossing could have significant impacts on them. The first two sentences of this paragraph on burbot indicates that winter open cut will occur on several major rivers including SF Kuskokwim and references Table 3-13-22 yet according to that table, burbot were not caught in the SF Kuskokwim.
FISH 13	**ADF&G**	3.13	3.13-161		"Two other resident fish species that also can be important components of subsistence and sport fisheries in the Kuskokwim basin include northern pike and Arctic grayling." EIS ends stream crossing section by briefly describing life histories of pike and Arctic grayling and concludes that open cut crossings in spring could impact their spawning activities. EIS section on stream crossings only describe life histories of ss~~S~~heefish, whitefish, burbot, Arctic grayling and pike and the potential effects of pipeline stream crossings. The EIS also only describes the potential impacts of the sheefish subsistence fishery from pipeline crossings. The EIS should also describe the life histories and potential effects of pipeline stream crossings on the other economic and traditionally important species such as the five species of Pacific salmon, Dolly Varden and rainbow trout..
	ADF&G FISH 13	3.13	3.13-162		"Although limited potential exists for general public access to the pipeline corridor due to the remoteness of the area and seasonal transportation constraints, temporary construction roads,

FISH 13					maintenance road improvements, and ATV use near rivers and streams along the gas pipeline could increase fishing access to area streams beyond existing conditions." EIS should describe effects on aquatic resources from ORV stream crossings as a result of increased access along the pipeline ROW.
FISH 13	**ADF&G**	3.13	3.13-162		"Although limited potential exists for general public access to the pipeline corridor due to the remoteness of the area and seasonal transportation constraints, temporary construction roads, maintenance road improvements, and ATV use near rivers and streams along the gas pipeline could increase fishing access to area streams beyond existing conditions." The wildlife section addressed increases to hunting pressure both from increased access as well as the result of high paying mine jobs and the affordability of boats by workers. This same concept should be applied to aquatic resources.
LAND 15	**ADF&G**	3.15	3.15-27		This section states that seven R.S. 2477 ROWs are in the vicinity of the mine site, and that the state may dedicate alternative easements on state land. The State asserts that specific R.S. 2477 Rights-of-Way exist across State, federal, and private lands. The EIS should acknowledge that any vacation and relocation of an R.S. 2477 ROW around the mine site will need to be developed through a cooperative process between the State and with the affected landowners to provide continuous legal access through the area.
LAND 15	**ADF&G**	3.15	3.15-30		"The two Section 17(b) easements would need to be vacated or relocated as a result of the proposed project: EIN 21 C4 and EIN 21A C4. For the BLM to vacate, or [terminate] **relocate** a Section 17(b) easement…" Not all Section 17(b) easements are constructed (i.e., along a trail). Any relocations of Section 17(b) easements should be temporary and re-evaluated by BLM once mine reclamation and closure activities are complete so as to provide for a reasonable public access through the area, taking into account topography and present existing use.
LAND 15	**ADF&G**	3.15	3.15-37		"As discussed in Section 3.15.2.1.1, the BLM would need to vacate or relocate three Section 17(b) easements (approximately 18 acres and 2.94 miles total) as a result of the proposed project." **ADF&G** Section 3.15.2.1.1 also states that Omnibus Route (FAS 231) would likely need to be relocated. In addition, the DEIS identifies R.S. 2477 easements within the mine site; a previous Donlin Gold LLC Public Easement Plan proposed to vacate and reroute eight R.S. 2477 easements. The environmental analysis should evaluate affects to all affected legal easements,

	LAND 15				including Section 17(b) easements, R.S. 2477 easements, Onmibus Routes, and other public access easements identified in Section 3.15.1.5.
LAND 15	**ADF&G**	3.15	3.15-40		"As discussed in Section 3.15.2.1.2, two Section 17(b) easements (approximately 0.56 acres and 0.18 miles) would need to be relocated or vacated as a result of the proposed project." One of the Section 17(b) easements is a one-acre site easement upland of the ordinary high water mark of the Kuskokwim River. In addition to functioning as a rest stop along the trail, this Section 17(b) easement functions as a site easement for travel along the Kuskokwim River, or access to the upland trail. ADF&G would advocate for relocation of all Section 17(b) easements, as necessary to maintain public access around the project infrastructure. In addition, Section 3.15.2.1.2 identifies one R.S. 2477 easement (Crooked Creek-Aniak Trail) affected by the proposed Angyaruaq (Jungjuk) Port at the Kuskokwim River. The DEIS should describe measures to preclude restrictions to public use of the R.S. 2477 easement (e.g., relocation) to maintain public access through the area.
LAND 15	**ADF&G**	3.16	3.16-14		This section discusses relocations of Section 17(b) easements. As identified above, the EIS should also address effects to R.S. 2477 Rights-of-way and Omnibus Route, FAS 231 in the mine site vicinity.
EDIT 7	**ADF&G**	5.5	5.5-23	Table 5.5-1	Mit 7 The ADF&G is a permitting agency/authority since the Getmuna material site will be connected to an anadromous waterbody (Getmuna Creek).
EDIT 7	**ADF&G**	5.5	5.5-30	Table 5.5-1	Mit 27 The ADF&G is a permitting agency/authority since Fish Habitat Permits are required for the installation of piles within freshwater fish-bearing water bodies.
MIT 31	**ADF&G**	3.2, 3.5, 3.6, and 3.13			**General Comment:** Hydraulic conductivity is discussed in several sections of the EIS (Soils, both Groundwater and Surface Water Hydrology, and Fish and Aquatic Resources). There appears to be a substantial amount of uncertainty with regards to the expected level of hydraulic conductivity. Given the uncertainty with regards to the streamflow reduction in the middle reach of Crooked Creek, the EIS should discuss potential mitigation measures specific to changes in stream flow whether they be positive or negative..

ADHSS/HIA	3.22.3	3.22-10		Third bullet: Add Y-K in parentheses if that's what Y-K in the rest of 3.22.3 refers to (versus Yukon-Kuskoskwim). EDIT 5
ADHSS/HIA	3.22.3.1	3.22-11	Table 3.22-2	This table would be easier for the reader if census areas were listed vertically and the populations were listed horizontally (switch the two) CLA 21
ADHSS/HIA	3.22.3.1	3.22-11	Table 3.22-2	Data from Yukon-Koyukuk should also be presented (and should also be referred to in a consistent way as there is confusion with Y-K (could also mean Yukon-Kusksowim). CLA 21
ADHSS/HIA	3.22.3.2	3.22-12		First paragraph, last sentence. Revise to: They included public and community meetings. EDIT 5
ADHSS/HIA	3.22.3.2	3.22-12		Last paragraph. Remove entire paragraph EDIT 5
ADHSS/HIA	3.22.3.3	3.22-12		Update NewFields reference to 2015 EDIT 5
ADHSS/HIA	3.22.3.4.1	3.22-16		First sentence on page: Provide state graduation rate for a comparison EDIT 5
ADHSS/HIA	3.22.3.4.1	3.22-18	3.22-5	Again, confusion with Y-K. Add definition to legend for this table (and consider adding to all relevant tables) CLA 21
ADHSS/HIA	3.22.4	3.22-34		1st paragraph, 3rd sentence. Revise to: The impact dimensions first evaluate severity of potential health effects and an assessment of beneficial or adverse **impacts**, and need for intervention if an adverse impact **is identified.** EDIT 5
ADHSS/HIA	3.22.4	3.22-35		4th bullet. It does not make sense to call potential health consequences 'epidemiological'. Suggest revising to: Some potential health consequences, by their very nature, are **complex**, and not easily quantifiable. EDIT 5
ADHSS/HIA	3.22.4.2	3.22-38		Last paragraph in first section. "Consequences for all project components are expected to be more noticeable in the smaller communities…" Not necessarily. Bethel may experience some discrete impacts, primarily due to workforce influx and being a transportation hub. SER 17
ADHSS/HIA	3.22.4.2.1	3.22-39		First full sentence on page. Money spent in a community does not need to be focused on health care facilities to improve health. Money from taxes/income/sales spent on other things, such as schools, can also indirectly result in health benefits. PHL 3
ADHSS/HIA	3.22.4.2.1	3.22-39		Psychosocial distress sub-section. Define psychosocial stress and identify relevant health outcomes. PHL 20
ADHSS/HIA	3.22.4.2.2	3.22-48		Unintentional accidents and injuries, 2nd sentence: Motor vehicle travel is one of the **leading** reported causes of death in the region… PHL 13
ADHSS/HIA	3.22.4.2.4	3.22-73		This entire section needs to present both sides of the picture. There are potential negative impacts to food security, costs, and consumption PHL 12

PHL 12	**ADHSS/HIA**	3.22.4.2.4	3.22-74		Fear of consuming contaminated fish should be discussed in addition to similar concerns regarding waterfowl. This fear has been frequently mentioned in meetings with community stakeholders.
	ADHSS/HIA	3.22.4.2.4	3.22-77	Table 3.22-21	Increase in diet composition and food security: there is also a potential negative impact PHL 12
	ADHSS/HIA	3.22.4.2.5	3.22-80		Discussion of vaccine-preventable diseases (i.e., chicken pox and measles) is warranted due to potential workforce influx. Add this discussion PHL 5
PHL 21	**ADHSS/HIA**	3.22.4.2.7	3.22-87		Air emissions are not the only things that can impact non-communicable and chronic disease. Health outcomes such as obesity, diabetes, and hyperlipidemia are important to discuss in this section. Add to entire section.
	ADHSS/HIA	3.22.4.2.10	3.22-95		It is not the standard practice of an HIA to average all potential health impacts. Suggest removing. PHL 2
NEPA 8	**ADNR**	General			DNR understands that there may be a request from some of the federal agencies, who are also cooperating agencies, to have a supplemental draft EIS. To date ADNR, as well as ADEC, ADF&G, and DHSS have dedicated a large amount of staff time and resources to help the USACE and the rest of the EIS team develop a defensible EIS. It is very concerning that after the amount of resources the USACE, State agencies, federal agencies, and other cooperating agencies have committed over the last three and a half years to this USACE-led NEPA process, that the EIS timeline would need to be so drastically extended and is not considered defendable. DNR does not share in the opinion that a supplemental of any sort is necessary at this time and encourages the USACE to use the draft EIS, public comments, State comments and the cooperating agencies (especially the ones with concerns) to develop a defensible final EIS that covers any concerns or gaps that these agencies may have, rather than adding unnecessary steps to the process. Additionally this type of request, by cooperating agencies, at this point in the process, highlights a failure for federal agencies to work within the NEPA process and brings to question their roles as cooperating agencies. Draft EIS's by their nature are the established process through which to work out any concerns or perceived deficiencies by working through those issues and developing a final EIS that thoroughly identifies and discloses impacts from the project. The USACE is not required to go out to a supplemental draft EIS and should use the agreed-upon EIS process to develop a defendable final EIS that better aligns federal agency's positions and concerns.
	ADNR EDIT 1	General	General		There appears to be inconsistency when using Y-K throughout the DEIS. Sometimes it means Yukon-Kuskokwim and sometimes it means Yukon-Koyukuk. This should be clarified.
EDIT 4	**ADNR**	2.3.7 versus table	2-168 versus 2-172	Table 2.3-44	Section 2.3.7 on page 2-168 states that Alt 6A would be a 313-mile length pipeline; this is inconsistent with other locations in the DEIS, for example "There would be a 314.2-mile long natural gas pipeline..." in Table 2.3-44 on page 2-172. The 313-mile versus 314-mile

	EDIT 4	2.3-44			inconsistencies appear in various parts of the DEIS.
IDIT 3	**ADNR**	Cultural Resources-Pipeline	2-184	Table 2.3-44	Alt 6A would impact more of the INHT than Alt 2, but the table currently says "Same as Alternative 2."
	ADNR EDIT 5	3.15.1.3.2	3.15-19		The SPCO has now been integrated into the DNR Division of Oil and Gas, including a name change to the “State Pipeline Coordinator's Section”. The office's duties and authorities in relation to AS 38.35 pipeline right-of-way leases have not changed.
	ADNR EDIT 5	Synopsis	3.15-1		"(INHT) passes through state-managed lands near and within the pipeline corridor" - these lands are State-owned, and the trail is managed jointly under a comprehensive management plan.
	ADNR CLA 17	3.15.3.7.1	3.15-56		"313 mile ROW" - alternative 6A is listed as 314 miles in other locations.
CLIM 2	**ADNR**	3.26.4.2.1 Nat’l Gas Pipeline, Op’s & Maint.	3.26-30		"The compressor station at MP 5 would be powered by electricity; therefore, it would not have combustion causing GHG emissions" The compressor station is proposed at MP 0.4, not MP 5. Additionally, Donlin Gold has been considering the option to power the facility using natural gas.
CLA 9	**ADNR**	4.3.2.3.2	4.4-40		“Cumulative effects… would be very similar to Alternative 2 and would be derived primarily from port site in-water construction activities and fuel and cargo barge traffic.” This sounds as though Alternative 3A would have more port activity than Alternative 2, but it should actually be less activity, due to decreased diesel storage and barging. This text would be more correct for Alternative 3B.
CLA 9	**ADNR**	4.3.2.3.3	4.4-40		“For the remaining action alternatives, the contribution to cumulative effects on terrestrial mammals and birds is considered moderate, as described for Alternative 2.” - Alternative 3B would have port construction in Cook Inlet, which could impact wildlife differently than Alternative 2. Should the 4.3.2.3.2 text actually refer to Alternative 3B?
	ADNR	3.1.1.1	3.1-3		Material Statutes are 38.05.550-565 not 38.05.110-120 EDIT 5
	ADNR	1	1-41	1.10-2	Material Statutes are 38.05.550-565 not 38.05.110-120 EDIT 3
LAND 15	**ADNR**	3.15.2.1.1	3.15-27		The dEIS states that where 7 RS 2477 ROWs are in the vicinity of the mine site, “alternative access may be required, and the state may dedicate alternative easements on state land.” Donlin Gold has petitioned the State regarding the closure of these ROWs. While the State has not yet issued a decision regarding Donlin Gold’s petition, the burden of securing, dedicating and, in some cases, constructing alternative access falls on the petitioner.

LAND 15	**ADNR**	3.15.3.2, 3.15.2.2.1	3.15-37, 3.23-32		All Alternatives (except no action): Public crossing of newly constructed roads should be allowed wherever existing travel corridors intersect the proposed roads, unless said travel corridors are closed for public access in accordance with applicable law.
LAND 15	**ADNR**	3.15.3.2, 3.23.2.2.1	3.15-27, 3.23-32		DMLW/SCRO recognizes that there is a difference between current public use of surface transportation networks and potential use of such networks. As such, although Donlin reports that RS 2477 ROWs and other State easements are used infrequently by the public, the State places a high value on retaining legal public access in these areas. While restrictions on public access may be authorized by the State, particularly during the construction and operation phases of the proposed project, in the very-long-term (after the operational life of the mine) some of these restrictions may be lifted and portions of the newly constructed mine roads on State lands may be permanently made public.
CLA 29	**ADNR**	Chapter 1: Purpose and Need	1-28	Table 1.10-1	Issue: The figures in Table 1.10-1 are no longer accurate. Recommendation: amend Table 1.10-1 with the following current information (4/6/16) and replace reference ADNR 2014c (Ch. 9, page 9-9) accordingly. Fort Knox Mine (Letter of Credit) $96,164,867 Greens Creek Mine (USFS/State Surety Bonds) $68,918,907 Kensington Mine (USFS Surety Bonds) $28,727,011 Niblack Project (Surety Bond) $1,409,959 Nixon Fork Mine (BLM Surety Bond) $6,033,000 Pogo Mine and Road (Letter of Credit) $57,104,000 Red Dog Mine (Letter of Credit) $423,600,000 *under review as of 4/6/16 Rock Creek (Nanuuq) Mine (Letter of Credit) $263,522
EDIT 3	**ADNR**	Chapter 1: Purpose and Need and Appendix A, Financial Assurance Instrume	1-27 and A-3		Statement: "State of Alaska statutes also provide for the establishment of trust funds to cover reclamation and associated costs. Trust funds could be used by the state for: reclamation: dam maintenance; monitoring, control and treatment of water and other leachates; protection of surface and groundwater; and long-term site maintenance (see AS 37.14.820). The State has not developed regulations or guidance on how to implement the trust fund statutory language. However, that does not prevent the establishment and use of a trust fund, which may be particularly well-suited for long-term, post-closure costs." Issue: Neither this statement, nor AS 37.14.800 through .840 is applicable to what Donlin has proposed to DNR and DEC regarding the potential establishment of a trust fund. Donlin has proposed establishing a trust fund managed by a private entity (e.g. trust company, bank, or other qualified financial institution). This statement and the referenced Alaska Statutes may confuse the public and the agencies, as it implies that the trust fund envisioned by Donlin and described later in Appendix A would be managed by the State of Alaska.

EDIT 3		nt			Recommendation: rewrite this statement, removing any reference to AS 37.14.800 through .840. Alternatively, Donlin could choose to reference AS 46.03.100(f), 18 AAC 60.265, AS 27.19.040, 11 AAC 93.171 or other applicable statutes/regulations that allow DEC and DNR to approve various forms of financial assurance mechanisms, which may include a privately managed trust fund.
BER 10	**ADNR**	Appendix A, Physical Reclamation and Closure Cost Estimate	6		Statement: "Although the SRCE model has not been formally adopted by the State of Alaska, it has been accepted for use for all recent reclamation and closure cost estimates in Alaska, including Greens Creek, Fort Knox, and Red Dog." Issue: Red Dog has not submitted cost estimates to the State of Alaska using SRCE. Recommendation: delete "all" and "Red Dog" from this statement.
BER 10	**ADNR**	Appendix A, Long-Term Post-Closure Cost Estimate	7		Statement: "Financial assurance for long-term closure costs would be established in a trust fund." Issue: this statement appears to commit Donlin to a single mechanism for meeting their financial assurance obligations under state statutes and regulations. Recommendation: rewrite this statement or paragraph to clarify that it is Donlin's expectation or plan to establish a trust fund over time to meet state financial assurance requirements.
BER 11	**ADNR**	Appendix A, Long-Term Post-Closure Cost Estimate	7		Statement: "In order to build the trust fund to $73 million dollars at closure, Donlin would make annual contributions of approximately $2.3 million per year into the trust fund during Project construction and operation." Issue: This statement may be misinterpreted to mean that Donlin will be under-bonded during the period they would be building the trust fund up to the estimated $73 million dollar amount. In reality, Donlin will be required under state laws to provide the full amount of approved financial assurance prior to initiating construction. Most likely, Donlin will initially provide a more traditional form of financial assurance (e.g. letter of credit or surety) to meet their financial assurance obligations. As the trust fund is built up, Donlin may request to reduce their other form(s) of financial assurance, provided the total amount among all financial assurance mechanisms is approved by DNR and DEC and meets all applicable permit conditions. Recommendation: add language to this paragraph clarifying that Donlin is required to fully bond the project upfront, and briefly explain how Donlin will meet their financial assurance obligations as the trust is being funded to the amount approved by DEC and DNR (e.g. through a letter of credit or surety bond).

EDIT 5	**ADNR**	3.6.2.2.5	3.6-44		Add ADEC to sentence Financial assurance under ADNR and ADEC permitting that would fund groundwater containment at the pit lake and SRS in post-closure.
MIT 4	**ADNR**			5.5 -1	The State will work with the EIS team to identify any known requirements that would be needed, but in general many of these decisions would not be made until after the release of the final EIS and subsequent ROD's and may be predecisional to identify in the EIS. Please make sure to check in with State lead at OPMP if identifying any mitigation throughout the document that imply that a decision has already been made. That being said if a "mitigation" measure is required by State statute or regulation as a condition of a permit approval then it may be appropriate to identify mitigation that would be required by a State department.
EDIT 7	**ADNR**		5-23	5.5-1	Mit 8 please remove statement "State of Alaska has indicated implementation concerns". The description does a good job describing the issue and when it might be a concern.
	ADNR			5.5-1	Mit 9 permit & agency/authority should read BLM, ADNR/**SHPO** EDIT 7
	ADNR		5-26	5.5-1	Mit 12 should PHSMA be added to the authority list EDIT 7
MIT 4	**ADNR**			5.5-1	Mit 17 not sure why that is the only mitigation that will be required. Not saying that it wouldn't be a requirement, but it is the mitigation in table that has had a decision it looks like. For consistency would move to "TBD".
CLA 11	**ADNR**	1.1		Figure 1.1-2	Please identify State agencies as: <u>State Agencies</u> • ADEC • ADF&G • ADNR • DHSS I think it would be good to let the public know what State agencies have been dedicated to be represented at the cooperating agency meetings
EDIT 3	**ADNR**		1.4.2		Additionally, pursuant to the National Trails Systems Act of 1968 (16 USC 1241-1251), the BLM is the statutorily designated federal administrator for the Iditarod National Historic Trail (INHT), and is the federal point-of-contact for INHT matters. No one entity manages the entire

EDIT 3					Iditarod Trail—management is guided by a cooperative plan adopted by federal and state agencies in the mid-1980s. The BLM, as INHT administrator, coordinates the efforts of public land managers and volunteers on behalf of the trail. It may be helpful to the reader if it was noted that in general the BLM has permitting authority for the INHT over BLM lands and DNR has permitting authority over State lands and that the National Trails Act does not apply on State land.
EDIT 3	**ADNR**		1.10.4	1-26	Some other smaller land use permits or leases may require financial assurances of some sort. Suggest rewording to state "There are three major State of Alaska…" or some way to identify that these may not be the only permits that require assurances. There are three State of Alaska permits/approvals for the project that will require establishment of financial assurance: approval of the Project Reclamation Plan by the ADNR; issuance of the Project Integrated Waste Management Permit (IWMP) by the ADEC, and issuance of the Certificates of Approval to Construct the Donlin Gold Project dams issued by ADNR.
BER 11	**ADNR**		1.10.4.1		In practice, financial assurance for reclamation and closure, waste ~~and water~~ management permit (IWMP), and dam ~~closure~~ safety program for large mine projects have been combined into a single financial assurance (see more on the coordinated State of Alaska process, below) ~~and are typically guaranteed through letters of credit and sureties (ADNR 2014).~~ Took out the last sentence because Donlin actually is proposing to have the trust fund cover a large portion of the financial assurances for Dam Safety and IWMP. Concern above might be ok because it is covered in the next paragraph, but still may be appropriate to remove "~~and are typically guaranteed through letters of credit and sureties (ADNR 2014).~~"
	ADNR EDIT 5	3.0		3.3.1 3.3.3	Page breaks in small tables are awkward.
	ADNR GEO 12	3.1.3.2.1	3.1-34		First paragraph under "Construction" indicates that 2400 acres of weathered bedrock would be excavated for the TSF. See section 3.1.3.2.2. 2400 acres is the total area of the TSF, not the dam footprint. The TSF liner prep does not include bedrock excavation.
	ADNR		3.1-35		Refers to "design for closure" but the closure of the TSF is not described. DAM 9
	ADNR CLA 31	3.3.1	3.3-3		A introduction of the regulatory programs should be included to put into context why such programs are described in detail under this section.
DAM 9	**ADNR**	3.3.1.1	3.3-3		Incorrect reference. Alaska dam safety regulation are under 11 AAC 93 (Not 18 AAC 93)

	ADNR DAM 9	3.3.1.1	3.3-4		In first full paragraph, AS 27.19.060 allows cooperative agreements for reclamation of tailings dams, but “cooperative management” is ambiguous. Please elaborate.
	ADNR CLA 31	3.3.1.1	3.3-4		Last paragraph describes determinations attributed to ADNR without reference. This seems inappropriate.
DAM 9	**ADNR**	3.3.1.1	3.3-4&5		Last paragraph refers to “dry stack tailings dams” regulated by ADEC and dams below dry stacks for water management. Referring to dry stack tailings as a dam introduces unnecessary confusion.
	ADNR CLA 31	3.3.1.1	3.3-5		Last two sentences in last paragraph seem out of context. Include paragraph break and elaborate, or delete.
	ADNR GEO 3	3.3.2.1.1	3.3-6		First sentence is an overstatement. More accurately, “Regions of Alaska are among the most seismically active areas of the world…”, but not the whole state. Alaska is a big place.
GEO 2	**ADNR**	3.3.2.1.1	3.3-7		Under “Active Faults”, last paragraph is very confusing language by mixing a discussion of an active fault (defined above at less than 10000 yrs old) with "the most recent surface rupture" 15 miles and 50 miles away that "is" (are) mid-Quaternary. If the Donlin Creek Fault is not active, neither are the latter two per the above definition.
	ADNR EDIT 5	3.3.2.1.1	3.3-11		The second full paragraph list specific design criteria have not been reviewed or approved by ADNR Dam Safety. State of Alaska under AS 46.17 is the controlling regulatory authority for the dams and is not superseded by NEPA.
	ADNR EDIT 5	3.3.3.2.1	3.3-33		Under “Tailings Storage Facility” in first sentence, change “permitted” to “regulated.” The NEPA process does not guarantee any state regulatory approvals are automatic nor does the NEPA process obligate the state to issue any approvals.
DAM 9	**ADNR**	3.3.3.2.1	3.3-33		Under “Tailings Storage Facility” the first sentence does not contain an accurate description of the Class I hazard potential criteria. ADNR authority under AS 46.17 is limited to the protection of life and property and anadromous fish habitat. The “potential for severe environmental damage” has not been described or demonstrated in this section, nor is it within the authority of ADNR Dam Safety under AS 46.17 to assess or mitigate. It is under the authority of AS 46.15 and AS 27.19.
	ADNR DAM 9	3.3.3.2.1	3.3-33		Under “Tailings Storage Facility”, in the second bullet, ER 1110-2-1806 describes both methods.
	ADNR NSB 1	3.3.3.2.1			This section contains significant design information and references to BGC, 2011a & BGC, 2011b. Those documents have not been reviewed by ADNR Dam Safety

State of Alaska 2 (Walker)

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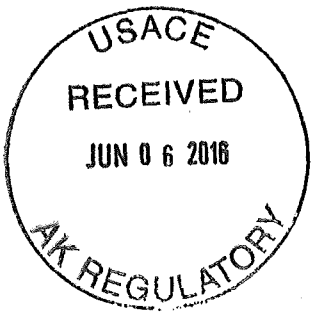
Governor Bill Walker
STATE OF ALASKA



May 31, 2016

Mr. Keith Gordon
Alaska District
U.S. Army Corps of Engineers
CEPOA-RD-Gordon
P.O. Box 6898
Joint Base Elmendorf-Richardson, AK 99506-0898

RE: State of Alaska consolidated comments on Donlin Gold draft EIS

Dear Mr. Gordon:

The State of Alaska (State) has reviewed the draft of the Environmental Impact Statement (EIS) for the Donlin Gold mine and is pleased to provide the attached comments.

As you know, exploration and development of Alaska's natural resources plays an important part of our past, present, and also our future. The five large mines currently active in our state provide excellent jobs for Alaskans and stimulate and diversify Alaska's economy. Responsible development of the proposed Donlin Gold project will continue this tradition and enable the Calista Corporation (Calista) and The Kuskokwim Corporation (TKC) to generate employment, business opportunities, and revenues for their shareholders and the shareholders of other Alaska Native corporations throughout the state, as well as for the State of Alaska.

SER 2

More than twenty years have passed since Calista first entered into a mining lease for the mineral lands it selected under the Alaska Native Claims Settlement Act (ANCSA). Over that time, Donlin Gold has been extremely active with community outreach and involvement. As a resource development state, we have a long history of understanding the challenges of responsibly developing our natural resources and economy while protecting subsistence resources and cultural values. Experience has shown a balance of needs can best be met with direct and substantive involvement of the local communities and tribal governments. This type of stakeholder engagement is essential to balancing those needs and will be necessary through all phases of the proposed project.

PUB 1

In 2013 Donlin Gold was named National Employer of the year by the National Association of State Workforce Agencies, recognizing businesses that demonstrate outstanding accomplishments resulting in a positive impact on its workforce, industry, and community. If developed, the Donlin Gold mine would create a variety of exceptional jobs in the Yukon-Kuskokwim region, which will be required to sustain a modern, responsible mine. Donlin Gold has described many of these jobs in an employment booklet, which also describes the qualifications for those jobs. I am proud to note

SER 5

that Alaska has the universities and technical programs that provide the education and training required to qualify for those positions. Alaskans, trained in Alaska, will be able to work to help ensure that the Donlin Gold mine will be accomplished with the highest regard for our land, air, water, fish, and wildlife.

PUB 6

The State has been encouraged by Donlin Gold's willingness to explore and adopt major changes in their project design to meet public and regulator concerns. This type of stakeholder interaction, and the ability to respond and adapt, ensures that the design of such an important project is a collaborative effort. Donlin's demonstrated ability and willingness to respond to stakeholder concerns with tangible, substantive design changes, whether it be to the pipeline alignment or to the mine site operations, are an invaluable trait for any project proponent. Donlin Gold has been proactive in working with State agencies to discuss concerns early on in the process in order to design a project that balances the needs of all stakeholders and resources.

The State has been a cooperating agency on the development of this draft EIS and has been heavily involved in the process since 2012. The release of the draft EIS is a major milestone for the USACE and the rest of the EIS team. I ask that the USACE continue to be efficient in their development of a defensible EIS and National Environmental Policy Act (NEPA) process and look forward to a timely release of the final EIS and subsequent Record of Decision(s).

For these reasons, I support the responsible development of this project and look forward to continuing a partnership with the USACE, the cooperating agencies, and Donlin Gold to ensure a project designed with the highest regard for the surrounding environment and communities. Additionally, the responsible development of these resources assures that Calista and TKC are allowed full enjoyment of their lands as was intended by the Alaska Native Claims Settlement Act, while potentially extending and providing critical infrastructure and utilities to rural Alaska. As this project moves through the federal and State permitting processes, we look forward to additional discussion on a number of aspects of the project to ensure responsible development through the entire life of the project. Thank you for the opportunity to comment on the Donlin Gold draft EIS.

Sincerely,

Bill Walker

Bill Walker
Governor

Enclosure

THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Natural Resources
DIVISION OF PARKS & OUTDOOR RECREATION
Office of History & Archaeology
550 West 7th Ave., Suite 1310
Anchorage, Alaska 99501-3565
Main: 907.269.8721
http://dnr.alaska.gov/parks/oha

USACE
RECEIVED
MAY 26 2016
AK REGULATORY

May 23, 2016

File No.: 3130-1R COE Donlin Gold Project
3330-6: IDT-00260, IDT-00275, IDT-00288, MCG-00003, MCG-00060, MCG-00062, MCG-00066, MCG-00068, MCG-00071, MCG-00072, MCG-00075, MCG-00076, MCG-00130, RUS-00112, RUS-00114, SLT-00094, TAL-00164, TAL-00166, TYO-00215, TYO-00277, TYO-00278, and TYO-00279.
3330-6N: IDT-00276, IDT-00285, MCG-00007, and TYO-00023
3330-6P: IDT-00261, IDT-00262, IDT-00263, IDT-00264, IDT-00265, IDT-00266, IDT-00277, IDT-00278, IDT-00279, IDT-00280, IDT-00281, IDT-00282, IDT-00283, IDT-00284, IDT-00286, IDT-00287, IDT-00289, IDT-00290, IDT-00291, IDT-00292, MCG-00061, MCG-00063, MCG-00064, MCG-00065, MCG-00067, MCG-00069, MCG-00073, MCG-00074, MCG-00077, RUS-00111, RUS-00113, TAL-00010, TAL-00044, TAL-00129, TAL-00151, TAL-00152, TAL-00153, TAL-00163, TAL-00165, TAL-00177, TAL-00178, TYO-00021, TYO-00022, and TYO-00307.

Keith Gordon
Project Manager
Alaska District, U.S. Army Corps of Engineers
Regulatory Division
P.O. Box 6898
JBER, AK 99506-0898

Subject: Determinations of Eligibility for Sites Recorded for the Donlin Gold Project

Dear Mr. Gordon:

The Alaska State Historic Preservation Office (AK SHPO) received your correspondence (dated April 15, 2016) on April 18, 2016. Following our review of the documentation provided, we offer the following comments:

CUL 4

- We concur with your determination that the following sites are **eligible** for the NRHP: IDT-00260[1], IDT-00275, IDT-00288, MCG-00003, MCG-00060, MCG-00062, MCG-00066, MCG-00068, MCG-00071, MCG-00072, MCG-00075, MCG-00076, MCG-00130, RUS-00112, RUS-00114, SLT-00094, TAL-00164, TAL-00166, TYO-00215[2], TYO-00277, TYO-00278, and TYO-00279.
- At this time, we are unable to concur that the following sites are not eligible for the National Register of Historic Places (NHRP): IDT-00277, IDT-00278, IDT-00279, IDT-00280, IDT-00281, IDT-00282, IDT-00283, IDT-00284, IDT-00286, IDT-00287, IDT-00289, IDT-00290, IDT-00291, MCG-00061, MCG-00065, MCG-00069, MCG-00073, MCG-00074, MCG-00077,

[1] Our office recommends that the applicability of National Register Criterion A also be evaluated for this site.
[2] This site is recommended as eligible under Criterion C and the documentation states that it embodies the distinctive characteristics of a type, period and method of construction of a 1940s – 1950s trapline cabin. However, the documentation does not describe those characteristics.

RUS-00111, TAL-00151, TAL-00152, TAL-00153, TAL-00163, TAL-00165, TAL-00177, TAL-00178, and TYO-00307.

CUL 4 The documentation states that these sites are not individually eligible, but it is unclear whether any of them were considered as potentially contributing resources within a prehistoric archaeological district. Because many of these sites may be adversely affected by project-related construction, we encourage the consideration of potential districts that may be present in (or intersected by) the project area. When evaluated individually, sites may not rise to the level of NRHP-eligibility on their own, but when considered within the context of a district, they may be 'contributing resources,' which would make them eligible for the NRHP. We request additional information regarding the potential for any of these sites – consisting primarily of surface and subsurface lithic artifacts – to contribute to potential archaeological districts. The consideration of districts will be important as we move forward to assess the effects of the project.

CUL 4 For similar reasons, we are unable to concur at this time that IDT-00262, IDT-00263, IDT-00264, and MCG-00064 are not eligible for the NRHP. These sites appear to have the potential to answer research questions related to land use patterns, regional site types, and tool comparisons. Even if these data are primarily obtainable via laboratory analysis of the artifacts, the sites still '*have yielded, or may be likely to yield, information important in prehistory or history.*' Considered in light of the comment above about potential archaeological districts, we believe that these sites may be individually eligible for the NRHP or when considered as potentially contributing to an archaeological district.

CUL 4

- We concur with your determination that the following sites are **not eligible** for the National Register of Historic Places (NRHP): IDT-00276, IDT-00285, MCG-00007 (destroyed), and TYO-00023 (destroyed).
- We note that additional investigations are needed at the following sites, before an assessment of NRHP-eligibility can be made: IDT-00261, IDT-00292, MCG-00063, MCG-00067, RUS-00113, TAL-00010, TAL-00044, TAL-00129, TYO-00021, and TYO-00022[3].
- The documentation does not provide sufficient explanation for why IDT-00265 and IDT-00266 are not significant under Criteria A or B, given their association with placer mining and resource development in the Middle Kuskokwim region and their possible association with a known mining family. We recommend that additional information be provided to support the evaluation of this mining feature under Criteria A and B.

Thank you for the opportunity to comment. We look forward to continued consultation on the subject project. Please contact Shina duVall at 269-8720 or shina.duvall@alaska.gov if you have any questions or if we can be of further assistance.

Sincerely,

Judith E. Bittner
State Historic Preservation Officer
JEB:sad

cc by email: Jenny Blanchard, BLM

[3] Misplotted in AHRS.

From:	Bellion, Tara
To:	Evans, Jessica
Cc:	DonlinEISAR
Subject:	FW: DEIS Comment FW: [EXTERNAL] Alaska District Contact Form: Donlin Mine Dam
Date:	Thursday, May 26, 2016 1:19:37 PM

Jessica - comment is at end of this email.

-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Thursday, May 26, 2016 1:12 PM
To: Isaacs, Jon; Bellion, Tara
Subject: DEIS Comment FW: [EXTERNAL] Alaska District Contact Form: Donlin Mine Dam

-----Original Message-----
From: Pagemaster, Reg POA
Sent: Thursday, May 26, 2016 7:41 AM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>
Cc: Newman, Sheila M POA <Sheila.M.Newman@usace.army.mil>; Pagemaster, Reg POA <regpagemaster@usace.army.mil>
Subject: FW: [EXTERNAL] Alaska District Contact Form: Donlin Mine Dam

Keith,

Please read and respond if necessary. Please cc Reg Pagemaster if response is needed.

Thank you

Julie

-----Original Message-----
From: suesteinacher@hotmail.com [mailto:suesteinacher@hotmail.com]
Sent: Thursday, May 26, 2016 7:04 AM
To: Pagemaster, Reg POA <regpagemaster@usace.army.mil>
Subject: [EXTERNAL] Alaska District Contact Form: Donlin Mine Dam

This message was sent from the Alaska District website.

Message From: Sue Steinacher

Email: suesteinacher@hotmail.com

Response requested: No

Message:

I have often said one doesn't move to Nome if they are anti-mining, but at the same time Alaska deserves only mine mines built to the highest standards. It is up to the Corp to insure that only first class mining is done in Alaska. The same basic mining corporation that built the now defunct Rock Creek Mine in Nome, is involved with Donlin. In Nome they were allowed start utilizing a dam built only to the

first or second stage, thinking there would only be thick tailings paste laid down behind it. Instead they miscalculated groundwater behavior, and soon there was 54 million gallons of solution behind the incomplete dam. We must apply the lessons learned with the Rock Creek Mine, and insure that only the
DAM 2 highest standards are insisted upon by the regulatory agencies. Please, make mining safe for Alaska.

From:	Carolyn Stevens
To:	donlingoldeis, POA
Subject:	[EXTERNAL] Support for Alternative 2, Donlin Gold"s Proposed Project. DEIS
Date:	Tuesday, May 31, 2016 9:06:01 PM

Mr. Keith Gordon, U.S. Army Corps of Engineers, Alaska District--

This letter is written in support of Alternative 2 for the Donlin Gold Project. The area in western Alaska
SER 18 where the proposed Donlin Gold Mine is located is remote, and the people of that area would benefit enormously--and for decades--from infrastructure that would necessarily have to be developed to operate the mine.

PHL 3 It is a well-documented and extremely sad fact that the suicide rate in that area of Western Alaska is very high, which reflects lack of hope among the native youth. Availability of good jobs that pay well and that are preceded by excellent technological training can greatly help in bringing down such a terrible statistic.

The folks working to develop Donlin Gold have spent years, many man hours, and millions of dollars trying to work out the very best plan for development of the Mine, and the folks there are technologically very competent. Advancements in technology have enabled modern mines to become extremely efficient and environmentally sensitive operations that contribute significantly to an economy through effective resource development. The Donlin Gold Project, when it becomes a mine, will
SER 10 doubtless contribute greatly to the overall economy of Alaska as well as the local economy and the social and psychological health of the Alaska Natives in the area.

PLEASE SUPPORT ALTERNATIVE 2 for the Donlin Gold Project.

Thank you,

Carolyn Stevens, M.S. in Geology (UAF)
Member, Alaska Miners Association
(Also former Editor of "The Alaska Miner")

Sent from my iPad

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

5/24/2016

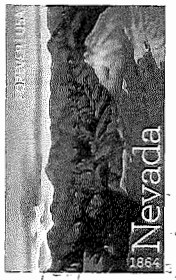
Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

I AM VERY SUPPORTIVE OF THIS PROJECT. THE NATURAL GAS PIPELINE IS A GREAT IDEA, FOR THESE REASONS:

* NATURAL GAS IS THE CLEANEST BURN OF ALL FOSSIL FUELS. PAA 4
* THE U.S. HAS HUGE RESERVES OF NATURAL GAS. PAA 4
* WILL REDUCE THE AMOUNT OF BARGE TRAFFIC ON THE KUSKOKWIM RIVER. GAS 4
* NATURAL GAS PIPELINE HAS SUFFICIENT CAPACITY FOR OTHER POWER GENERATION REQUIREMENTS. GAS 1

Thanks! Robert H. Stevens

Mr. Robert Stevens
6818 Relic St.
Las Vegas, NV 89149-3003



LAS VEGAS NV MAY 2016 USPS

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

USACE RECEIVED JUN 13 2016 AK REGULATORY

From: Janine Stewman
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Thursday, April 21, 2016 9:35:02 AM

My name is Janine Stewman a resident & a business owner in Crooked Creek, AK 99575.

I have been recently been contacted by someone on the Watershed Council to get information on fish resources of the Crooked Creek. He asked if he could quote me. I said yes, but to note that I do support the Donlin Creek Mine project. We are economically suppressed & often are on fishing restrictions. I'm the only store owner in Crooked Creek that carries groceries & fuel. I have been carrying a village dependent on me to carry them thru until they get a job or dividend check from PfD or corporation checks so they/their kids don't go hungry. It is hard on us all without economic development. We are a community closest to the mine and residents here will benefit greatly from the jobs that will bring a better way of life, and maybe then we can handle the fishing restrictions imposed on us. Again, I support the Economic development of the Donlin Gold Project. I care deeply about the well being of our village, the environment, the wildlife & the future sustainability of our community...I have been recently been contacted by someone on the Watershed Council to get information on fish resources of the Crooked Creek. He asked if he could quote me. I said yes, but to note that I do support the Donlin Creek Mine project. We are economically suppressed & often are on fishing restrictions. I'm the only store owner in Crooked Creek that carries groceries & fuel. I have been carrying a village dependent on me to carry them thru until they get a job or dividend check from PfD or corporation checks so they/their kids don't go hungry. It is hard on us all without economic development. We are a community closest to the mine and residents here will benefit greatly from the jobs that will bring a better way of life, and maybe then we can handle the fishing restrictions imposed on us. Again, I support the Economic development of the Donlin Gold Project. I care deeply about the well being of our village, the environment, the wildlife & the future sustainability of our community...I posted this on my Facebook timeline and am sharing it for the Donlin Gold EIS.

SER 5

Sent from my iPad

From: Raven Stewman
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Wednesday, May 25, 2016 8:54:57 PM

SER 24

I am Raven Stewman, a young adult in a village closest to Donlin Gold, known as Crooked Creek. I can remember a time when the village was slow, and no work was around other than the local grocery store, Thomas Trading Post. Growing up were the entire people is economically broke, Donlin has presented a great opportunity for the community. They had provided jobs and income for struggling families who had appropriate training. They even helped during the Flood of 2011 by evacuating the people who were stuck.
They will help the communities grow into what anybody portrayed them to be. They have been honest with us, and always have updated the people on what their plans are to be. We will be thankful for such an opportunity and rise with it we shall.

Raven S.

USACE
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MAY 1 1 2016
AK REGULATORY

April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

To Whom It May Concern,

I am writing to express my support for Alternative 2, the Donlin Gold Project.

SER 15

Donlin Gold has a proven record of commitment to the people of the Yukon Kuskokwim (YK) Region. The economic potential it has for the local communities is destined to have a grossly positive impact to a region that is currently experiencing one of the highest unemployment rates in the state. With Donlin Golds commitment to local hiring, young and future generations have much to look forward to, including: well-paying jobs in a variety of career fields, educational opportunities, and economic stability that will be broadly felt throughout southwest Alaska.

Donlin Gold has also demonstrated a notable commitment to the environment. Donlin has 16+ years of extensive studies focused on creating an environmentally and socially responsible project; and has purposefully designed its project to reduce the overall footprint of the mine and diminish any social impacts it may have on the YK region. Proposals such as building a natural gas pipeline have been developed in an effort to minimize barge traffic on the Kuskokwim River. Furthermore, a specific route for the pipeline has been selected to minimize disturbance to known historic landmarks such as the Iditarod Trail. It is worth noting that the Iditarod Trail was originally created and used for the purpose of the Gold Rush in 1910. While we certainly want to preserve the beauty of our Alaska heritage, let us not forget how that history was created.

IDIT 1

LAND 1

Lastly, I think it's worth noting that this region of land and its resources belong to the shareholders of Calista and The Kuskokwim Corporation. This area in particular was specifically selected during the Alaska Native Claims Settlement Act (ANCSA) due to its rich mineral content and the economic potential it would provide for its shareholders and descendants. ANCSA understands the importance of heritage and a subsistence lifestyle, but also recognizes the potential for achieving unity and managing the land for both modern and traditional uses.

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Signature

Aaron Strickland

Print Name

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MAY 1 1 2016
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April 25, 2016

U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

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LAND 1

Again, I am writing to express my support for Alternative 2, the Donlin Gold Project.

Regards,

Signature

GINA STRICKLAND
Print Name

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: I support Donlin
Date: Thursday, March 31, 2016 10:18:54 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Thursday, March 31, 2016 10:11 AM
To: Craig, Bill
Subject: FW: I support Donlin

-----Original Message-----
From: Jordan Summers [mailto:jsummers@stgincorporated.com]
Sent: Thursday, March 31, 2016 7:52 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] I support Donlin

SER 5 I, Jordan Summers, having managed rural infrastructure projects throughout Alaska understand the significant benefits and opportunities the Donlin Gold mine would bring to our state, especially to the poorest region, the Yukon-Kuskokwim Delta. I strongly support the responsible development of this mine, particularly Donlin Gold's "Alternative 2" approach to this development.

Under the Alaska Native Claims Settlement Act, Calista Regional Corporation (Calista) selected the mineral rights at Donlin Gold, The Kuskokwim Corporation (TKC) selected the surface estate, both in efforts to benefit shareholders from the development and production of the mineral resources. This economic opportunity for shareholders and descendants of Calista is precisely the purpose behind Congress' grant of entitlement of these lands to Calista and TKC.

There are many social and economic benefits of this project to the region, state, and to the nation, including:

* Through the ANCSA 7(i) and 7(j) revenue sharing provisions, the Donlin Gold project will provide revenue to all Alaska Native regional and village corporations and shareholders.

* The jobs and the economic stimulus provided by Donlin Gold would help sustain communities in the Yukon-Kuskokwim (YK) region and fund traditional and subsistence activities.

GAS 1 * The potential for lower cost energy options to the region as the proposed natural gas pipeline will have excess capacity should there be an interest in accessing natural gas to address the energy needs of the YK region.

SER 8 An estimated 3,000 jobs will be created during the approximate 3-year construction phase, and up to 1,200 jobs for the estimated mine life of 27.5 years. These jobs will have a significant and positive impact on the economy of the region and the state, especially in a region that experiences some of the highest unemployment rates. This will likely lead to reduced out-migration, helping to maintain rural schools and culture, including a traditional way of life.

An example to compare the positive potential benefits of a project like this is the Red Dog Mine in Northwest Alaska.

Through the exploration stages, Donlin has shown a strong commitment to local hire and for supporting communities and cultures in the region. A project like this truly is a rare opportunity to improve the local

economy where few other opportunities exist.

If developed, I believe it will be done in a way that creates opportunity for local employment and economic growth, while protecting the subsistence resources and culture of the region, and protecting the environment.

I support the rigorous permitting process that has already permitted the six large mines under the review of NEPA and the scientifically-based process which includes over 60 major state and federal permits and authorizations. Alaska's existing mines are operating to the highest standards and in harmony with our renewable resources. Donlin's project description demonstrates an understanding of environmental concerns, and features vigorous environmental management principles.

Thank you for the opportunity to comment on this important Issue.

Sincerely,

Jordan Summers

STG Incorporated

Superintendent

(907)348-4246 direct

(360)820-8511 mobile

(907)717-5758 field

Jsummers@stgincorporated.com <mailto:Jsummers@stgincorporated.com>

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"22 CFR Part 125.4 (b) (9) applicable."

From: michael repasky
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Project - A must have for Alaska and Alaskans
Date: Friday, May 27, 2016 8:43:35 AM

Greetings,

As a relatively new resident of Alaska (been here 2 years) it is surprising how few good paying jobs are available due to the lack of traditional manufacturing/production activities. With the oil industry in turmoil and the state finances in shambles, the Donlin Gold project represents a significant opportunity to build Alaska's economy. As a small business owner, the health of Alaska's economy has a direct impact. Based on everything I've read regarding the Donlin Gold project it would provide responsible economic prospects for the region and Alaska. The proposed pipeline would minimize impact on the various land uses while providing long term opportunities for Alaskans. Based on my research an estimated 3,000 jobs would be created during the 4 year construction phase and between 600-1200 jobs for the estimated mine life of 27.5 years. Having done much business with the Kinross / Fort Knox mine over the past 2 years I know from experience that they operate to the highest standards and in harmony with our renewable resources.

SER 4

I appreciate your consideration and look forward to the Donlin Gold project being approved.

Sincerely,
Michael Repasky

SUMMIT LOGISTICS
3453 Truck Street
Fairbanks, AK 99709

Cell (907) 699-3733
Ph (907) 456-3733
Fax (907) 456-1672

Swanson, Carrie

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May 31, 2106

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, Alaska 99506-0898

Attn: CEPOA-RD-Gordon

Dear Mr. Gordon,

I was born and raised in Bethel, Alaska in the Yukon-Kuskokwim region of Alaska, which is the same region where the Donlin Gold Project is being developed. As an original shareholder of the Calista Corporation with two sons who are scheduled to be shareholders, it gives me great pleasure to write and comment on the Draft EIS that is currently under review.

SER 5 I am supportive of the project because of the possibility of good paying jobs for my sons and other residents in the Y-K Region. Ours is one of the poorest regions of the state and the Donlin Project would fuel our economy, which is currently severely depressed.

The people here are in desperate need to employment. Our jobless rate is huge and with that comes many other problems besides little money to survive.

PHL 3 Our rates of alcohol abuse and suicide are very high because the people do not feel a sense of worth with the inability to care for themselves and their f families. Jobs, a sense of hope and self-value would go a long ways toward addressing our high rates of suicide.

What's more, the project would bring people who have migrated away from our region to find jobs elsewhere back to our region. Families will be reunited and our villages' rich sense of culture can be restored.

The Donlin Gold Project will help restore our economy for certain, but the other benefits that go along with that are also hugely important. I would appreciate your positive review of the project's Draft EIS so the project can move forward for the benefit of the Y-K region's residents.

Sincerely,

Carrie Swanson

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Thursday, February 25, 2016 6:48:24 AM

-----Original Message-----
From: Gary Swoffer [mailto:gswoffer@denali-industrial.com]
Sent: Thursday, February 04, 2016 5:25 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To Whom it may concern,

SER 5 Please approve this very important mine for construction and operation. It will have so many positive effects on the state and local economy. It's going to employee so many natives from the area that it will change to whole economic outlook for the many villages in the area.

And this mine will be built and maintained environmentally sound! Using the best technology available.

Respectfully,

Gary Swoffer

President

Denali Industrial Supply, Inc.

1499 Van Horn Rd.

Fairbanks, AK 99701

Phone: (907) 452-4524

Cell: (907) 388-2724

Fax: (907) 452-7826

Comment Form

The Corps welcomes your comments on the Draft Environmental Impact Statement. If you'd like to mail your comments, please feel free to use this form. Write your comments below then fold this page in thirds so the mailing address shows. Additional pages can be inserted. Remember to affix first class postage. You can also email your comments to POA.donlingoldeis@usace.army.mil, or fax them to (907) 753-5567.

Important topics for comments would include:

- *Comments and questions about the accuracy of information in the Draft EIS.*
- *Comments and questions about the adequacy of methods or assumptions used.*
- *New information to be considered in preparing the Final EIS.*
- *New reasonable alternatives or revisions to current alternatives.*
- *Additional measures to reduce impacts (mitigation).*

Dean Swope Bethel, Alaska

I hope that the utmost Details be tended to the Saftey of this project. Because we need this project / because the Economy of our Region is Depressed – the People are Depressed, the young men need jobs -and Skills. The mine can provide that if Local hire is Enforced - in Concert with the Saftk of the mining operation.

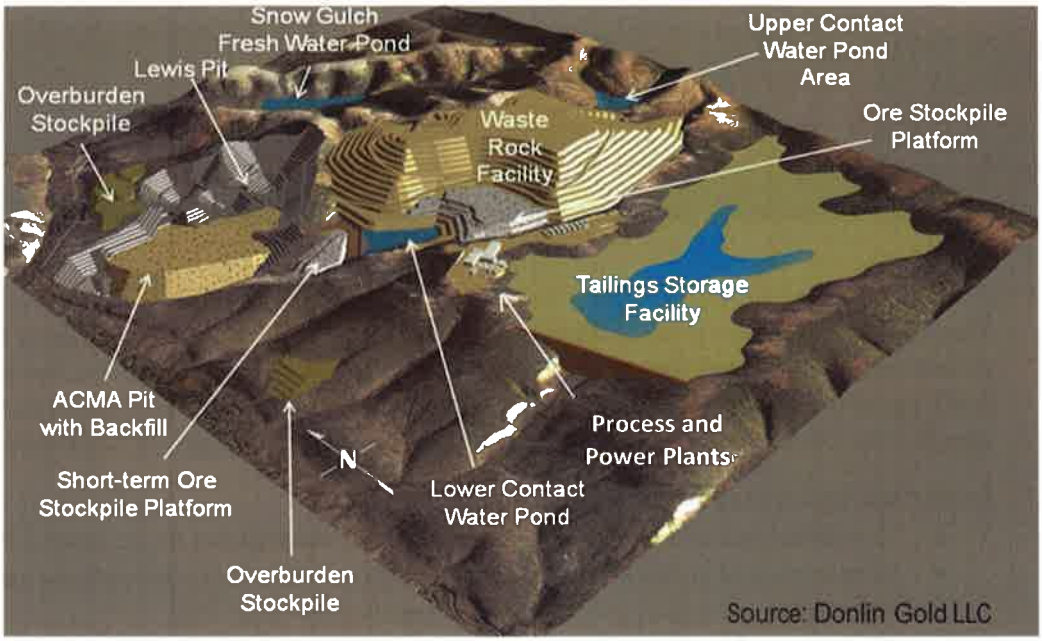
SER 15

Dean Swope

Layout of Proposed Mine Site

The image to the right illustrates the eventual layout of a proposed gold mine, ten miles north of the community of Crooked Creek on the Kuskokwim River in southwestern Alaska, for which the US Army Corps of Engineers is preparing an EIS. The project, proposed by Donlin Gold, LLC, includes a natural gas pipeline and transportation and components. You may use this mail-in form to submit comments.

For more information, please visit:
www.DonlinGoldEIS.com



(fold here)

Keith Gordon
Regulatory Division
US Army Corps of Engineers
CEPOA-RD-Gordon, PO Box 6898
Joint Base Elmendorf Richardson, AK
99506-0898

from:

US Army Corps of Engineers
Donlin Gold Project EIS

Place first-class postage here.

From:	David Szumigala
To:	donlingoldeis, POA
Cc:	david szumigala
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Tuesday, May 31, 2016 12:50:36 PM

I am writing in response to the Donlin Gold draft EIS. I support development of this project in southwestern Alaska. I also support Alternative 2.

SVE 1 The Donlin Gold project will provide critical infrastructure and economic development in this part of Alaska. Alternative 2 is a balanced approach to developing the mine and associated infrastructure while providing environmental protection exceeding standards established by Alaskan and federal regulations, statutes, and practice.

Thank you..

David Szumigala

Dave Szumigala via handheld device

Taiga Resources Conservation

a management and consulting firm specializing in conservation based natural resource industry support. We provide industry, governmental, regional, and community assistance in understanding, developing, and maintaining conservation based initiatives that will help sustain long term stewardship for important social/cultural atmospheres, fish, wildlife, land/water habitats, and industry developments within them.

HC60 Box 299C Copper Center, Alaska USA 99573 Phone: 1.907.822.3410
Email: taigaresources@gmail.com Web: www.taigaresources.com

DONLIN CREEK MINE PROPOSED GAS PIPELINE

EIS COMMENT AND REQUEST DOCUMENT

Submitted by:

Robert R. Fithian
HC 60 Box 299C
Copper Center, AK 99573
Phone: 907-822-3410
Email: fithian@cvinternet.net

Submitted to:

U.S. Army Corps of Engineers
Keith Gordon, Project Manager

January 28, 2016

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EXHIBITS

I. March 19, 2010 AMS Letter to Donlin Creek Mine
II. Alaskan Mountain Safaris Brochure
III. *Dichinanek' Hwt'Ana: A History of the People of the Upper Kuskokwim who Lived in Nikolai and Telida Alaska* by Raymond Collins.
IV. Upper Kuskokwim Reroute Map

TERMS OF REFERENCES

For purposes of this report the following terms of reference will be used.

A. DCM will indicate: Donlin Creek Mine and or its Managers/Operators.
B. PGP will indicate: Proposed Donlin Creek Mine Gas Pipeline.
C. UKR will indicate: Upper Kuskokwim Reroute
D. SAO will indicate: State of Alaska Pipeline Coordinator's Office.
E. ACE will indicate: Army Corps of Engineers.
F. BLM will indicate: Bureau of Land Management.
G. MP will indicate Donlin Creek Mine proposed gas pipeline mile marks.

AUTHOR'S BIO

Robert Fithian has a substantial background, knowledge and experience from a personal long history of work within, avocation for and often leadership in Alaska's mineral, forestry, professional guide, agriculture and specialty construction industries.

This ongoing history includes:

- Having conducted numerous winter cross country mining equipment and supply mobilizations and demobilizations within the Upper Kuskokwim Region.
- Having built or enhanced airfields for large aircraft use, roads, and provided substantial logistical and contract mining services support for mines within the Upper Kuskokwim region.
- Having owned and operated, or provided contract mining services to many mines throughout Alaska.
- Providing leadership within the Alaska mining industry by serving terms within the Alaska Miners Association Board of Directors, and, serving as the membership elected Statewide President.
- Eleven terms as the Executive Director of the Alaska Professional Hunters Association.
- Serving at the appointment of three Alaska Governors on a Subsistence Resource Commission.
- Served on the McGrath, Alaska Fish and Game Advisory Committee.
- Recognized as one of Americas foremost conservation leaders by serving multiple terms by joint appointments from the Secretaries of Interior and Agriculture on America's esteemed Wildlife and Hunting Heritage Conservation Council in Washington DC.
- Mr. Fithian has numerous respected professional relationships with individuals and general contractors who were substantially involved with development of the Trans-Alaska pipeline who are still currently involved with similar large scale arctic and northern latitude projects. Within his life, he has worked on some of the most remote

mining projects in the world as well as several natural gas pipelines within Alaska, Texas and Oklahoma.

- In February of 2014, he was elected by the seven US long standing state professional guide outfitter organizations as their national spokesperson.
- Mr. Fithian has provided numerous presentations, and authored many articles on mining, social license, climate change, natural resource industry stewardship and conservation throughout North America.
- Many years of his life have been dedicated to the conservation of the wild things in the wild places and respectful stewardship of industry within them.
- For more years than the currently proposed DCM mine life, Mr. Fithian as a Professional Guide has operated a guide service business conducting some of North America's greatest hunting opportunities with long term multiple species safari style hunts. These family operated and conservation based hunts have been conducted within a small region of the western Alaska Range and Upper Kuskokwim Region which the ecological resources that he and his family are dependent upon will be severed and forever impacted by the PGP.
- His sons, and now their sons, have spent much of their growing up years living and working in this region close to the lands and resources. It is for theirs, and the people of the Upper Kuskokwim and generations to follow, and Alaska's future, that the following comments are submitted.

COMMENT AND REQUEST SUMMARY

January 25, 2015

State of Alaska
State Pipeline Coordinator's Office
411 W 4th AVE, Suite 2
Anchorage, AK 99501-2343

Dear Sirs,

PAA 24

You are begged to consider and act upon the herein disclosed comments, concerns and recommendations regarding the footprint of the proposed Donlin Creek Mine Gas Pipeline (PGP) as it pertains to the Upper Kuskokwim Region of Alaska. The impacts of the proposed project in this region are very real and very serious. These proposed impacts are threatening to important ecological, cultural, social and other long term industry within this region.

These negative impacts are not naively conceived, but brought forward to you by keen, knowledgeable, respected, science based comments from a person who cares much for Alaska's great mineral industry but also from one who cares just as much or more, for the best interest of Alaska and, the ecology, people and conservation of the ways of life of the Upper Kuskokwim Region.

Nothing within this document should be interpreted as anti-mining or anti Donlin Creek Mine. The author has respectfully supported both the mining industry and the Donlin Creek Mine for many years.

May it be understood that the same ecological, cultural, concerns expressed within the whole of this comment and request document are attributable to the PGP between MP110 and 150. However, as it is easily recognized, due to the geographical nature of the region between these points, there are no alternatives to this proposed section which would reduce or eliminate the negative ecological, cultural and social impacts described herein.

Therefore, this comment and request document will primarily address the PGP between MP 150 and 220 as currently proposed.

PAA 24

Beginning at approximately mile point 150, viable alternatives do exist that provide the needed respect and protection for the many critical and real concerns that are depicted within this document.

It is with hope and respect for the whole that you are begged to consider and require for all of the reasons contained within this document, that the PGP be extended to the West from its currently proposed 150 mile point an additional distance of approximately thirty miles and then turn to the South through the Kuskokwim Valley Floor and retie into the currently DCM PGP at approximately MP 220. This reroute request will hereafter be referred to as the Upper Kuskokwim Reroute (UKR).

The following concerns and comments will help you understand and provide the basis for this much need change.

Respectfully,

Robert Fithian

Robert Fithian

REASONING BEHIND REQUESTED ALTERNATE PIPELINE ROUTING

TWL 2

The development of the PGP will represent the first major development of its kind within the Kuskokwim Region as a whole. As such it breaches the integrity of the wilderness barrier which previously has been in place forever. The SOA must develop a complete understanding of how the PGP as proposed, will change this region as a whole.

Most of the people who live in the Upper Kuskokwim River communities live there because they love life there. There is always the option of moving to the cities or to different parts of the world, but in general, these residents live in this region because they like to live there within the environment that exists. It is therefore mandatory that very careful SOA review and consideration be provided regarding the PGP development and the long and short term impacts on these communities and other ways of life that exist within the Upper Kuskokwim Region.

America and the world over are full of environmental, social, cultural, conservation and economic mistakes that have occurred whenever large industrialization has moved into remote regions. These same mistakes if recognized and acted upon by SOA, ACE and BLM may help provide for a true conservation, social and cultural basis for DCM to move forward within and to provide to Alaska and the world, an example of how to provide for these types of developments with respect for the whole.

PUB 1

Regarding DCM and the PGP, during February of 2010, in meetings where I was requested to not make anyone knowledgeable about the project, it was explained to me by senior DCM staff that they were moving forward with development of a plan to install a five inch diameter buried steel pipeline to move natural gas from Cook Inlet to Donlin Creek via Rainy Pass and the Upper Kuskokwim. Senior DCM staff also explained to me on several occasions that the pipeline project would be completed in its entirety within a one year time frame and those of us dependent upon the conservation of the region would never even know the difference between before and after pipeline installation.

Knowing Alaska and the construction industry, the proposed routing, what the true challenges to construction of the pipeline and what the cultural, ecological and environmental impacts would be on the west side of the Alaska Range, I did my very best to encourage a respectful "turning together" to address the proposed project. (*Please see Exhibit II, Feb. 2010 AMS letter.*)

This effort was a failure and respect had to be forced through numerous meeting and phone calls.

PUB 1

Within two years, the DCM's formerly proposed five-inch pipeline—to be installed in one year without noticeable impact to the important cultural, ecological and environmental concern—had turned into a 14 inch pipeline with a three year installation process, serious potential harm factors and substantial long lasting impacts to all aspects of the cultural, ecological and environmental concerns.

Within the DCM *Plan of Development* the criteria stated for PGP route selection has no inclusion for consideration of the impact on other ways of life or equally important long term sustainable industries.

PUB 4

There are thirteen alternate route considerations identified which are all characterized only by ease of construction, or bypassing of challenging geo technical considerations, not because of impact on the other customary and traditional ways of life or the ecological/conservation based aspects which are depicted within this document. It is therefore vital that these long established customary and traditional ways of life and viable and sustainable industries be protected by the SOA and ACE permitting process.

To my knowledge, no serious depth of background investigation was conducted on the people, their way of life, the resources they are dependent upon or the potential impact which the proposed gas pipeline will have on them before the footprint of the pipeline was developed within the Upper Kuskokwim Region.

The DCM hosted public meeting process within this region did not begin until **after** the pipeline routing had been selected and geo-technical data either gathered or was being gathered. This has left the people of the Upper Kuskokwim little ability for consideration of concerns or subsequent changes needed to protect large ecological areas or their long established customary and traditional ways of life.

In a similar vein, previous management teams within the Pebble Mine project also moved into an ecological and socially sensitive region of Alaska with a *"spurs on" "find it-build it"* approach, which very much influenced potential project negativity. This does not need to and should not happen with DCM.

As the substantial effort by DCM to define their proposed pipeline routing within the Upper Kuskokwim Region, as well as the associated geo technical data gathering, environmental, project planning was all assembled and submitted to the Corps of Engineers for approval without any sincere effort to collect or respectfully respond to negative impact concerns, the affected

PUB 4

public is therefore dependent upon the SOA, NEPA and EIS processes to address concerns and subsequent changes.

The affected general public, who must take substantial time out of their lives to respond, cannot truly comprehend the depth of the over one thousand pages of technical overview and summary information which defines the project. When they find that their concerns must compete financially with the development effort to create the largest open pit gold mine in the world, with billions of dollars to support the effort, they naturally feel overwhelmed. This should not be the process. Their concerns should be considered in the most respectful of manner, which they have not.

During several respectful communication attempts to encourage DCM to turn together to address concerns relative to the PGP, senior DCM staff simply has simply responded with the comment that "they are going to build the pipeline as proposed, they do not think it will have an effect on the numerous concerns defined within your concerns, to just get used to the PGP being there and if I do not agree, then sue them to try and stop or force consideration".

Consultation, Collaboration and Cooperation with the Upper Kuskokwim local villages, towns and affected parties should have occurred before such a significant event as the PGP was defined and initiated. To initiate a project with such inherent impacts, without a collaborative approach, and then cast it into the EIS process and force response, should not be the way of doing business or the way of the future for Alaska.

May 29, 2014 Canadian Mining Journal Article

GOLD: Pascua-Lama deal hailed as "historic"

*"Toronto's **Barrick Gold** has come to an initial agreement with 13 of the 18 indigenous Diaguita communities that have vigorously opposed development of the Pascua-Lama gold project on the Chile-Argentina border, according to the lawyer representing the local groups.*

*"This is historical, never seen in Chile's mining history," Lorenzo Soto, the lawyer for the Diaguita, said. **"A new phase in the way that large scale mining is done in Chile has begun."***

He hailed the changing attitudes of mining sector. In the past development was able to proceed "even if it trod all over the rights of the local communities." Now they a new, consultative approach is taking shape.

The agreement between the Diaguita and Barrick is to last six months, during which time Barrick will provide project details to the community. Third party experts, paid for by the mining company, will corroborate the details. If this process is successful, discussions will enter a dialogue phase that may involve international observers and the creation of a unique royalty payable to the Diaguita. That phase is expected to last two to three years. Construction will not restart until the dialogue is concluded."

SOCIAL LICENSE

PUB 1

Social license to operate within any rural region is easily defined by having sincere respect for the people, their way of life, and the fish, wildlife, land and water resources in the region you intend to operate within. The most effective way to accomplish this license is to turn together with those that will be most affected by your activities ahead of time to develop a plan which can work for both.

To turn away from the local people and say, "This project is going to happen, we are going to be there, just prepare for it" works against everyone's best interest.

Relative to the proposed natural gas pipeline within the Upper Kuskokwim Region, the process DCM has taken has been anything but respectful. The proposed footprint of the pipeline was chosen without a respectful review or consideration of its negative impacts locally but rather, for the shortest viable route possible.

Past attempts by the author to relate the long term impact concerns to DCM have been returned with dialogue which maintains that the impacts "will not be substantial," and that important subsistence, cultural, ecological and other customary and traditional ways of life "will not be negatively affected."

PUB 1

This is very definitely not the case and that the SOA and the other agencies involved within the pipeline permitting process have a very serious responsibility to not allow for these impacts to occur, especially if viable alternatives exist.

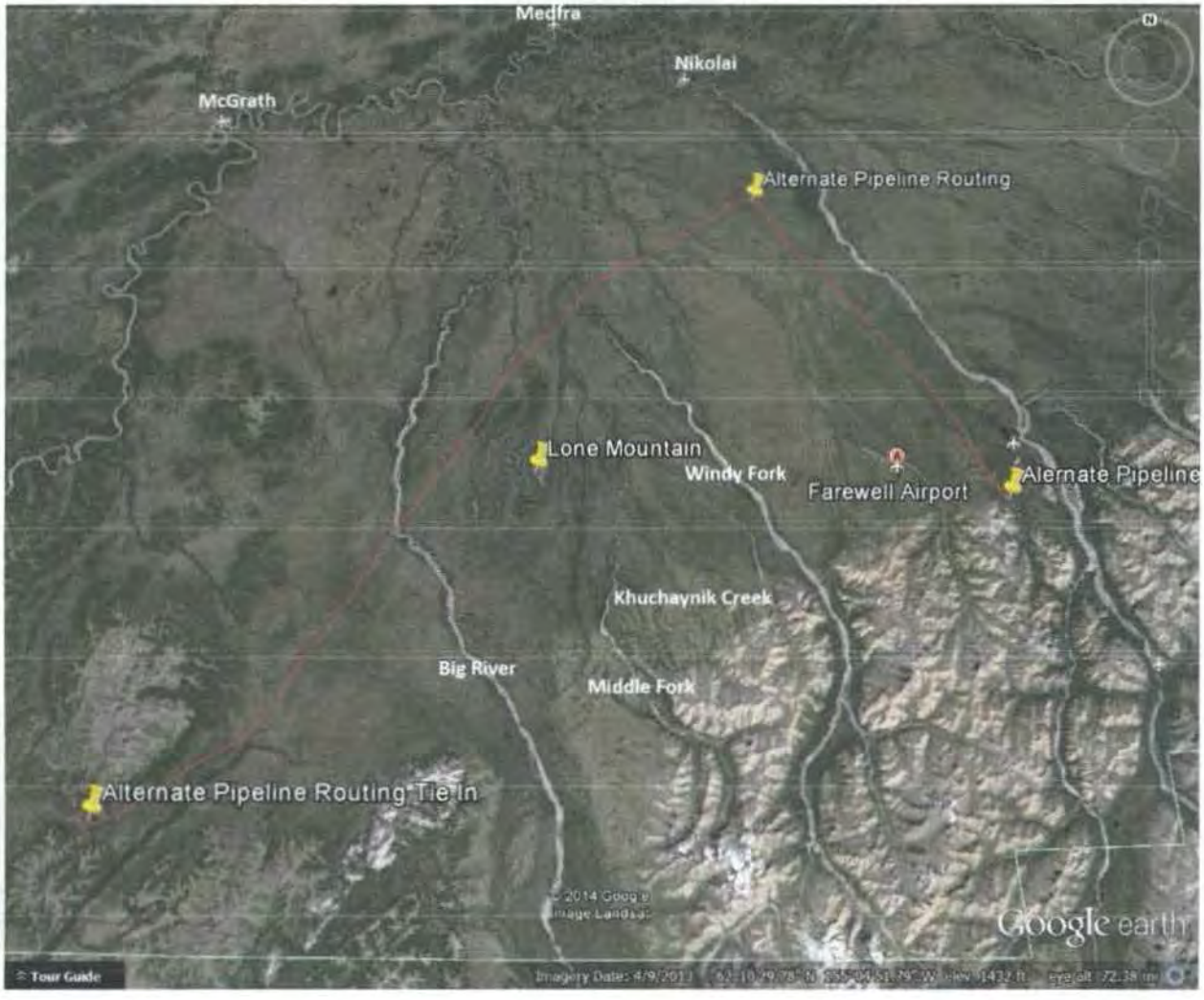
In short, the PGP as proposed, will force forfeiture of one sustainable industry which has a long and proven conservation basis for another which is non-sustainable and will provide at best, a questionable conservation basis of which the true long term impact and final reclamation result is highly suspect, questionable and unknown. The SOA process must clearly work to mitigate this potential impact by the DCM.

As previously stated in writing numerous times, for many years I have strongly supported conservation based development of DCM for the best interest of the Central Kuskokwim Region, Alaska as a whole and the owners/operators/employees (current and future) of the proposed project.

As my experience and support with the project has only been of a peripheral nature relative to the mine itself, I cannot speak to the consciousness of DCM regarding the important social, ecological and conservation aspect of the actual mine development. It has been my basic understanding that they have been and continue to look to these important concerns respectfully and adequately within the Central and Lower Kuskokwim Region.

This has very definitely not been the case within the Upper Kuskokwim Region. As I have expressed many times before, these significant and threatening impacts upon this region, its peoples, ways of life and established sustainable businesses does not have to occur.

The alternative routing recommended within this letter is real, it eliminates the negative impacts, provides for the required energy delivery to the mine as well as becomes more of a benefit to the Upper Kuskokwim communities.



SUMMARY OF DCM PGP IMPACTS AS CURRENTLY PROPOSED BETWEEN MILES 150 AND 220

CULTURAL

TWL 2 DCM has addressed in an annotated manner within their pipeline development plan what they will do with known cultural sites such as graves, artifacts etc. They also describe what they will

TWL 2

do if something new of a cultural nature is found during pipeline construction. There is no mention within the development plan of protecting the true culture of the people. It is very important to note that the whole of the lands and resources which the PGP impacts between mile points 110 and 220 ***are*** the culture of the Upper Kuskokwim people and others in this region that have come to depend upon them. Not just their graves and artifacts.

The true culture of this region lies within the extraordinary lands and resources which are found there. Each unique little mountain or hill, each geographic bench, each group of lakes, each large lake, each unique mountain and river/stream drainage has a given name and everything that walks or swims or grows within this region is the culture of the people who live or depend upon this area and its resources.

These great and unique habitats do not host the bountifulness of fish and wildlife resources which they could in their own ability. Modern man has already played his political role in disaffecting the prudent guidelines of sustained yield, abundance, and maximum benefit and the fish and wildlife in this region have suffered accordingly. What is left provides only a delicate balance of the use by the whole. Without the respect requested within this document, the impact of the PGP will eliminate this delicate balance forever.

TWL 1

The indigenous people living in this area are considered "Kolchan" or "Dichinanek' Hwt'ana" which in English would be "Upper Kuskokwim People." Their native language is distinctly related to this region and is one of the eleven identified Athabaskan languages. During April 2014, the Alaska State Legislature passed legislation (HB216) which identified and declared that twenty traditional Alaska Native languages will become official state languages.

The Upper Kuskokwim Language was included within this legislation and thus documented as one of the twenty individual languages within Alaska. The isolated presence of this distinct language proves that these people have been living in this distinct region for a long period of time.

The culture of these people is one adapted to by the provisions of their environment. Their current and historical geographical region dependency is constrained within the western tributaries of the Alaska Range Mountains bounded by the Swift or McKinley Fork of the Kuskokwim River to the North, the headwaters of Big River and outlying Tatlawiksuk River drainages to the South with the south and east flowing drainages of the Kuskokwim Mountains to the North and West.

TWL 1

Within this region and its mountains, rivers, lakes, valleys and plains the Upper Kuskokwim People have lived for countless generations within a culture of harvesting and gathering natural resources for their life's sustenance; a progression from one habitat to the next in pursuit of seasonal resources.

DATA 1

Probably the most complete written works about the Upper Kuskokwim Region and its people is titled *Dichinanek' Hwt'Ana: A History of the People of the Upper Kuskokwim who Lived in Nikolai and Telida Alaska*: by Raymond Collins. (Included within this document package as Exhibit III)

This work contains extensive references to the cultural importance of the unique lands and resources which will be impacted by the PGP between miles 110 and 220. A basic review of this written work would allow for any prudent person to sense the important significance of the lands and resources within this region to the culture of the local people. The same prudent person when comparing the impacts that the PGP as proposed will have on this region would easily comprehend substantial conflict, threat and loss.

TWL 1

The first thoroughly written recorded crossing of the Alaska Range Mountains in this region occurred in 1898, when USGS geologist J. E. Spurr and topographer W. S. Post led an expedition across Alaska's Susitna Basin and ascended and then descended the Alaska Range Mountains to the Upper Kuskokwim River.

Their discovery route through the Alaska Range is very comparable to the route which is used by the Iditarod dog sled race and also the chosen route for the PGP. The first evidence of human activities that Spurr and his party found on the West side of the Alaska Range were well used hunting camps and human travel trails along the mountainous headwaters portion of South Fork of the Kuskokwim River. Spurr in fact named most of the west flowing mountain drainages which he encountered after persons working within his expedition. He did not "discover" this region or its tributaries; these discoveries should be attributed to the prior generations of the Upper Kuskokwim people.

Further down the South Fork the Spurr Expedition encountered local people which were led by a man named "Nikolai." These people were engaged in living their traditional subsistence lifestyle.

It is important to note that the incredible wildlife habitats and much of the wilderness of this region existing in 1898 are still the great habitats and wilderness regions they were then. Also important is the fact that the culture The Spurr Expedition encountered in this locale in 1898,

TWL 1

continues to exist within this region in the descendants of the same people this expedition encountered. They, like their forefathers, are very dependent upon the conservation and utilization of the natural resources of this incredible and very unique region. The PGP should not jeopardize, nor take away from these people and/or Alaska, the culture that has and does exist here.

SER 29

As the habitats of the Western Alaska Range and its outlying flanks provide a unique and healthy ecosystem for numerous large mammal species the historic people of this region have developed into very artful and accomplished hunters.

During the past and current century these two factors registered with the worlds sporting community and many of the people from the Upper Kuskokwim engaged themselves in the professional guiding industry by working for other guides within this region.

Several have used the knowledge gained in this work to start and operate their own businesses. It has been beneficial for them for they not only receive financial remuneration for their work; the vast majority of the meat harvested was and is retained by their guiding business and shared within their families and local communities.

There are several long established multi-generational professional guide service businesses located within the lands which the PGP footprint between miles 150 and 220 which will be significantly impacted and destroyed. They will lose viability, sustainability and will be put out of business by the pipeline development as proposed.

As the arts and other manifestations of human intellectual achievement regarded collectively represents a culture, the negative and destructive impacts which the PGP will have on the above described long time established and sustainable way of life should not be jeopardized.

PAA 24

DCM maintains that the development of the pipeline will be a "here today and gone tomorrow" event and that the impact will have little or no effect on the other ways of life that exist in the regions it impacts. We strongly feel that this is not the case and that immediate and long term impacts from the development of the pipeline as proposed, as well as the thirty years and quite possibly more of ensuing maintenance will in fact, substantially alter and eliminate vital aspects

PAA 24

of the customary and traditional way of life that has existed in the Upper Kuskokwim Region for many generations.

The UKR will significantly reduce the PGP impacts on the cultural importance of this region and should be adopted.

ECOLOGICAL

PAA 24

The wildland habitats between proposed MP150 and 220 of the pipeline route lie within the important transitional phase of spruce forest to uplands on the Western and Northward facing slope of the Alaska Range.

The geographical uplands transected by the PGP between these DCM proposed mileposts include incredible tundra steppes divided by eighty-nine outflowing streams and rivers. These tributaries of the main Kuskokwim River are born within the Terra Cotta and Trimokish regions of the Western Alaska Range Mountains and flow out though the vital transitional habitats and on into the black spruce forest of the Kuskokwim Valley proper. Numerous kettle lakes are encompassed within the near proximity of the PGP and each provides a vital role in the overall delicate nature of these critical upland habitats and ecosystems.

This incredible habitat should be considered critical in nature. We do not believe that the PGP impact on this region will be brief. It will in fact be problematic and ongoing, and the ecological balance of the region will be negatively affected in a great manner. DCM PGP as proposed represents the shortest most cost efficient route for the pipeline. The herein requested UKR will in fact mitigate the majority of the following ecological concerns and still provide for the pipeline.

SOL 8

As proposed, nearly the whole of the route between MP 150 and 220 is fully exposed to solar thaw. Combination permafrost, ice lenses and thawed ground conditions are checker-boarded throughout the entire length of the planned route. The DCM Plan of Pipeline Development figure 8-5 clearly shows the unstable permafrost conditions that exist within this area of concern.

The relative warm permafrost temperatures (29°F - 31°F) in this region make this remnant permafrost very susceptible to continued and enhanced solar thaw.

SOL 8

Minimal surface vegetation and ground disturbance even in winter will substantially enhance additional thawing. The result will be substantial troughing, ponding, and erosion especially within the pipeline corridor and trench.

PAA 24

DCM geotechnical data depicted within the Plan of Development maintains that the route chosen between miles 150 and 220 was done so to limit the potential impact of the pipeline on environmental factors such as wetlands. DCM maintains that due to Clean Water Act 404 (B) restraints, alternative buried pipeline routing which lie within the outlying colder and more permanently frozen black spruce forested regions was not considered selectable.

In fact, the route as proposed will cause more long term wetlands mitigation requirements than the TRC proposed route.

The assessment value of wetlands contained within the UKR recommended route is far less valuable than the ecologically sensitive and critical wetland habitats which will be negatively impacted with pipeline development as proposed.

The UKR proposed rerouting not only protects sensitive and critical wildlife habitat of the uplands but also provides a better long term ecological and environmental overall footprint for the pipeline.

Moving the pipeline out into the black spruce forest within the Kuskokwim valley proper will result in substantially less long term wetland mitigation factors, provide avoidance of critical wetland habitats, minimizes overall ecological wetland disturbance to critical habitats and eco systems, and reduces compensation requirements for wetland disturbance.

The UKR requested re-route would establish the pipeline within habitats and regions much less critical to wildlife and human use as well as providing a much more stable ecological footprint and substrate.

In fact, wetland mitigation requirements and cost may even be reduced by the UKR.

PAA 24

Additionally, the UKR reroute provides for the best interest of all user groups, it protects the unique and important upland transitional habitats and allows for continuation of the customary and traditional lifestyle and other industries within this region.

There are many thousands of miles of buried pipeline in similar or identical habitats to the UKR reroute within Alaska and Canada that have been successfully established to support this recommendation.

PAA 24

Much of the proposed pipeline routing between Mile 150 and 190 lies in close proximity to, or over, an existing trail historically established by cinnabar miner Robert Lyman. Mr. Lyman developed this winter trail to bring equipment to his White Mountain mine site from 1963 through 1974. Mr. Lyman is buried a short distance from the proposed Big River PGP crossing.

I have traveled this trail on many occasions over the past thirty plus years and can clearly state that even the historical and minimal winter only impact on the frozen surface eventually caused considerable thaw in numerous locations resulting in extensive sloughing and erosion. These impacts were enhanced by continuous solar thaw in this primarily open and fully exposed habitat. Even from minimal historical use some of the resulting holes and subsequent erosion would swallow a large piece of heavy machinery today.

The area soils and surface vegetation within this region are very ecologically sensitive and any amount of surface impact results in enhanced thawing, sloughing, and erosion. The DCM PGP proposed route represents in many areas a jumble of tundra covered semi frozen big holes, large buried ice lenses, uneven landscape and lakes.

The existing vegetative mat provides insulation to existing thawed and unthawed pockets. As proposed, overall ground impacts and especially the overland pipe transport and pipe storage yards will heighten vegetative impact and thus enhance erosion.

It is important to note that the proposed diesel fuel consumption requirement for this section of pipeline development alone is over one million gallons. The amount of machinery impact to consume this amount of fuel within this delicate habitat no matter how environmentally focused, is going to render new erosion and substantial long term maintenance requirements.

Global temperature change has to be considered when looking at continued thawing and resulting long term impact on the proposed gas-line trench. This consideration should be an important aspect of the SOA and ACE consideration.

Thirty years ago there were substantial glacial and historic snow pack reserves in the heads of each of the drainages that outflow to the north from the mountains between Miles 140 and 200 of the proposed DCM pipeline. Now, due to continual warming, many of these drainages are completely void of any glacial ice or historic snowpack. This is a strong indication of enhanced thawing in this region which will jeopardize the integrity of the PGP.

PAA 37

There are numerous noticeable glacier retreat age rings as seen by infrared aerial photos lying within twenty miles of each of the major drainages draining to the north of the mountains between miles 140 and 200 of the proposed DCMGP. Scientists maintain that the overall age of

PAA 37

this defined and retreating ice age may be less than six thousand years. Each of these retreat rings indicate cooling trends which stalled the overall warming retreat cycles. During eight of the past ten years, the previous winter snow pack has melted completely and substantially diminished reserve snow and ice pack. Once again, I use this knowledge to help you understand that the PGP as proposed should not be placed within the delicate tundra upland, fully exposed warming habitats. The SOA and ACE should define this factor and suggest alternatives.

PAA 24

Again, the UKR substantially reduces solar thaw geotechnical aspects and provides a better overall footprint of impact. SOA and ACE need to consider the substantial ecological impact by pipeline development as proposed by DCM. These after pipeline installation maintenance concerns will require much more continued maintenance than DCM is proposing.

HYD 10

Hydrology and Outflow Concerns

Between proposed mile points 150 and 220 the DCMGP will require eighty-nine stream or river crossings. All of these tributaries are outflow of various sizes from mountainous headwaters to the east of the proposed pipeline. The US and world over is rife with flood and erosion based buried pipeline failure history due to flood and erosion.

Subsequently, I am very concerned with the lack of historical hydrology studies relative to flood and erosion within this region and whether the one being used by DCM for proposed river and stream pipeline crossings is adequate to address channel erosion during any significant or one hundred year event.

Having contended with flood events in many parts of the world including several that have been defined as fifty and one hundred year events and, comparing this experience with thirty-plus years in the Western Alaska Range during flood season, I have seen and dealt with three events that were significant within this region. With little or no historic official record keeping relating with, my feeling in comparing these three flood events is that I have not yet seen even a fifty year event in the Western Alaska Range.

On several occasions after multiple days of warm summer temperatures and continuous rain, I have seen thirty to fifty feet average width and two foot depth waterways within MP 150 and 190 become one thousand to twelve hundred feet wide by four feet depth multiple day flood events with tremendous erosion and scouring results.

HYD 10

Scouring Erosion Breaking Abrasion Factors

During the three noted flood events within this region I witnessed, extreme increases in water volume and flow velocity resulted in extreme stream and river, bank and bed transformation. Scouring, breaking and abrasion factors during these flood events caused considerable lateral and certain vertical movement to the stream and river channels. Some of the eighty-nine streams or rivers are small tributaries which have much higher vertical erosion than the wider river beds.

Outflow Turbulence Velocity and Terracing

The PGP as proposed will be located at the base of the mountainous outflow of these eighty nine drainages where flood turbulence will in many cases be at its greatest velocity. In several other cases relative to the larger rivers, the proposed crossings are located at the rivers near widest historically carved channels where flood events continue to widen with terracing outflow and bank erosion.

CLIM 4

Solar Thaw Enhanced Erosion

The existing thawing cycle of the warming permafrost in this region is creating more thawed substrate annually which significantly enhances erosion factors during these flood events.

Substantial bank erosion, carving and scouring occurs with each flood event often causing complete transformation to the flow arteries with new arteries, additional terracing and channel cutting.

Within this region there are numerous manmade structures which have been lost to flood and erosion factors. Many of these structures were originally placed on high ground above existing streams and rivers by builders who believed it would never be possible for water flow to ever reach.

On more than one occasion I have been asked to assist with trying to save structures from flood events in this region. Homes, camps and cabins which were originally built above historic high water marks and outside of stream or river channels have been lost to flood caused erosion and widening of river channels.

CLIM 4

As proposed, many of eighty-nine pipeline stream/river entry and exit points between MP 150 and 220 will be **at risk** to flood events. This risk is substantially abated with the UKR recommended reroute.

PAA 24

Entry and Exit Grades

PAA 24

As proposed with the PGP, many of the tributary crossings between MP 150 and 220 have much longer and steeper entry and exit grades than are found within the requested UKR reroute.

When these entry and exit grades are considered within the scope of continued solar thaw and hydrology related concerns shown above, consideration must be given to alternative routing which would reduce damage and maintenance factors and risks.

The UKR recommended alternative routing puts the pipeline well out into the valley floor where the natural horizontal plain and river/stream meandering substantially reduces entry and exit grade and hydrology caused risk. All of these hydrology concerns are substantially mitigated by the UKR.

HYD 12

PGP Winter Water and Kettle Lake Ecology Impacts

As proposed, a tremendous amount of winter available water will be required for development of the PGP in this region. The DCM PGP plan calls for utilization of water from kettle lakes, rivers and streams to support the project. It is important to understand that most of these rivers and streams have minimal or even nonexistent free water movement or the ability to produce free water for winter utilization.

The many kettle lakes in this region are generally shallow and freeze solid during most winters. These kettle lakes should not be taken for granted. They each represent their own fragile ecosystem which in turn is connected to the larger overall existing ecological balance.

Many of them are well into the process of transformation into wetlands and as such, contribute greatly to the delicate ecological diversity of this region. Additionally, these lakes add significant value to the existing wetlands. Complete removal of water from these lakes may well harm existing and future ecosystems within this region.

HYD 12

Based on all of these concerns and factors, I am convinced that the PGP as proposed will have a much higher level of continuing maintenance, ecological impact and cost than is being projected.

HYD 10

The pipeline failure risk factor due to flooding and hydrology is not just high but probable. These concerns add significantly to the overall negative ecological impact posed by the pipeline in this upland region as proposed.

Article by: Associated Press January 25, 2015.

Sonar indicates pipeline that spilled oil into Yellowstone River is exposed on riverbed.

"GLENDIVE, Mont. — Sonar indicates part of an underground pipeline that spilled almost 40,000 gallons of oil into Montana's Yellowstone River and fouled a local water supply is exposed on the riverbed.

The pipeline is exposed for about 50 feet near where the breach occurred Jan. 17, according to a news release from public agencies involved with the response.

The pipeline had been buried at least 8 feet under the riverbed, and the depth was last confirmed in September 2011.

The cause of the spill remains under investigation. It prompted a five-day shutdown of drinking water services for 6,000 people in the city of Glendive after oil got into a treatment plant.

Prior accidents, including a 2011 Exxon Mobil pipeline spill on the Yellowstone near Billings, have demonstrated that pipelines beneath bodies of water can quickly become exposed by floodwaters or other natural forces."

PAA 24

Again, the UKR recommended alternative routing will not impact this regions unique delicate ecological balance that has been thousands of years in the making. It also replaces higher value wetlands with those of significantly less value and thus reduces mitigation requirements.

Additionally, it moves the footprint of the pipeline much closer to two communities which would provide instant infrastructure and support services should a pipeline failure ever occur.

FISH 1

Fish

Regarding PGP impacts on fish. I have knowledge of the present documented history of salmon and whitefish including sheefish within the Upper Kuskokwim watersheds.

What I feel is important to understand is that with sincere respect through the pipeline construction phase of the impacted fish utilized waterways that the concerns relative to fish can be successfully addressed. The ADF&G science we have for fish stocks within the Upper Kuskokwim has been gathered and recorded over enough years to provide a glimpse at trends.

The DCM PGP Ottertail field work represents just the beginning of a basis and not enough broadness or depth to effectively address potential impacts. To be considered accurate, it would need to be conducted over a long period of years.

FISH 16

Although my knowledge is anecdotal in nature, it does come from over thirty years of keen observation and recordings. There are years when strong fish runs and high water bring Chinook and Coho salmon and even sheefish into or close to the mountains and there are years of low fish runs and low water events where there is little utilization of the upland waterways. These events vary accordingly.

Sheefish have certain known spawning areas on the Middle Fork/Windy Fork and Big River which are important to recognize.

There was information defining a previously unknown species of char that inhabits the upland waterways of the streams and rivers between and including the South Fork and Big River. This science, gathered by a former ADF&G biologist, was lost in a fire in McGrath.

My concerns about any negative impacts on fish are more reflective of:

PAA 24

a. Potential pollution from liquid spills.
b. Engineering and installation of stream and river crossings that provides minimum disruption and several times over the engineered guidelines for turbulence, erosion, abrasion and terracing factors.

The UKR proposed route travels close to but just above (1-3 miles) the ADF&G known sheefish and within salmon spawning grounds on the Middle Fork and Windy Fork Rivers. However,

PAA 24

with consideration of the above two factors, the crossings can be successfully established in keeping with good stewardship as they have been in numerous locations in Alaska and throughout North America.

One could argue that the PGP as proposed would have less potential impact on fish than the UKR. However, we have on numerous years observed Chinook and Coho salmon spawning within in the upper reaches of the river systems in this region which will be impacted by the PGP.

There is an significant importance of protecting and posing no potential harm to fish by any construction project or pipeline within this region as a whole.

GEO 2

Fault Zone

Active fault zones within this region include the major Denali Fault which is intercepted by the PGM near mile 150. This fault zone and associated earthquakes represents one of the most active earthquake zones in North America. In 2002, for example, one of the greatest known earthquakes associated with this fault zone occurred which caused waterways as far away as Texas to splash for half an hour. This earthquake created a surface rupture of over two hundred miles with offsets up to twenty-eight feet and extended the recognized Western reach of its zone to Farewell. A similar event occurred in 1903 which may have been an even greater movement event. Although DCM PGP addresses the fault zone and potential movement events within their pipeline plan of development, in my opinion they do not provide enough confidence relative to a breach of pipe during a substantial plate tectonic movement of this fault.

ENVIRONMENTAL CONCERNS

PAA 24

This section describes concerns relative to potential threats to the physical environment by the PGP as proposed between miles 150 and 220.

The impact of many hundreds of employees, development of large airfields, development of large man camps, equipment shops, over one million gallons of fuel transport, storage and spill risk, tremendous amount of large equipment, transport of pipe, pipeline storage yards storing five miles of fourteen inch steel pipe every five miles, numerous hectares of gravel pits, water extraction, mobilization, demobilization, R&R activities of employees, substantially endangers

PAA 24

the critical, delicate and important transitional habitat and ecosystems between proposed miles 150 and 220 of the pipeline.

The UKR proposed reroute once again, abates or mitigates this concern.

It is neither right nor respectful to impact sensitive and critical habitats that wildlife and humans depend upon when viable alternatives exist. We are hopeful that the SOA will help encourage viable alternatives that do not jeopardize other ways of life and important resources.

LAND 5

As proposed, a 300 person camp at Farewell will be established (approximately mile 150) and another 300 person camp at Big River (approximate mile 190) of which each will receive at least three years of service. Additional improvements will be made at the Farewell airfield and a new 6000 foot airfield will be established at the Big River crossing.

DCM maintained one year that the State of Alaska is advocating leaving the improvements (airfields, camps etc.) intact to allow for new public access to remote regions and the next year, that they are going to restrict access and remove improvements. We have no idea of what to believe or expect but we do know that these developments will be extensive and end our customary and traditional way of life in this region.

Each of the many small tributaries which flow out of the mountains will have multiple hectare gravel pits developed. The whole of this proposed corridor along the flanks of the range will be maintained to be brush free.

Beginning several years ago and through the beginning of their public notification efforts, DCM maintained that they will construct this portion of a five inch pipeline in one winter and be gone, with no noticeable disturbance to the wilderness environment.

Alaska has a long history of taking assumptions identical to this and proving them wrong. DCM maintained to me, again and again, that this entire phase of construction will be conducted in one winter, they will be gone and we will never know they were there. Please know that I did not then, and do not now, begin to agree with this assumption. The infrastructure development alone will take more time than this to develop.

As it stands now, we are up to a proposed three year construction project, (possibly longer) fourteen-inch pipeline, giant airfields, multiple 300-man camps, many hectares of gravel pits, millions of gallons of fuel transport, storage and use, 200-feet of pipeline right of way with a 50-feet corridor continuously maintained to be brush free for 30 years, and significant impact upon

LAND 5

the environment and other ways of life. Where is this misleading and actual impact going to stop?

Please know that I have spent substantial time carefully going over the lay of the land and proposed project relative to this comment with long time respected and current arctic pipeline contractors who agree with my overall concerns herein depicted.

Note that I have been in McGrath when the temperature has been -75 degrees and that I have conducted a number of winter cross country mobilizations of heavy equipment within this region and as an owner/operator conducted numerous winter arctic mining and construction projects.

I believe that the PGP project will be more complicated, problematic, time consuming and continuously more ongoing than DCM projects at the risk of serious impact to the lands and resources, the cultural and social atmospheres as well as putting an end to other important existing long term sustainable industry.

IN THE COURTS: Suit seeks $6B from Barrick for Pascua-Lama misrepresentation.

May 22, 2014 Canadian Mining Journal

"TORONTO – A class action suit demanding $6 billion in damages has been filed against ***Barrick Gold*** *and its executives. The suit alleges that the company and employees misled investors about the economic and environmental risks of the Pascua-Lama gold project that straddles the Chile-Argentina border.*

Barrick suspended construction on the Chilean part of the project in October 2013. Money for the $8.5-billion development was tight, and the Chilean court had issued a stop work order as concern mounted over environmental questions.

In a statement of claim, lawyers for the plaintiffs allege that risks relating to the feasibility and cost of the project were misrepresented. They claim the company and its executives knew their statements were inaccurate, misleading and lacking key facts about Barrick's failure to comply with environmental regulations and permits for the Chilean portion of the mine.

Shareholders who acquired Barrick Gold securities during the period from May 7, 2009, to Nov. 1, 2013, please contact Koskie Minsky LLP at 1-888-723-4305 or email at barrickclassaction@kmlaw.ca."

Chilean Court Nixes Latest Pascua-Lama Appeal

Published: January 7, 2015 Engineer and Mining Journal

Written by Joe Kirschke

"In the latest blow against the $8.5 billion Pascua-Lama project, Chile's Supreme Court dismissed an appeal by Barrick Gold Corp. over environmental penalties, the company announced. The judgment upholds a lower court ruling against the $8.5 billion Andean asset suspended in Q4 2013.

In Q2 2014, Chile's national environmental officials fined Barrick $16 million over noncompliance with regulatory requirements. The massive copper-gold-silver project has been dogged by local opposition, labor unrest and cost overruns for years.

Following the latest ruling, environmental officials will now re-evaluate previously imposed fines, according to company representatives. Toronto-headquartered Barrick gave no indication of the possible size of the new penalty and a spokesman was unavailable for comment, according to a Reuters report."

WILDLIFE CONSERVATION

WILD 1 Important wildlife species which reside within the region to be impacted by the PGP between proposed miles 150 and 220 include Dall's sheep, moose, caribou, bison, black bear, wolf, brown/grizzly bear, wolverine, lynx, coyote, marten, beaver, muskrat, marmot, ground squirrels, ermine, red fox, mink, and porcupine. All of these species are utilized by man for food, clothing or economy and there is a long established history within this region of this use.

There are not many comparable habitats within Alaska and no other in the world where all of these species are year around resident. This is due to the uniqueness of the habitat found here.

WILD 1

The wildland habitats between proposed MP150 and MP220 of the pipeline route lie within the important transitional phase of spruce forest to uplands on the Western Slope of the Alaska Range. As such, this first and second generation habitat is considered critical and very important to wildlife for a number of ecologically enhancing reasons and should be avoided by the pipeline development.

WILD 1

Numerous geological dikes, fault zones and independently deposited mineral sources have surface exposures across this upland habitat. These dikes, fault zones and other naturally occurring sources provide certain minerals to affiliated surface exposures which are important to wildlife. The mineral lick on Egypt Mountain has long been known for its importance to bison and moose. There are numerous others not depicted within the DCM PGP research which are very important to wildlife.

There is a dominant east/west cutting fault in this region which for the purpose of these comments I will call the Middle Fork fault. This fault zone intercepts and outcrops in the very first small up thrust of the mountains just to the South of the Middle Fork River. One of the most utilized mineral sources is located within a short distance from the PGP.

Two similar mineral bearing zones also surface at two additional points to the Northwest where impact by the PGP activities will have a restrictive and possibly damaging impact on the wildlife of the region as a whole. These three points are historic mineral sources for all ungulate wildlife species of the region and predators as well. All three licks are used consistently.

There are other very similar mineral sources located near the proposed pipeline footprint between the Middle Fork and the South Fork Rivers. PGP will negatively impact these important wildlife mineral sources.

One of these mineral source locations is located within 600 yards of the PGP footprint. There are numerous well defined game trails leading to this important mineral source and several are easily seen to cross the PGP footprint. The lick itself covers approximately a 1/3 acre.

The Ottertail wildlife review contained within the DCM PGP Plan of Development does not show these important mineral locations, all of which are easily definable from the air.

Please note that the PGP will have a very negative impact on wildlife by adversely affecting animal access to these mineral sources. I do not believe that the PGP impact on this region will be brief. I believe it will be problematic and ongoing and that these important wildlife habitats should not be compromised. The SOA needs to consider the negative impact on wildlife created by affecting wildlife access to these mineral sources.

WILD 1

On any given winter when the Western Alaska Range Mountains between MP150 and MP185 of the PGP receive heavy snowfall, the Dall's sheep of the region migrate out to the western flanks of the range where wind generally exposes winter feed. There are several small outlays of hills from the range which, during these times of deep snow—often accompanied by extreme cold—the sheep populations use these exposed low elevation hills to forage for food.

These hills are located within a close proximity to the PGP footprint and are also exposed to the tremendous amount of large aircraft which will be utilizing the airspace in this region for access to and from the Farewell and Big River proposed PGP support camps and airfields.

As proposed, winter or late spring DCM PGP pipeline surveillance, maintenance and or construction has the potential to negatively impact wildlife utilization of these areas at a time when nutritional stress is at its highest annual point. These are important and critical habitats.

Any additional stress can, and will, provide substantial mortality results during these severe weather events in this region. SOA needs to consider the impacts on wild sheep by affecting wildlife access and comfort in these locations during high nutritional and weather stress periods.

On any given winter when the western Alaska Range Mountains and outlying tundra uplands between MP150 and MP220 of the proposed pipeline receive heavy snowfall, the tundra uplands with their related first and second generation habitats provide critical browse for the moose populations of this region. As proposed, winter or late spring DCM pipeline surveillance and/or construction has the potential to negatively impact wildlife utilization of these important and critical habitats. The SOA needs to consider the impacts on wildlife by affecting wildlife access and wildlife comfort in these locations during high nutritional and weather stress periods.

WILD 1

As proposed, the DCM will develop two, 300-man camps between proposed MP150 and MP220 of the pipeline (Big River and Farewell). This would be almost identical in human impact of taking the whole human population of McGrath times two and putting half in Farewell and half at Big River. Year around or not, this level of human impact on the lands and resources will be very high and devastating to the wildlife and to the local way of life in that area that depends upon prudent wildlife conservation.

DCM maintains that this large amount of construction personnel will not be allowed to hunt within the "pipeline corridor" which is fifty feet wide and takes the average human about thirty seconds to walk across.

WILD 1

Even with heavy work schedules these 500—600 employees will have many opportunities to go and play. As proposed, all of the pipeline development between MP150 and MP194 is located in what is considered critical and important summer and winter wildlife habitat.

LAND 5

The proposed field camp, gravel pits and new airfield at Big River for instance will be readily visible to all of my hunting clients during many days of their hunts.

Ordinarily, the first view these Alaska visitors have of this very remote and pristine country is breathtaking and the resulting photos always represent cherished memories of what an incredible wilderness region they were able to experience and be part of.

The PGP as proposed takes this future away from them. The SOA needs to address the impact of the removal of pristine wilderness viewsheds, scenic and remote scenic river and stream systems and the replacement viewshed of man camps, gravel pits, maintained pipeline right of way, storage yards and large airfields.

The following few pages provide you a glimpse of the respect for the wilderness and our customary and traditional way if life that the visiting public currently has. It is not fair to us, or Alaska, or the visiting public to take this away from us with the development of the PGP, especially when viable alternative routing exists. We could add to this list with many more.

What Our Previous Hunters Are Saying:

Bob, I want to thank you again for the great time I had on our recent spring Grizzly Bear hunt. My definition of a great hunt encompasses the total experience of having good company in the field and in camp, hunting remote and scenic country, seeing a variety of wild game, and having the opportunity to harvest a mature, prime specimen of the animal being hunted. Our hunt provided all these experiences in full measure, leaving me with many indelible memories.

Here are a few of the more memorable highlights.

- Seeing grizzlies on 10 different days
- Watching a mother grizzly lay on her back, allowing her cub to climb onto her belly and nurse
- Seeing full-curl Dall sheep rams raking their horns on trees
- Rooting for the tiny baby moose that was trying to get to its feet for the first time in it's life.

- Spotting different wildlife on a daily basis, including grizzly bear, black bear, moose, bison, Dall sheep, caribou, fox, coyote, snowshoe hares, and dozens of species of birds and small animals.
- Experiencing the "thrill of the chase" when a very speedy and hungry coyote almost ran down a group of Dall sheep ewes.
- Having a grizzly walk up to within 100 yards of us on the open tundra.
- Finally finding the monster bear "Joe Louis," after we had already bagged one.

Of course, the climax of the trip was harvesting the big grizzly. Since I was hunting with the 454 Casull revolver, I needed to get close to the bear....but 20 yards was almost too close! Everything worked out okay, and the bear is a magnificent trophy...a mature boar with 4 inch long claws, and a head large enough to fit my head within the jaws! His hide squared out at 8.25 feet, and the skull measured 23 5/8 inches...an exceptional specimen.

My entire hunt was a very enjoyable experience. Your easygoing nature, appreciation for the outdoors, and knowledge of the Alaska flora and fauna made the quieter hours pleasant and informative. When it came to spotting and hunting the bears, your willingness to put in long hours plus your many years of prior guiding experience proved to be a very effective combination. I never doubted that we would be successful in bagging a grizzly, and it was gratifying to pass up opportunities on some smaller adult bears early in the hunt, in hopes of finding an exceptionally large boar later on...which we did.

P.S. The lucky hunter who bags "Joe Louis" will have trophy of a lifetime, and one which will certainly score high in the Boone and Crockett Record Book!!!

Jim Schmid
Fort Collins, Colorado

Greetings from Oregon!

I want to take this opportunity to thank you for a terrific hunt, The hunt for the Dall ram through 4 days of rain, fog, low clouds, and creeks at flood stage remains the highlight of my hunt. Greg was a great guide and hunting companion. I appreciate your willingness to travel 21 miles (in 1 day) across the tundra to look for that big caribou when warm weather kept the bulls in the mountains. The eight black bear, seven grizzlies, six very nice moose, black wolf, peregrine falcon, and gyr falcon we saw added immeasurable to the quality of the hunt. I look forward to a return trip in the future.

Gene Silovsky
Redmond, Oregon

I hunted with Robert of Alaskan Mountain Safaris on a 21 day hunt in August and September. I have nothing but good to say about the hunt. I hunted several days with Robert and Barb then 12 days with Greg his #1 guide. In 21 days I took 2 bears, a black one seven foot, and one 6 ½ foot. A 37 ½ inch 10 year old ram heavy horned, a nice caribou scoring 378 and a 65 ½ moose that scored 224. The food was good, service was excellent. I had a cracker jack of a good time looking forward to next time. I would not hesitate in booking again.

Happy Hunting,

Ralph Stogsdill,

St. Louis, Missouri

Once again I would like to say thank you for another fantastic hunting adventure. The "Emerald Valley" will always be a very special place to me. From the rocky peaks to the foothills and lowlands, the diversity and abundance of game is truly a hunting paradise.

I appreciate all the effort and hard work by you and your family to ensure a very enjoyable and successful trip.

Two trips and six trophies speak for itself. Thanks again for memories that will truly last a lifetime!

Jim Reed
Longmont, Colorado

Just wanted to thank you and your family for the hunt of a lifetime. It was fantastic. Your concern for my comfort, safety, and putting me on trophy animals was greatly appreciated, as well as following all rules of sportsmanship and fair chase. I've been lucky enough to hunt most of my adult life all over North America, and I must say that my two-week hunt in Alaska was second to none. What started out as a trip of a lifetime, I hope will end up as the first of many. The whole experience—the bush plane ride with Bobby Woods, the scenery, the camp

food, accommodations and camp life, (I especially enjoyed your two sons, Cody and Jared, which T.W. and I nicknamed the Wright Brothers because of their interest in airplanes) just came to a most memorable time. I also want to say that my taxidermist was very impressed with the condition of my capes.

Thanks again, Robert, for everything. I still get a chuckle when I think of the name tag that Barb put on my Eddie Bauer duffle bag. Remember, my trip will not be complete until you and your family come and stay with us in South Texas when you come to San Antonio for the sheep convention. Please use me for a reference anytime.

G.W. Arnold Boerne, Texas

Dear Bob,

I'm sending you some pictures of my hunt, I hope you enjoy them as much as I do. They are full of memories that I'll treasure the rest of my life. My experience far exceeded my expectations. Ron was an incredible guide, I enjoyed his company greatly. Camp was comfortable, the food was wonderful (thanks Barb), and your son Jared did a super job of taking care of all our other needs. Thanks for a great hunt.

Sincerely,

Dan Pearson
Colorado

Dear Bob, Barb, Cody and Jared,

It's hard to believe that my Alaskan adventure has come and gone and now it's almost year has gone by. I hope everyone enjoyed having me as a client as much as I enjoyed being one. I really feel that we made a special connection between all of us....

Your friend,

Paul (Stonestreet)
West Virginia
PS Please send several newsletters, I want to frame them.

Dear Bob,

I want to take this opportunity to thank everyone from Alaskan Mountain Safaris. My guide, Lewis worked very hard and as a result, I had an enjoyable fair chase hunt. I will never forget the day when we saw all "Grand Slam" animals (including gray wolf) and we ended the day by just sitting back and watching a beautiful sow grizzly and her white cub. A hunt that I will always remember was when Barb called my moose out of the timber and I was able to take the shot. Camp food was delicious and Jared's moose roast was excellent. His name is often mentioned when I tell my teenagers of al his hard work around camp.

Again, thanks for the hunt of a lifetime!

Sincerely, Mario Hernandez Colorado

Dear Bob:

We just wanted to thank you for making our first trip to Alaska a memorable one. Lon, Rita, Verna, and I had never been to Alaska and you and your crew made it a trip of a lifetime.

The transportation, accommodations, food and camaraderie were second to none. This does not even take into account the hunting enjoyment we had. We have hunted most of the western United States and found Alaska to be "Unique" like most of its individuals.

We did not necessarily come to fill every tag we bought but rather came to hunt hard, see game, and cover some country. All these goals were attained and then some. Lon's bear and my ram will be trophies we will proudly display for years to come.

We have sung your praises to everyone who will listen and would love to come back and visit you again soon.

All the best,

Bill O'Loughlin
Oregon

Bob, Barb & all

Bill and I have talked on the phone numerous times after coming home, and we can't stop agreeing on the fun we had, the animals we seen, experiences we shared but most of all, the new friendships we made.....Now that I am home I keep looking through my pictures remembering it was a great time, Bob. Your and your guides deserve the highest praises.

Bill and I were very happy with our trophies and there is no doubt in my mind we could have done better with different weather but that is all right. Hunters accept those challenges and deal with the outcome. We all know it is part of the game. We also hope that at no time we made you feel pressured to show us game constantly. Even with the bad weather we saw a tremendous amount of animals and some beautiful country off and on.

My wife had a great time with everything but the horse ride, but now she can even laugh about that where she tells stories to her friends. Rita and I often make the comment after eating supper "now if we only had a Bob story to listen to." We all loved those stories Bob, and everyone else too. I feel I still owe you for all you have done. ...

We are very impressed with the way you "take of the animals and their environment." You took me back to the way my Dad felt about animals and the land. He said you never really own anything, you just take care of it for the next person, and I can tell it's the same way you feel.

At the airport I wanted to tell you how grateful I was to you and your family, but I'm not very good at writing and even worse when I try to talk, so I just shook your hand, watched you walk down the hall, and left me wondering when will I see my new friends again?

We do want to come back to Alaska again but don't know when we'll be able to do that. We will give you a call one of these days to surprise you. Thanks again Bob, you and your family are welcome at our fire anytime.

Your friends,
Lon & Rita (Wyoming) Bill & Verna (Oregon)

Dear Bob, Barb, and family,

Thanks for the great hunt, great scenery, and great hospitality. Your staff are all top notch, everyone of them went out of their way to make it a enjoyable & memorable trip. Even though the weather was often less than favorable, they did what ever it took to make it a successful

hunt. I went away with not only a hunt of a lifetime, but also I'd made new friends for a lifetime.

Thanks again,

Dale Thornton,
Oregon

Dear Robert,

I haven't written before now because I have had a difficult time deciding what to do about my Alaskan exposure. The entire event was an out-of-culture experience for me and I haven't decided how I can get more of it.

We arrived back in Denver after the spring grizzly hunt in time for Geoffrey's high school graduation. The first thing he did was to go to the jeweler and have his grizzly claw mounted in a silver base to hang on a chain around his neck. This has kept him occupied many times telling the details of the hunt.

On our spring grizzly hunt, my son Geoffrey and I spent time together creating a memory that will last a lifetime. The thrill of the hunt, the excitement of the chase, and the rush of the conquest all combined to expand into a profound appreciation for Nature, like never before. Even afterwards during our few hours in Anchorage, we came into contact with customs, history and artifacts which were new to us. My wife especially appreciated the jewelry items made out of woolly mammoth tusk. How unusual! As for you, Jared, your wife Barbara and even Cody after my conversation with him, you made us feel very comfortable just as if we were family members. Thanks for giving us a hunting thrill of a lifetime and extending the hand of Christian fellowship.

Very truly yours,

Dan and Geoffrey Whittaker
Colorado

Dear Bob, Barb, Cody and Jared

After waiting 19 months and then having the 10-day hunt go by so fast seems like a dream. I came back with a lifetime of Alaskan memories and some new friends.

The plane ride into base camp until the plane ride out, was packed with exciting experiences that I relive over and over daily. If I'm not showing the pictures and talking about it I'm daydreaming about it.

Your friendship, food and accommodations were excellent. I've highly recommended you to all my friends that have been interested in an Alaskan hunt. Your knowledge of the country and animals was a learning experience for me.

I'm honored to have set camp records, so Bob tells me. From the dangerous climb and having my custom rifle misfire 7 out of 10 times, crossing raging rivers, working and walking hard for my 38 ½ inch Dall Sheep that we almost walked away from, seemed like just another day in the life of "Jeremiah Bob".

Bob and Barb I appreciate your hard efforts and concerns on going after the Caribou "twice" and trying to find a black bear...The Emerald Valley has such vast and beautiful sights. Glassing about the hills and never knowing what you'll see is just amazing. It makes coming back to Colorado and hunting dull and boring.

I'm looking forward to my Dall sheep and Caribou being up on the wall to admire and cherish for many years to come.

Thank you all so much for a very enjoyable Alaskan hunt.

Sincerely,
Rick Thomas
Loveland, Colorado

Dear Robert and Family,

I just wanted to write and thank you for a fantastic 14 day hunt of a lifetime. Your dedication to the hunt was greatly appreciated and the accommodations were second to none. Please thank my hard-working guide Ron for all his efforts which contributed to my successful hunts and also Don and Alice for the wonderful food and all-around hospitality.

The beauty of Emerald Valley will always be remembered with its golden eagles, Dall sheep, moose, caribou, grizzlies, and many species of small game. It was a real joy to live among them for the short time I was in Alaska.

I thank you for the outstanding and professional job exhibited in the caping of my Dall sheep, grizzly and caribou.

I would highly recommend your team to any future client and will not be back to Alaskan Mountain Safaris soon enough to get my moose. I thank you again for the memories that will truly last a lifetime.

Sincerely,
Craig Willkom
Grand Cayman

After my Dall sheep hunt in the Upper Kuskokwim during 1995, I told Bob Fithian that it was the best hunt of my long career. Now that I've completed a mountain goat hunt in the waning days of October 1998, I can say that he has shown me the ultimate in hunting. First it was the most physically challenging hunt of my life. Of course this is why I wanted to hunt goat in the first place. It is a very physical hunt because goats live in the inhospitable area above tree line. The stark, white beauty of their environment combined with the uncommon beauty of the animal in his winter coat makes Mountain Goat hunting the ultimate outdoors adventure. After an arduous day climbing Billy Goat Mountain we reached our floating cabin dead tired. Yet Bob found the energy to cook us a gourmet dinner. As with the seep hunt Bob left no detail to chance. We saw a lot of goats and we did a lot of real tough climbing. But everything was well planned and skillfully executed. Ken Vlasoff and his nephew Lewis were very competent guides. Ken's fishing boat was in great shape and was a comfortable way to hunt and glass the high peaks. While the Dall sheep hunt was truly outstanding the goat hunt was the ultimate hunting challenge. To Bob, Ken and Lewis I say thanks for the most challenging hunt of my career.

Best regards,

John Lowery

California

My Grandfather told me since I was 6, stories of how great Alaska is. So, for the last 32 years I have dreamed of the Alaskan Wilderness. It took me 15 years to get my ducks in a row but, I made it to Alaska! Thanks to Bob, Barb, Ron, Heath, & Jared I did not just see Alaska but, I got to experience the wonderful Alaskan wilderness as it truly is.

In 16 days with the Fithians I saw moose, caribou, Dall sheep, a black fox (painfully I must say), 2 wolverines in 1 week, grizzly bear, black bear, and some of the most beautiful country in the world. Not to mention I was fortunate enough to clean a grizzly bear and a black bear skull that Bob and Ron skillfully helped me harvest!!! I never dreamed of seeing all the animals I did. Let alone, having the opportunity to get an Alaskan black bear and Alaskan grizzly bear.

Thank you Fithians. Your kindness, knowledge, goodness, & sincerity made this "A Trip Of A Lifetime." Due to your gracious efforts my life will never be the same. While I will be in wild and wonderful West Virginia, a large part of me will be in God's wonderful creation "Alaska"!!! Fithians you helped make my Alaskan Wilderness Experience truly "A Dream Come True."

God bless you all,
Dave Shortridge
West Virginia

Bob & Barb

Thank you for another great hunt & even more important are the memories! You made a lot of dreams come true for Lon. It may have started from business but you & your family are considered close friends and dear to our hearts—for that I thank you.

Be Safe
Good Luck
Your Friend
Bill O'Loughlin

After a lifetime of hunting, this was the hunt of a lifetime. We really enjoyed your family and your sharing of Alaska!

Frank Schmidt

Cody, WY

I had an amazing time with you chaps. It couldn't have been any better mate. I gotta say, we really enjoyed our trip up there with you, Bobby. I fell in love with chasing mooses around. What a cool place and an excellent animal to hunt. You made the trip so worthwhile mate.

Cheers,
Davey Hughes
New Zealand

PAA 24

There is no question that development of the PGP will eliminate the future of my families long established professional guide business and the opportunity to continue to share this great place with sportsmen and woman from around the world. The whole PGP construction phase, right of way, gravel pits, infrastructure, pipeline crossings, new access, substantial continued maintenance all work to eliminate the cultural and traditional way of life shown in the above reflections. Please consider and encourage the UKR.

PAA 24

AIRCRAFT IMPACT

With over one million gallons of fuel, one hundred miles of pipe, all project personnel, project equipment, equipment fluids, maintenance supplies, camp development and maintenance support being provided by aircraft, this impact alone right on top of the critical habitat and against the mountains during the winter and early spring months will have a serious impact on wildlife during their most stressful period of their yearly life. This is just too big of a risk or forfeiture to take. The UKR eliminates this impact.

ALASKA DEPARTMENT OF FISH AND GAME

PUB 1

Established in 1959, within the Alaska Department of Fish and Game are 82 regional Advisory Committees which provide a local forum for the collection and expression of opinions and recommendations on matters related to the management of local fish and wildlife resources. These opinions and recommendations are then forwarded for consideration to Alaska's Boards of Game and Fish.

The McGrath Advisory Committee which has members from McGrath, Nikolai, Telida and Takotna provides this representation within this letter's area of concern, the PGP footprint.

There is no history of DCM reaching within this well-known and established process to respectfully discuss or communicate the potential impacts of the PGP.

Instead, the ADF&G AC process has been ignored by DCM and will in the future be subject to substantial challenges and changes resulting from the conflicts associated with wildlife conservation and hunting opportunity within the PGP mile points of 110 and 220.

WILD 1

There is a long and documented history within this Advisory Committee of wildlife conservation concerns relative to man's impact on the lands and resources located between the PGP miles of 110 and 220.

The bulk of these concerns have been relative to overhunting of wildlife near Farewell where there has long been large aircraft access. Many of the concerns having to be addressed have led to reduced hunting seasons and opportunity which has substantially affected the local subsistence and guided hunting opportunities.

The PGP as proposed will without any question increase hunting in this region and reduce the fragile harvestable surplus of wildlife.

The ensuing regulatory Board of Game and Federal Subsistence Board actions will in fact, by law, protect wildlife from overhunting by reducing resident hunter opportunity, elimination of nonresident hunter opportunity, and elimination of the professional guide industry to provide for subsistence needs and even then, local subsistence users will have reduced opportunity to harvest wildlife.

The region to the West of Rainy Pass within the proposed pipeline footprint is classified by the Alaska Department of Fish and Game (ADF&G) as Game Management Unit (GMU) 19. There are four subunits within GMU 19 which are defined as 19 A, B, C and D. According to long time

WILD 1

ADF&G development and management goals, this GMU can be conveniently divided into two regions that have distinct differences in habitat, user access, and hunting practices.

a. Units 19A and 19D are generally lower elevation areas accessible by boat. Hunters within 19A and D generally have been local residents living and hunting for food.
b. Units 19B and 19C are generally higher elevation areas where access is largely restricted to aircraft. Few people live in these areas, and those traveling there to hunt have been mainly hunting for quality of wilderness experience, trophy quality and acquisition of meat factors.

The SOA needs to acknowledge this past management history and work to protect those guidelines. Especially, when viable and non-substantial impacting options exist.

GMU 19C has historically been managed by ADF&G primarily for non-subsistence and nonlocal hunters. As such, this region has provided for the development of many historical professional guide businesses. Combining the incredible quality of the wilderness and the management for trophy quality game in this region has provided a direct link to Alaska's Constitutional mandate of Maximum Benefit for harvest of Replenishable Natural Resources.

The PGP as proposed eliminates this way of life and counters the constitutional mandates which they provide for from this region. The PGP should not impact this sustainable future in any way.

The SOA needs to help protect this history and sustainable future.

SOA should not allow for the forfeiture of one industry for another, especially when viable sustainable opportunity options to preserve both exist.

FUTURE ACCESS

PAA 24

DCM has gone full circle on this concern. At first, I was told for two years by DCM that the SOA was requesting DCM to leave new airfield developments and access infrastructure in place after pipeline construction completion.

Now, DCM maintains that access along the proposed PGP right of way will be restricted. We do not know what to believe other than we know that the conservation based way of life that we have worked hard to achieve will be eliminated with the PGP.

It is wise for everyone to envision and understand access impacts along the PGP right of way between MP 150 and 220. Recreational type all-terrain vehicles thirty years ago were not close to

PAA 24

the able vehicles of today. With a proposed PGP life of over thirty years, we have no idea what ATV's will be capable of twenty or thirty years down the trail but we can count on them being more able.

According to the Alaska Wildlife Troopers who have a seasonal facility at Farewell, there are over 100 ATV's stored at this location by hunters. The PGP as proposed will provide a highway of impact via the upon the delicate existing conservation base of wildlife to the negative, resulting in lost opportunity for all hunters. The UKR directs this impact away from the more delicate and critical upland habitats and helps protect wildlife.

OTHER INDUSTRY RESPECT

SER 29

There has been little consideration provided by DCM for the true impact which will occur to the long term businesses and their employees and families which livelihoods are dependent on minimal impact on the wildlife, wildlands, viewsheds and quality of wilderness experience of this area. The SOA needs to define and realize what the long term loss of these businesses will mean to these peoples and the local economies.

As a prime example: The late Philip Esai of Nikolai was one of the very first Native Alaskan's to achieve an Alaska Registered Professional Guide license. Working as a young man for several professional guides within the heart of the country directly impacted by the PGP between mile posts 110 and 220 for many years, he learned about the industry. He acquired his professional guide license and began his own service in 1973 within the region to be most heavily impacted by the PGP (Windy Fork River and Khuchaynik Creek).

Philip passed away in the spring of 2014 but his professional guiding legacy carries on with his son, his son-in law and his grandson. Their historic camp "Silvertip" is located within ½ mile of the PGP.

Philip has been named the 2015 Iditarod Honorary Musher and his wife Dora will be wearing bib no. 1 out of the shoot at the start of the 2015 Iditarod this year.

At a 2013 DCM public meeting held in Nikolai, Philips grandson Andrew received his Class A Assistant Guide License in the mail the same day the DCM PGP public meeting was held. It was a beaming and proud young man who brought the new license to show me at the DCM meeting. The PGM will in fact eliminate his future in that region as a guide.

SER 29

How sad it is that the PGP will eliminate the passing on of the way of life that Philip cherished so much. This type of thing should not happen, especially when viable options exist to protect these cultures and ways of life.

What this history shows is an unwillingness of DCM to respect other ways of life that will be impacted by the proposed PGP project.

Once again, this brings forward the importance of the integrity of the SOA to recognize and help mediate conflicts for the best interest of the whole.

There is no question that I am a stakeholder within this concern. The customary and traditional way of life that three generations of my family have shared as professional guides with people from all over the world will be absolutely compromised by the PGP. This way of life has required a deeply seated conservation basis for viability and sustainability which will be lost if the PGP plan is developed as proposed.

SER 29

Approximately half of our client's historical harvest of moose, grizzly and black bear has occurred on one side or the other of the PGP. As well, approximately thirty percent of our client's harvest of caribou has occurred to the west of the PGP while the remaining seventy percent has occurred to the east.

There are no outstanding populations of wildlife in this region and annual harvestable surpluses hang within a delicate balance of conservation and prudent stewardship.

Within our professional guide service, we do not sell or promote the killing of wildlife. We promote and sell "quality wilderness hunting experiences".

The integrity of what we offer is broken by the PGP.

The long history and the future sustainability of jobs, support services, affiliated local economy, sharing of food to the local communities, benefit to wildlife conservation and its funding will also be affected in a negative way. The SOA must work to truly protect these long term and sustainable businesses and the people who have had the entrepreneurship spirit to develop and manage them.

WILD 1

I was first made aware of the proposed pipeline project by a phone call from a DCM contractor in late February 2010. The call was made asking about submitting a hurried bid to provide camp support for a "confidential" project that would have three helicopters and twenty plus persons

WILD 1

doing reconnaissance from May through September of that year right across the lands we have long conducted our guiding service within.

The call was a result of conflict DCM had with another local lodge at Farewell Lake, and they needed last minute support for the project. We immediately made the contractor aware that we had clients booked as usual for our fall hunts and that we would look at what we could do to balance this thing out and work with them to get the job done.

We then were to find out about the proposed pipeline and route and the base line data that DCM was in a hurry to develop.

DCM chose a different camp for their project sighting concerns with aircraft safety and fuel storage with ours. This was fine with us but the location of the chosen provider required a one hundred mile round trip addition to each of many daily helicopter flights to and from the work location. Substantial fixed wing support would also have to occur to support the chosen camp. Most of these flights would be right over the important wildlife and wildlife habitats that we are dependent upon and have guided within for many years. We had to request and fight for consideration of not just the impact on the proposed pipeline right of way but also for all of the flight traffic which was to occur right over important habitats and the wildlife within them we are dependent upon.

After some struggle, we were able to achieve an assertion that DCM would complete the work in the sensitive areas we guide within during the summer months and would incorporate flight patterns to minimize impact on wildlife.

Respectfully, this effort by DCM has been a failure.

PAA 24

Struggle and disruption occurred each year through 2012 with many instances of conflict, primarily with aircraft associated with the PGP. We have had to make many calls to DCM, it's contractors, the Alaska Miners Association, DNR, and others asking that someone help us with the negative impacts on our guided hunt activities by DCM affiliated helicopters.

DCM informed me that they were spending millions of dollars securing the pipeline route and if we felt threatened just to sue them.

DCM will provide a different story but we have numerous documented instances of this type of conflict.

PAA 24

Even after numerous and contentious communications within previous years, in 2012 for several days right in the heart of moose season we had low elevation DCM affiliated helicopter activity right on top of us acutely disrupting the hunt. Once again, we had to make all of the calls asking for help and consideration.

What this history shows, is a underlying lack of understanding and true respect for how the DCM project will impact the lands, waters wildlife, wildland experience, and viewshed resources and those of us who depend upon conservation of and prudent stewardship of them. Therefore, the SOA has to develop mitigation to prohibit this type of behavior respectful of the whole.

There should not have to be a fight between miners or guides or local residents or other ways of life. There should be a respectful turning together with a sincere effort to communicate-collaborate and cooperate for the best interest of Alaska as a whole.

Not an after the fact series of public meetings that do little more than show writing within an application process that there was outreach.

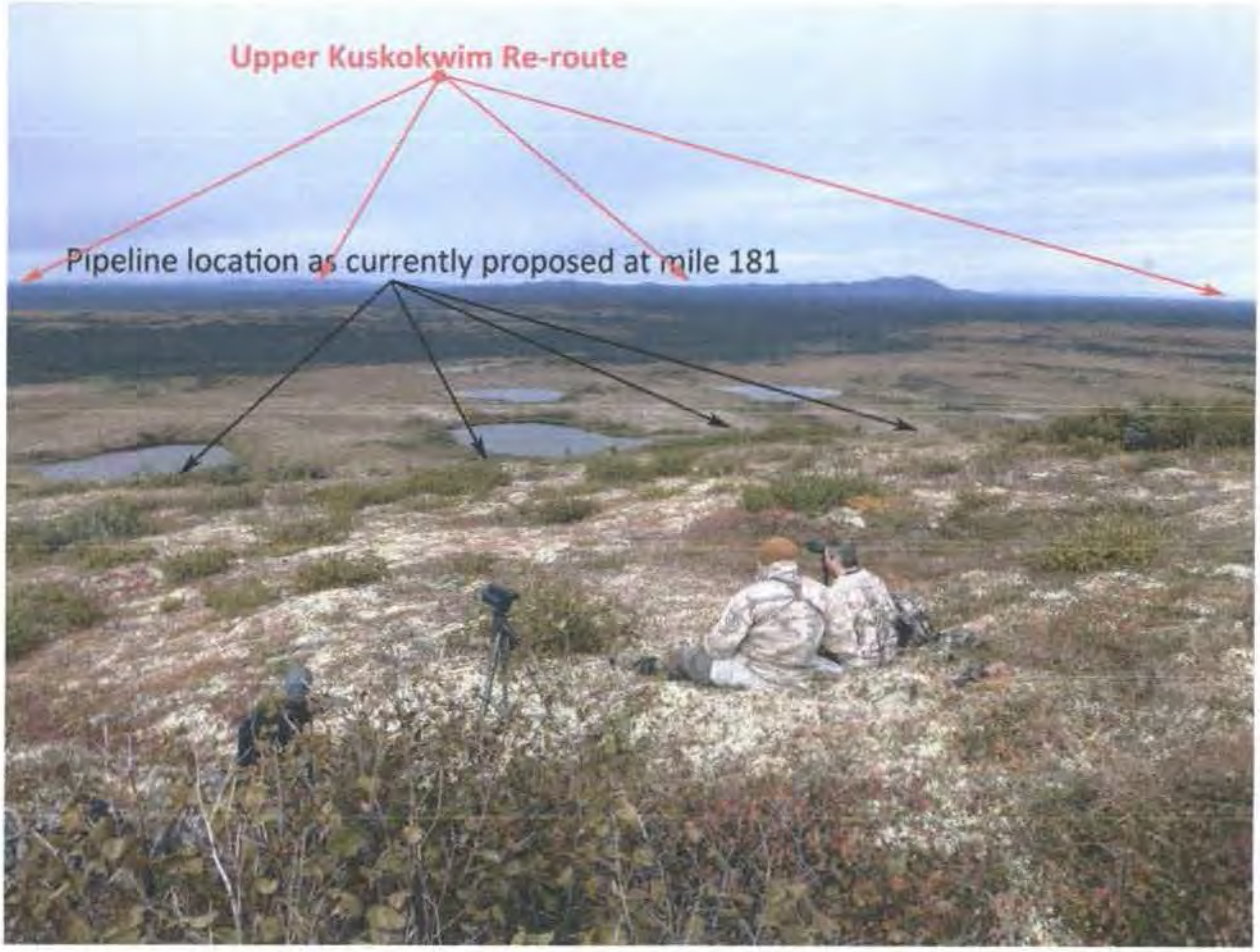
The EIS should consider the long term best interest of the whole for all parties. Alaska is a state where conservation and development have to work together to provide a viable future for both. DCM has broken this respectful consideration within the Upper Kuskokwim region.

Please do not certify the existing PGP footprint between MP 150 and 220 but rather, require the development of the UKR to help provide for the best interest of the whole.

SUMMARY COMPARISON OF THE DONLIN CREEK Mine (DCM) GAS PIPELINE AS CURRENTLY PROPOSED (PGP) AND THE PROPOSED ALTERNATIVE UPPER KUSKOKWIM REROUTE (UKR)

PAA 24

There will be a cry from DCM that the additional thirty miles of pipeline required by the UKR will make the DCM project cost prohibitive. Please know that a substantial amount of their mineral reserve base has been defined within their last several years of exploration and there is little doubt that the reserve base will be increased, probably substantially with additional exploration. DCM should be working to provide a respectful conservation basis for the whole of their great project, which includes respecting the people, their customary and traditional ways of life and the natural resources they are dependent upon.



PAA 24

1. As currently proposed the PGP footprint between MP 150 and 220 lays along the flanks of the Western Alaska Range and negatively impacts many important cultural, ecological, environmental and social related concerns.
    a. The UKR would extend the PGP thirty miles to the west and then turn to the south to tie in to the current PGP footprint at approximately MP 220. When constructed in keeping with the following considerations, the UKR effectively and substantially mitigates many of the cultural, ecological, environmental and social related concerns defined within this comment and recommendation document.

SVE 5

2. As currently proposed, the PGP will take away viability of continuation of the customary and traditional way of life that the Upper Kuskokwim people and communities have depended upon for many generations by negatively affecting

SVE 5

wildlife populations and ecosystems within the important transitional habitats that lay along the Front Range between MP 150 and 220.

The only benefit DCM maintains that these people and communities will have as currently proposed by the PGP is the opportunity for jobs.

In short, a trade of an important part of the historical way of life for possible jobs affiliated with a mine far away from where they live and a pipeline which will destroy viability of the way of life they have had for centuries.

It is important to look carefully at this equation.

DCM has done a great job financially mitigating potential issues with Iditarod, Iron Dog, Calista Corp., communities and others. Promises of substantial continuation of funding, training, education, scholarships, grants, local jobs, tremendous royalties and rents, new and cheaper source of energy, etc. etc. etc. are on the table and are being utilized.

However, little consideration or respect has been provided to the Upper Kuskokwim People or Communities or the other long established ways of life found in that region that are jeopardized by the PGP.

DCM promises of jobs and job training for the Upper Kuskokwim residents have been found to be underwritten with current requirements to be Calista Corp. affiliates which the vast majority of the people in the Upper Kuskokwim are not.

PAA 24

3. The UKR would extend the PGP to within approximately twelve miles of Nikolai and transect the Upper Kuskokwim Valley proper and shorten the distance between McGrath and the PGP by approximately 22 miles. There are already winter trails from both of these communities to the UKR footprint.
    a. This change would provide for the potential viability of an important alternative energy that these two communities will probably never have the opportunity for otherwise. This is a very important consideration for the SOA and everyone involved.
4. By respectfully utilizing the UKR, DCM could utilize and enhance existing infrastructure, access and services within Nikolai and McGrath while at the same time reducing new infrastructure requirement's planned for Farewell and Big River.

PAA 24

5. By working with the communities of the Upper Kuskokwim with the UKR, DCM should be able to help develop a viable source of oversight for maintenance and access concerns relative to the pipeline which would help mitigate both concerns.
6. There are numerous other benefits by utilizing the UKR but most importantly this collaborative approach starts to provide the level of respect that the Upper Kuskokwim Communities and businesses deserve.

Respectfully and Sincerely Submitted by,

Robert Fithian

Robert Fithian

Copies also sent to:

Bill Walker Governor of Alaska
Senator Lisa Murkowski
Senator Dan Sullivan
Congressman Don Young
DNR Commissioner Mark Meyers
BLM Alaska Director Bud Cribley
Alaska Miners Association
Alaska Professional Hunters Association

Alaskan Mountain Safaris
Robert R. Fithian
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PUB 1

March 20, 2010

Mr. Rick Van Nieuwenhuyse
President and CEO
Nova Gold Resources
2300-200 Granville Street
Vancouver BC V6C 1S4, Canada

Mr. Michael J. Brown
Vice President of Public Affairs
Barrick Gold of North America Inc.
101 Constitution Avenue, #675-East
Washington DC 20001

Dear Messer's. Van Nieuwenhuyse and Brown,

Please receive this letter as a formal complaint and request for consideration and respect regarding my family's professional guide service business (AMS) and the development of the natural gas line pipeline your companies are proposing to install from Cook Inlet region of Alaska to the Donlin Creek Mine (DCM) in the Central Kuskokwim River region. The proposed footprint of the gas line lies right across the heart of important geographical wildlife habitat that has supported my family run business for many years. (Attachment 1) This region is a premier and unparalleled worldwide and uniquely diversified habitat for wildlife that has supported professional guided hunting activity for the past sixty plus years.

The professional guide industry is dependant uppon conservation of wildlife resources and sound industry stewardship. If provided with such, will still be in existance for many years after the mineral resources at Donlin Creek have been exhausted and the impacted lands reclaimed. It is important for us as industry providers to work together to the best extent possible in efforts to sustain or enhance the conservation aspects of the regions we operate in and the benefits we provide to the public within our respectful industries.

Please see the included map (Attachment 2) showing my family's lodge location and a picture of the area from one of my family's businesses website. (Attachment 3) The proposed pipeline development has already, and will continue to significantly negatively affect our long time established business. Nearly seventy percent of our now twenty-nine year harvest history of

moose, caribou, grizzly and black bear in this region has come from a proximity within three miles either side of the proposed pipeline footprint.

Please know that I am urging you to turn together in a better and more respectful manner to address our herein related concerns in a way that will allow us to continue to conduct my family's and others people's way of life in this region without undue harm, but also be able to show that we can work together to provide a model of how to do things right for everyone's best interest. I will await your written response to these concerns and hope to have them very soon before taking any other path to address my family's and numerous other peoples best interest and the best interest of the wildlife, wildland and waters affected in this matter.

During February of this year I was contacted by a contract service provider, Recon, LLC (RECON) working for DCM who briefly described the proposed project and asked about camp and lodge support facilities in this region which could support a survey and development crew utilizing helicopter support this summer and fall. It was my understanding that a previously planned camp support from the Farewell Lake area had not developed and DCM was now in a hurry to find a support camp for this year's planned effort in the region.

This was the first we had heard about the proposed project and I clearly stated my concerns about having clients from around the world booked for this spring and fall hunting seasons, pointing out that the proposed footprint of the gasline runs right through the area we have utilized for many years. I also articulated that we would "have to turn together" to effectively address this development for everyone's best interest. Also, in an effort to help control the significant impact on my family's business and the wildlife and wildlands in the region I would be willing to support this year's program with camp and lodge support.

I also stated that AMS had historically provided this same type of service for the same reasons several times in previous years from our base camp and lodge located on the Middle Fork River. RECON subsequently sent an invitation to bid on this service and my family met to discuss this new development and our current bookings, developed our bid and returned it within three days time as requested. Please see Attachments 4 and 5 and note the buildup of the program during August and September which represents our fall hunting seasons.

After repeated messages left to, and with, RECON personnel, approximately one week later we did receive a phone call from Steve Rowland of RECON informing us that they had awarded the camp support contract to a different lodge and that we had not prevailed because of non-authorized storage of fuel that the project would require. The Mr. Rowland also stated that he and I both knew that permitting the fuel storage would pose no significant additional permitting burden and that it could have been accomplished easily by either party. No other reasoning was provided. Please see the highlighted portion of attachment number 5.

We were now devastated with the concept that, not only would we have a significant part of the region we depend on for our business impacted by the actual field work of the program this year but that the flyway to and from the lodge selected was right over the remaining habitats that we would have left to operate within. The lodge chosen also represented at least a fifty mile

additional distance each flight from the gasline footprint which would substantially increase the overall impact on the wildlife and wildlands in the immediate region.

As well, when using the planned human/helicopter/fuel and standard cost, the other camp location would add at the very minimum an additional $100,000.00 more to facilitate the program this year than if they had chosen to utilize the AMS camp location.

There was no effort or communication from DCM or RECON to discuss ways that AMS could help address any deficiencies in our bid to help make it work better for them and for us. I immediately and specifically asked what we did wrong within the bid and what we could do in the future to work together better and have received no consideration or direct response in these requests.

Please note that AMS was not at the time and is not currently seeking to provide DCM services for any other reason than to try and offset and somewhat control the negative impacts on the wildlife and wildlands in the region and our way of life by the proposed project. Additionally, if and when the program moves forward we wanted to be in a position to both understand and address how and if we should book future hunts or help contibute to the success of both parties best interest.

Most of our hunts are booked two to four years in advance and at this point in time we have no knowledge of what gasline developments will be taking place for sure this year, next year or in future years. We do know what we have had to go through during the past month and we are not happy about the burden it has become or the disrespect for our business and way of life. This represents a serious impairment to our lives and the well being of our long established business. As business owners that offer and provide quality wilderness oriented hunting experiences we cannot and will not jeopardize our integrity, Alaska's integrity, or our clients' expectations for their most often, once in a lifetime hunting experiences.

During numerous verbal communications with RECON and DCM regarding our now greater concerns we were told that AMS was not permitted to facilitate the services we were offering to provide. (Attachment 6) In additional verbal communications, we were told DCM has certain company standards for their employees that AMS could not provide and that our airfield may pose a problem for the program. Please note that although we intentionally maintain our camp and lodge with the Alaskan aesthetics of days gone by, we have hosted numerous mineral exploration programs including substantial drilling programs, many years of diversified hunting clientele with discreet tastes as well as some of the wealthiest people in the world without one complaint about our food and/or camp accommodations in nearly thirty years. (Attachment 7) In fact, we have one of the highest if not the highest rate of return clientele within the professional guide industry in Alaska. In regard to the airfield, initial communications with RECON indicated the DCM intended to utilize single engine turbine DeHaviland Otter aircraft for project support from companies that AMS has long established relationships with. If there was a need for any airfield improvments to help with safety concerns they could have been easily addressed.

DCM has now *verbally* offered to establish certain flyways that may reduce impact on the wildlife in the region but clearly stated in an AMS requested meeting arbitrated by the Alaska

Miners Association (500 mile drive on 3-18-10) that they may well be conducting helicopter supported field work during the hunting season in the immediate area that AMS depends upon for our fall hunts and that we should just be aware of it and deal with it.

Communications has deteriorated from the AMS perspective directly related to a lack of respect and an unwillingness to understand important aspects of our business and way of life. As well, comments I have heard of being used against my family and I in the Alaska State Capital by DCM representatives will have to end or the Donlin Creek Mine project, my family's business, and Alaska will all loose credibility rapidly. I have had several respected Alaskans who are actively engaged in mining, oil, or gas advocacy recommend that I address this issue through injunction relief as a direct result of communications they have had with DCM representatives in Juneau about this particular issue.

DCM is now actively trying to contact other professional guides in the region to make them aware of the proposed project and is holding a public meeting in the village of Nikolai, Alaska to bring the project forward. It is my firm and sincere believe that if the Farewell Lake Lodge camp had been secured for this year's work program as hoped and RECON had not contacted me about other camp opportunities, that no guiding operation in this region or in the village of Nikolai would have even been aware of this program until they found their guiding or hunting season impacted this spring or fall. This assumption by AMS and other guiding operations in the area is in direct relation to DCM comments long after I have brought concerns and situations like these to their attention. DCM receives them and during the next round of communication is sure to tell me how they are making these outreach efforts as a part of the planned program.

Social license to operate within any rural region is easliy defined by having a sincere respect for the people, their way of life, and the fish, wildlife, land and water resources in the region you intend to operate within. The most effective way to accomplish this license, as you well know in reflection to the Donlin Creek Project proper, is to turn together with those that will be most affected by your activities. To turn away from them and say, *"we are going to be there, just prepare for it"* as has happened with this issue of conern, trends your project down the challenging path of fighting to preserve social acceptance.

When trying to explain to DCM the existing low density equilibrium's that the prey species of wildlife are currently at in this region and how their conservation is very important at this point in time, and asking what measures will be taken by DCM to minimize additional hunting opportunity by the proposed project, I was bluntly told that DCM is not in the wildlife management business.

For many years and in many public forums, I have, as a professional guide industry advocate supported the Donlin Creek Mine project and the manner in which it has been established to date by working with the local communities and social structures. The experience my family and I have met with on this proposed gasline aspect of the project does not lead us down that path of support.

As you may or may not be aware, my family and I have long been a part of the mining, forestry and professional guiding industries in Alaska. Although personally never having felt deserving

or in any way sought the honor of it, I was nominated and elected as statewide president of the Alaska Miners Association some years ago. Currently, I am serving my tenth term as Executive Director of the Alaska Professional Hunters Association. I have always promoted respect and the best interest of the whole for conservation based development of these and other important Alaska industries. (Attachment 8) As well, my family has developed a respected relationship with the people and the communities within the Upper Kuskokwim region. (Attachment 9)

Please also know that over the years I have been involved with many industry developments within rural Alaska and have subsequently, gained some limited knowledge of such. There are numerous aspects of the proposed pipeline that my knowledge and assistance may be beneficial to everyone's best interest. Once again, I am offering to turn together out of respect for the whole. As well, there are certain aspects of development being promoted by DCM regarding this gasline which I believe are incorrect in relation to actual accomplishment. These concerns will be brought forward as the public process of the project continues.

In closing, your response to this letter is very important to my family and to DCM. We hope that your response will show a sincerness to turn together and allow for both parties best interest's to be respected.

Respectfully,

Robert Fithian

Cc:
Sean Parnell; Governor, State of Alaska
Tom Lonnie; Director, Alaska Bureau of Land Management
Tom Irwin; Commissioner of Natural Resources, State of Alaska
Pat Pourchot; Special Assistant to the Secretary of Interior for Alaska
Dick Lefebvre; Deputy Commissioner of Natural Resources, State of Alaska
Denby Lloyd; Commissioner of Fish and Game, State of Alaska
Steve Borell; Executive Director, Alaska Miners Association
Joe Klutsch; President, Alaska Professional Hunters Association, Inc.
Paul Johnson; Chairman, Big Game Commercial Services Board, State of Alaska

Denali National Park and Preserve

National Park Service
U.S. Department of the Interior

DATA 1

Dichinanek' Hwt'ana

A History of the People of the Upper Kuskokwim who live in Nikolai and Telida

Raymond L. Collins

Donalene "Donne" is an an accomplished Athabaskan Indian woman from McGrath, Alaska, where she spent most of her life raising two sons and living on her late mother's native allotment five miles from the small town of McGrath. Both of her sons work on the North Slope and she is very proud of Einar and Frank Fleagle. On Harris Hill she runs her own generator. She has a home, a guest cabin, a saw mill and several buildings on the property. Her late parents log home is also there. Her parents and other family members are buried on Harris Hill. Donne has an identical twin sister who works as a Tribal Administrator and a younger brother works for Doyon Drilling. She has 4 grandchildren ranging from 9 -2 years old. Donne is a college graduate (with honors), a WK Kellogg International Leadership Fellow and has several certifications. She has served on local, state and national boards and continues to do so. Some former boards are ANVCA, RurALCAP, AVI, TCC, and Alyeska. She currently sits on the NICWA (National Indian Child Welfare Association) board. She spent one legislative session working for Senator Bettye Davis (D) Anchorage. She has worked as a Tribal Administrator, a Health Planner, a Health Director, Grants Writer, Environmental Worker, Environmental Program Director, Quality Control/Quality Assurance Person, Laborer/Foreman/Project Manager/Superintendent on several construction and environmental remediation jobs for several different companies and organizations, bank teller, administrative assistant, etc. She was the first President/CEO of her local ANC & the 2nd woman ever to be elected as Chair of RurALCAP in their 40+ years. She has extensive experience in public relations, legislative processes, and she has worked in various fire support capacities for the State of Alaska, DNR, DOF. Donne has worked as a consultant and owns her own business, Broken Arrow, which provides consultation services as well as a number of other services. She enjoys hobbies that are art oriented. Donne has traveled internationally to over 15 countries. She speaks Spanish and is a perfectionist and over achiever. She is known for her honesty, integrity and work ethics. She is a self-starter, accountable, highly motivated, and a visionary. Her motto is "I'll rest when I am dead." She is a believer in Jesus Christ and has had the good fortune to accumulate many friends as well as enjoy many opportunities and experiences. She loves the excitement of opportunities to work with rural Alaskans and that's where her heart remains. Although Donne now lives in urban Alaska she makes time to return to her home country at least twice a year to renew her spirit and ground her to that which her ancestors have provided as means of balance and harmony.

Denali National Park and Preserve

National Park Service
U.S. Department of the Interior

Dichinanek' Hwt'ana

A History of the People of the Upper Kuskokwim who live in Nikolai and Telida

Raymond L. Collins

DICHINANEK' HWT'ANA:

A HISTORY OF
THE PEOPLE OF THE UPPER KUSKOKWIM
WHO LIVE IN
NIKOLAI AND TELIDA, ALASKA

BY
RAYMOND L. COLLINS,
Edited by
Sally Jo Collins
MCGRATH, ALASKA
SEPTEMBER 2000
Revised January 2004

COMMON HERITAGE

Names

It is appropriate to begin with a discussion of the names that have been applied to the people of the Upper Kuskokwim area. A search of existing literature reveals a number of different names. Among them are McGrath Ingalik, Kolchan, Goltsan, and Upper Kuskokwim Athabaskan. There is also some confusion in the literature as to whether the residents constitute one group, more than one group, or an amalgamation of groups. What then is the historical origin of the Upper Kuskokwim Athabaskans whose descendants now live in Nikolai and Telida?

In 1960 the anthropologist Edward Hosley came to study the people of the area. He concluded, after gathering family histories, that the people were:

> "--an amalgamation of at least two earlier societies and show strongest connections with the Ingalik of the lower Yukon" (Hosley 1960:63).

He referred to them at the time as the McGrath Ingalik.

In the Introduction of Native People in the National Park Service publication Land Use in Northern Addition to Denali National Park and Preserve: An Historical Perspective a note of caution is made:

> "Various linguistic and cultural groups make up the Native populations living on the north flank of Denali. The historical roots of these groups point to in-migration, out-migration, intermarriage, dispersions, and consolidation. They are not one people; they are many (NPS AR-9, 1984:8).

It is important not to conclude from these statements that there is a lack of cohesion and historical continuity among the residents of Nikolai and Telida. Note that by 1981, with additional information, Hosley published the article Kolchan: Delineation of a New Northern Athapaskan Group (Arctic 21(1):6-11). In it he states:

> "The Kolchan are the Athapaskan Indians of the upper Kuskokwim River. They speak a distinct Athapaskan language more closely related to Tanana

than to Ingalik, spoken on the middle Kuskokwim. They are not so much a "tribe" as a collection of autonomous contiguous bands having cultural and linguistic similarities" (Hosley 1981:618).

We can also add that they have numerous kinship ties.

It is the language that is the deciding factor. Language is one of the key features that has been used to identify Athabaskan peoples. A map produced in 1984 by Dr. Michael Krauss, of the Alaska Native Language Center at the University of Alaska-Fairbanks, lists Upper Kuskokwim as one of the 11 Athabaskan languages that have been identified in Alaska. While these language areas do not denote tribal or political boundaries in all cases, they do reflect a degree of geographical isolation over time that allows distinct dialects to develop. These dialects developed differently enough from neighboring dialects to eventually become unique languages.

In looking at current residents of Nikolai and Telida, one has to go back only one, or at most two, generations to find someone who came from outside the area and was raised speaking a different language. The people of the area could have told us all along that their language is different from that of all their neighbors. However, in the past, they usually grew up being able to understand the Athabaskan language spoken by their closest neighbors. When someone moved into another language area, he eventually adopted the local language and his children grew up speaking it. It was not unusual to be bi-lingual or even tri-lingual. Some residents of the Upper Kuskokwim could speak or understand Koyukon, Holikachuk, Tanaina, or Tanana (all Athabaskan languages) and Yup'ik (Eskimo). When the Russians arrived they began learning the Russian language and when the Americans arrived, they added the English language as well. But all those who made this area their home adopted the Upper Kuskokwim language as their primary language.

The presence of the Upper Kuskokwim Athabaskan language is proof that a distinct group of Athabaskans has been living in the Upper Kuskokwim River basin for a long period of time. It takes time and social or geographical isolation for new languages to develop. In some ways the Upper Kuskokwim language is very conservative and has retained some of the characteristics of the ancestral Proto-Athabaskan language. One such characteristic is the retention of an almost full array of consonants at the ends of words. In many of the Athabaskan languages the endings of words have been simplified so that only a few

consonants, out of many possibilities, are utilized in the end position. This feature, and others, show that the language developed in place over time and is not an amalgamation of other Athabaskan languages but a distinct language.
Even though there has been a continual movement of people in and out of the area, and the bands consolidated into the communities of Nikolai and Telida in more recent times, their unique language marks them as a distinct group of people and ties them to the area in which they live.

As to what name should be assigned to this group, they refer to themselves simply as *Dina'ena* (the people). But they also recognize geographic distinctions. The broadest of these is *Dichinanek' Hwt'ana* (Timber River people). Their neighbors also knew them by this name. In Tanaina they were *Kenaniq' ht'an* while the Koyukon people to the north referred to them as *Dikinanek Hut'ana.* The English translation would be "Upper Kuskokwim people".

The Russians first learned about the people of the Upper Kuskokwim from other Athabaskans who called them *Goltsan,* and adopted this name, but as Zagoskin noted in his journal:

> "This is a name applied to all the tribes of the interior by those living along the coast. Those we saw called themselves by the rivers which in a sense constitute their patrimony" (Zagoskin 1967:243).

The term *Goltsan* is probably best translated as "strangers". The Tanaina sometimes used this term to refer to their neighbors, pronouncing it *Gheltsana.* This is the term that Edward Hosley chose in 1981, spelling it *Kolchan.* It is now used in some publications by other anthropologists. In 1965, when Ray and Sally Jo Collins published their first material on this language, they chose to use the geographical term "Upper Kuskokwim Athabaskan". In retrospect, they might also have chosen *Dichinanek' Hwt'ana,* the Athabaskan name, instead of its translation.

Historically there was a clan system present in the Upper Kuskokwim which placed people in groups. Everyone in the same clan was considered to be related and could not marry another member of that clan. An individual belonged to his mother's clan while his father would belong to a different clan.

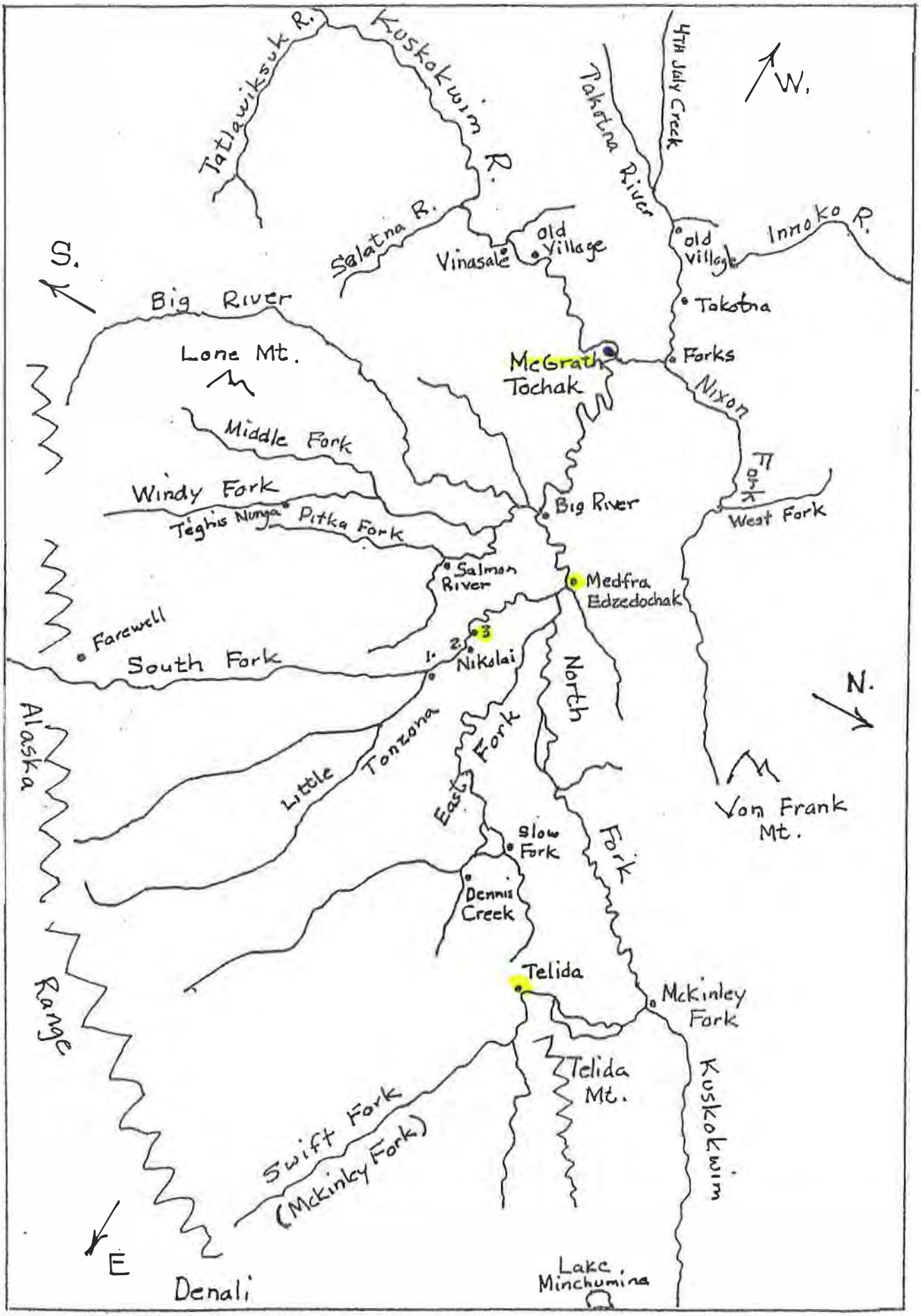
In the late 1960's Wassily Petruska and Carl Seseui identified the following clans:

Midzishtihwt'ana	Caribou people
Noltsena	Middle people
Ne≈chots'ina	(meaning not known)
Tonedrghelts'elinh	Mid-river people (?)
Dichalayu	Fish-tail people (thought to be a Yukon clan)

When people traveled in the Interior where other Athabaskans also used the clan system, they could expect that anyone of the same clan delineation would treat them as sister or brother. This was of great importance in the past when people traveled far from home to trade or to seek a wife.

In attempting to explain clans, Carl Seseui said they were "all the same Democrats and Republicans." He may have been inferring that members of the same clan were like-minded people who stuck together and treated fellow clansmen kindly. In times of warfare one could rely on clan members to give support just as family would.

While elders in the 1960's had some knowledge of the clan system, most young people today are not aware of their clan affiliation. They would have to consult with elders to try to determine the clan affiliation of their mothers or grandmothers to identify their own clan status.


Tatlawiksuk R.
Kuskokwim R.
Takotna River
4TH July Creek
W.
Salatna R.
Vinasale
old Village
old Village
Innoko R.
S.
Big River
Takotna
Lone Mt.
McGrath
Tochak
Forks
Nixon
Middle Fork
Windy Fork
Teghis Nunga
Pitka Fork
Big River
West Fork
Salmon River
Medfra
Edzedochak
Farewell
South Fork
Nikolai
N.
North Fork
Alaska Range
Little Tonzona
East Fork
Slow Fork
Dennis Creek
Telida
McKinley Fork
Telida Mt.
Kuskokwim
Swift Fork
(McKinley Fork)
E
Denali
Lake Minchumina
Von Frank Mt.

Pattern of Life

The people of the Upper Kuskokwim area developed a pattern of life that was determined to a large extent by their environment. As with other Athabaskans who reside near the head of a river system surrounded by mountains, they share a number of environmental constraints. The climate is that of the Alaskan Interior with cold winters and relatively warm summers. The boreal forest provides a number of micro-environments. Black spruce and moss lie over areas of frozen ground that requires a hot fire to clear and thaw, thus allowing willow and birch to move in. The thawed ground along the rivers is covered with stands of white spruce and birch on the higher cut bank side of the river, with thick stands of willow and alder on the sandbars. Cottonwood are found along the river and aspen on the higher ground. Cross-country travel is difficult in much of the lowland area because of numerous swamps and boggy areas drained by small streams that flow into the major rivers. The rivers are the main highways for travel both in summer and winter.

Food resources vary in type, quantity and habitat. Three species of salmon ascend the Kuskokwim streams: chinook (king), chum (dog), and coho (silver). Whereas hundreds of thousands, and even millions, of salmon enter the Kuskokwim River, by the time they reach the headwaters only a few thousand, or even a few hundred, are left to spawn in any given stream. There are no large lakes at the head of streams that the sockeye (red salmon), require for spawning. Whitefish, northern pike, Arctic grayling, Inconnu (sheefish), suckers, lush and a few resident Dolly Varden trout are present but these are also widely dispersed and not present in every stream.

Until the late 1800's and early 1900's moose were absent in most of the area. The large animals most harvested were Dall sheep, caribou, black bear and grizzly bear. Dall sheep habitat is limited to the Alaska Range. Caribou also spend much of the year in the mountains, moving down to the lowlands primarily during the winter.

Small game species such as rabbits, grouse and ptarmigan are widely dispersed but their populations are cyclic and in some years they are very scarce.

Ducks and geese pass through the area by the thousands in the spring when the headwaters of the rivers first open, but most move on to nest elsewhere. During the fall migration, when there is plenty of open water, most fly over the area without stopping except for a brief rest.

This illustrates that no one resource could be counted on as a source of food in any one location, and never all year long. The people had to utilize a wide variety of resources dispersed over a wide geographic area. There were no permanent, year-round villages in the past. People had to move seasonally to harvest food and would winter in different locations to keep from depleting the resources such as food, fur, and firewood in any given place. Many times it was easier to move the camp than to transport the resources back to the village. A person who moved around a lot and became familiar with hundreds of square miles of territory was better able to survive and support a family. If one resource failed he always knew of another place where he could successfully support his family.

For this reason, once a young man reached his teens he was expected to move around and learn to live off of the country. Even young women were prone to wander, as can be seen in the following story of "Ts'ek'its'a" (see Telida Village Stories section). Sometimes it was a matter of life or death as illustrated in the case of the two women who first settled at Telida in the following story "Capture" (see Pattern of Life section). Women moved with the men whenever possible. However, if they had young children that would have hindered the band then they might remain at a fishing site or other camp while the others went on nomadic hunts, such as to the mountains. The elderly traveled as long as they were able, then they remained in camp while others went on a migratory hunt. An example of this situation is recorded by Gordon (1917:65) who found an elderly man in camp alone on the North Fork of the Kuskokwim when he descended that river in 1906. Prior to this incident, he had found only a few people at Lake Minchumina while the rest of the band members were away hunting in the mountains.

Moving frequently, for the early Athabaskans, was a survival strategy. This is not unlike what takes place today when young people move to Anchorage for awhile to work, or even up to the "north slope" to work in the oil fields, or to go commercial fishing. One might also move between villages for work or to get married. Occasionally someone remains away permanently, just as in the past we found that some people moved into the Upper Kuskokwim area from a distance away for a variety of reasons. While the old strategy of moving around still applies today, it does not mean that one has abandoned his home - most people are still identified as being from where they or their parents or grandparents had lived.

Over time people identified dependable key resources and their locations in the Upper Kuskokwim and they returned to those places repeatedly. Telida was one of those locations with a dependable run of whitefish that moved in and out of Telida

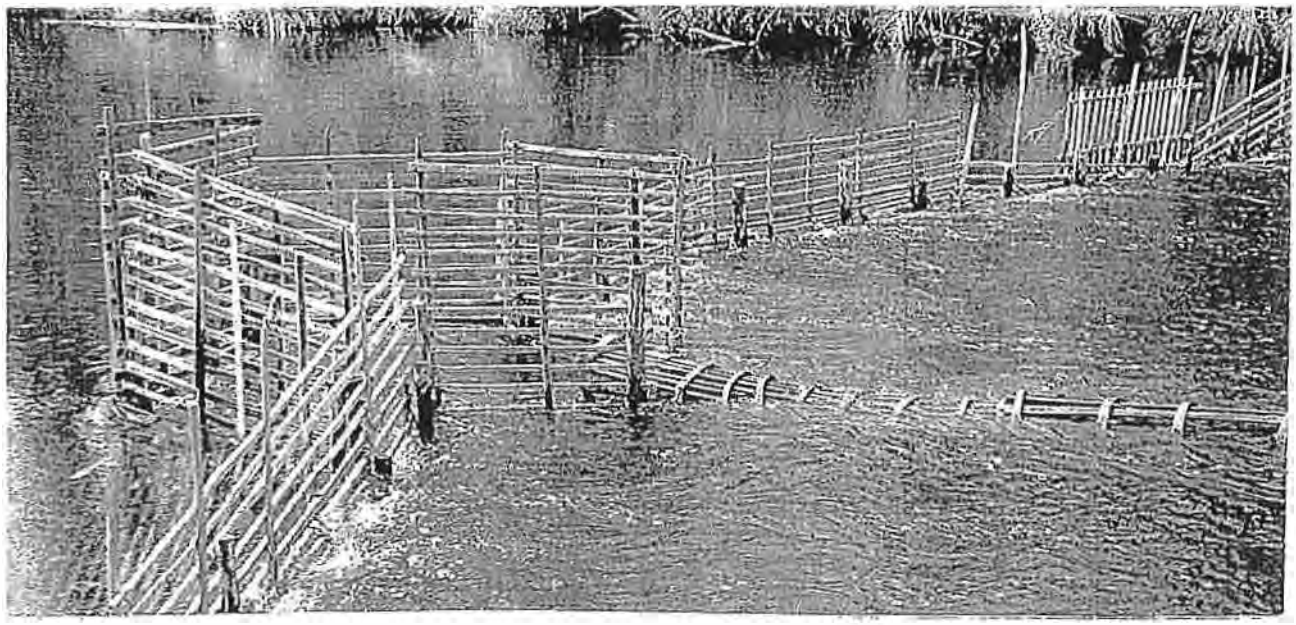
Lake each year. The Alaska Range also played a key role in the yearly cycle as sheep could always be found at the same locations, caribou spent the summer and early fall there, and later moose became numerous enough to harvest along the foothills. There were other advantages to hunting in the mountains. The ground is firm, making travel easier than in the lowlands. Once in the foothills hunters moved up and down into the mountains, or along the range from drainage to drainage. It is open country and game could be spotted from a great distance utilizing key lookout locations. When game was killed in the summer it was dried before transporting. In the late fall it was allowed to partially dry and could be hung for later retrieval. The hides of moose, or at an earlier time caribou, would be sewn together over an improvised frame to make a boat. After loading in all the meat, the camp, and the family the party floated downstream to a suitable winter camp in the timbered lowlands.

In the past, some Upper Kuskokwim people lived year 'round in the mountains at the head of streams on the north and south forks of the Kuskokwim River . Originally the only reason to move downstream was to secure a better supply of fish or to trap beaver and muskrat. Marten and other furbearers, even a few beaver, could be found in the mountains. When people became more dependent on trade goods from "the Outside" it made sense to move closer to the source of those goods. One such move of Nikolai Village was linked to the availability of trade goods. There was an early site up the South Fork near Farewell from which people had moved to the mouth of the Tonzona River, a major source of king salmon. Later, in 1910, when a steamboat with trade goods ascended to just above the present site of Nikolai and a trading post was erected, the people established their winter village at that site.

Each of the original band territories described by Hosley was along one of the major tributaries of the Upper Kuskokwim and most extended out to the mountains. A yearly cycle in one of these territories might begin with relocating to a fishing site in the late spring to take advantage of the fish runs that began moving upriver at breakup. Chinook (king salmon) was one of the prime fish sought because of its size and nutritional value. The original method for catching these fish was by constructing a fence and weir in a shallow side stream that was utilized for spawning. They were more difficult to catch in the main Kuskokwim River until the fishwheel was introduced in the early 1900's, and large twine and nylon fish nets became available. The original nets were made of babiche or willow bark. Both were difficult to make and required a lot of maintenance. If left in the water for very long they would rot and fall apart so they had to be taken out and dried

frequently. Because of the labor involved these were smaller than the nets used now. There are only a few key fishing sites for king salmon in the Upper Kuskokwim area; at *Jiṭs'u≈kashdi'* on the Tonzona River, on the Salmon River of the Pitka Fork, near Fourth of July Creek on the Takotna River, and a site up the Nixon Fork of the Takotna River. Of these, the first two sites were the most productive. Whitefish and other fish were caught in nets and later in fishwheels.

Miska and Katherine Deaphon installing the Salmon River fish fence, mid-1960's. Ray Collins photo.



Completed Salmon River fish weir, mid-1960's. Ray Collins photo.

After a good supply of fish was cut, dried and stored for the winter the men, women without small children, and children old enough for the walk headed for the Alaska Range to hunt. They traveled by boat to a point on the South Fork of the Kuskokwim or a location on the Middle Fork of Big River where they would cache their canoes. Both places are called *Nenots'eshts'ilyashdi'* (place where we left our boats). From there people would proceed with just what each person could carry in a pack, walking the river bars of the then-braided stream out to the mountains. There they would hunt and dry meat until they had enough hides to make a skin boat and enough meat to fill it up, then rejoin kin who had remained in other camps downriver. After freezeup the young men would be sent back out to the foothills to hunt for the entire village.

Nikolai and Telida were suitable sites for winter villages. Other sites that were used at times included East Fork, Big River and Vinasale. During the winter some families dispersed to trapline cabins. As trade goods became more available, and with the establishment of trading posts at McGrath and Medfra, trapping began to play a bigger role in the yearly cycle. Men and boys trapped for marten, lynx, wolf and wolverine and then in February their efforts shifted to trapping beaver. This sometimes involved moving to spring camp sites where muskrat could also be trapped or shot in the early spring.

By the time spring came the supply of dry fish from the previous summer and the meat from the fall and winter hunts was depleted. Beaver and muskrat provided some food as well as fur, but by mid-spring people looked forward to the thaw when the rivers would begin to open up. Ducks and geese returned, fat from a winter of feeding in the south. Open water also meant the commencing of the fish runs. All of these fresh food resources were greatly appreciated, especially after a long winter when food supplies might have been depleted. At times there were periods of starvation in the late winter when resources were depleted and conditions and location prevented immediate replenishment.

Ideally, fresh food was provided frequently, even in winter, by snaring rabbits around the winter camp and hunting grouse and ptarmigan. During some years migrating caribou moved down into the valleys around the winter villages. Whenever possible fresh meat was brought from the mountains. As stated earlier, some families remained through the winter in the foothills where they had access to sheep and caribou, and in more recent times, moose.

This general pattern of life continued until the late 1960's with some modifications. A major disrupting factor was the advent of schools. The presence of a school in Nikolai, beginning in 1948, required families to stay in residence there during the school year. The family, as a unit, could no longer move to the trapline or hunting grounds. Instead, men formed partnerships and worked their traplines. They remained away from the village for periods of time that varied from a few days to a week or more. Then they would have to return to the village to bring meat to their family, replenish the firewood supply, trade furs, and replenish their own supplies. After a few days in the village they would return to their lines to check their traps. Some of the old patterns were incorporated into these activities. Whereas young men used to go out to the mountains to hunt for the meat supply for the village, they might now open a trapline after freezeup that extended to the Alaska Range. They would remain in the foothills for a few days, hunting while their traps "worked". Then they would check their traps on the return trip to the village. After a few days this process would be repeated.

Political and Social Organization

Edward Hosley described how the people were organized in pre-contact times:

> "The social and political unit of the inhabitants of the upper Kuskokwim-upper Kantishna River area was the semi-nomadic band. These groups were customarily little more than a large extended family, numbering perhaps fifteen to thirty individuals. According to tradition, the band was often structured around two brothers, or a brother and his sister's husband, with their wives, children and perhaps daughters' spouses and grandchildren forming the nucleus to which other, more distant relatives might attach themselves" (Hosley 1966:76).

These bands tended to locate along major streams which allowed them to follow the seasonal round of movement previously described; e.g., movement from the Kuskokwim River to the Alaska Range. These bands, excluding the Kantishna River-Minchumina band, can be described as: the Telida band along the McKinley Fork (Swift Fork) which frequently wintered at Telida; the East Fork band with winter villages at Slow Fork and Dennis Creek; and the South Fork band with villages in the Farewell area or at the mouth of the Tonzona (Little Tonzona). (The latter village moved twice and became Nikolai village during the contact period). Other bands included the Salmon River band along the Salmon River and the Pitka and Middle Fork of the Kuskokwim; the Big River band which used Big River and the Middle Fork with winter villages at Farewell Landing and the mouth of Big River; and another band which ranged around Vinasale Mountain and had close ties with the former Tatlawiksuk and Takotna River bands. All of these bands were connected with numerous kinship ties, and families and individuals moved frequently between them. As various epidemics swept through the area, the population declined and people began the process of consolidation into the remaining communities of Nikolai and Telida.

With Russian contact and the conversion of the people to the Russian Orthodox Church, some former band leaders were appointed as "chiefs" (doyon). Previously they were recognized informally based on their ability to lead and serve their bands. Nikolai, the first "Chief", was appointed by a priest who visited Vinasale sometime in the late 1800's. Later, Old Man

Seseui was appointed as the chief of Telida. These are the only communities where churches were built in the upper Kuskokwim area. The chiefs had a special role in each church to see that the spiritual and physical needs of their members were met. In the absence of a priest the chief would speak in church. This merely formalized the roles of the former band leaders within the church structure. Formerly they spoke to the band, and spoke for the band to outsiders. They were also expected to see that all members of the band were provided for.

When Chief Nikolai died, he was succeeded by his son Deaphon (Nikolai). Wassily Devian was appointed second chief or "Marshal" (Hosley 1966:175). The first church was built in Old Nikolai about 1910. In 1924, the village and the church moved to the current location on higher ground that did not flood. After this move Devian was appointed chief, serving until his death in 1963. He was succeeded by his second chief, Pete Gregory. A few years later Miska Deaphon was appointed chief. Chief Seseui of Telida was succeeded, upon his death in 1930, by Second Chief Sergie Petruska. Carl Seseui followed Petruska in this position. These men, plus the adult males in the community, formed a traditional council that made all important decisions for the group.

Following the Alaska Native Claims Settlement Act (ANCSA), and the incorporation of Nikolai as a second class city, leadership in the communities has become much more complex. More recently the Tanana Chiefs Conference (TCC) has assisted in the formation in each community of Native Village Councils which are recognized by the federal government.

Nikolai and Telida first formed their own separate village corporations. Then, in 1976, they merged with McGrath and Takotna and formed MTNT, Ltd. A board of directors was elected to run this corporation with each of the four villages represented. MTNT, Ltd., holds title to land around each village and manages their joint income from ANCSA. They all belong to the Doyon regional corporation, and the non-profit Tanana Chiefs Conference which has a sub-regional office in McGrath.

CONTACT HISTORY

Russian Period

INITIAL CONTACT

The first contact the Upper Kuskokwim people had with the outside world was indirect through trade. With the establishment of trading posts on the Kenai Peninsula in the late 1700's, the Tanaina Athabaskans were brought into direct contact with Europeans and their trade goods. This contact resulted in the Tanaina becoming middlemen in trading with the people of the Interior.

No stories or written records document this early trade but there is a story about a Tanaina "strongman" who established a village in Upper Kuskokwim territory at *T'ighis Nunga'* on the Middle Fork of the Big River. His presence and treatment of the people led to growing resentment and eventually an attack in which he and his people were killed. One man escaped to take word back to his people about what had happened. This did not seem to lead to retaliation, possibly because, according to one story, he had been warned by his father not to cause trouble. Instead he had boasted that he "was not afraid of those Giltsane" (the Tanaina name for the Upper Kuskokwim people). Thus he was viewed as being in the wrong. The story follows:

"Strongman"

One time a "strongman" moved in from the Iliamna area. He camped at *T'ighis Nunga'* on the Middle Fork of Big River. He had been warned by his father not to cause trouble but he didn't listen and boasted, "I'm not afraid of the Giltsane. They won't kill me!" He began to cause trouble and resentment against him grew until finally a war party was formed. Grandpa Esai's father was said to be one of the members, so this would place it back about six generations, sometime in the latter half of the 1800's. Two men went after him while he was sleeping behind a low brush shelter. One man speared him, cutting his stomach open from the naval up, but he grabbed the spear, cutting his hands badly on the blade. In spite of this he drove the attackers off and shot some of them with arrows before he died. One account says he wrenched the spear out of the attacker's hand and threw it backward with such force that he pierced one of the attackers with the shaft.

Another account refers to him holding the bow with his feet because of his cut hands and drawing the arrows held between his teeth.

Later people from his home raided Vinasale and took captives, a brother and sister, back to Iliamna. They lived there for awhile. The girl managed to stash away some dry fish and other food that would keep. Finally they held a big dance, making the captives dance also. It lasted for a day and a half but finally everyone was tired and they all went to sleep. The brother and sister ran away and hid in the grass near the village until people stopped looking for them and then they took off for home. This was in the early spring and when they got to the mountains they were able to walk on top of the snow crust. They made it to Lime Village where the boy decided to stay and marry so the girl returned to Vinasale alone. This is how the Gregorys have relatives at Lime Village - through their mother who was related to the girl.

The Iliamna people said that they would not have made the raid if the people in the Upper Kuskokwim had only killed the "strongman" because he had previously made trouble at home, but they felt it was necessary to avenge the others who were killed with him (A.Gregory 1971; B.Esai 1991).

LT. LAVERNITY ZAGOSKIN EXPEDITION

The first written account of the early trade and contact was by Lt. L.A. Zagoskin, a Russian naval officer, who was given the mission of exploring Interior Alaska for the Russian American Company. He was to provide an accurate map of the country and make recommendations on the best locations for future trading posts. Fur taken by Alaskan Natives in the Interior was being traded with coastal Eskimos via the Kaltag portage and the portage between the Koyukuk and Buckland Rivers. On the coast the Alaska Natives were trading with Siberian Natives who then traded with Russians in Siberia. The furs that left Alaska by these routes did not pass through the hands of the Russian American Company so it brought them no profit. To deal with this situation, the Russians established a post at St. Michael on Norton Sound and then on the Yukon at Nulato, intercepting the trade through the Kaltag portage. However, they were not able to intercept the fur being traded up the Koyukuk River and out to Kotzebue Sound.

Lt. Zagoskin was familiar with navigation, and able to take accurate astronomical readings and map his location. He and a small party entered the Interior in 1842 via Fort St. Michael and the Unalakleet-Kaltag portage. They had arrived at St. Michael on July 11 but were not able to depart for the Interior until December 4, 1842. They had a cold, difficult journey over the portage, finally arriving at Nulato on January 15, 1843. At the end of February Zagoskin and his party set off up the Koyukuk River to locate the trail to Kotzebue Sound. They were greeted cordially by the Athabaskans along the Koyukuk River who were reluctant to take them over the portage to the coast. They were shown the beginning of the trail but were stopped by the onset of spring, being told it was too late to travel through to Kotzebue Sound. The spring thaw was well under way by the time Zagoskin got back to Nulato. The ice went out on the Yukon River on May 8, ending travel until after the breakup.

The party set off up the Yukon River on June 4th. They paddled and pulled the boats, first along one shore and then the other. On June 17th they were traveling along the south bank when they suddenly came upon a camp of Indians. This encounter is of interest because the people came from the "Tlegon" River. This is shown on Zagoskin's map as the east branch of the Innoko River which heads in a portage to the Takotna River. These people would have been acquainted with, and very likely were related to, people living in the Upper Kuskokwim.

From them Zagoskin learned that beaver and fox were abundant in their country and that these Indians either went out to the Yukon River with their furs to trade for white and black beads, shells, metal and tobacco, or took them down the Innoko River to trade with other people there (Holikachuk and Shageluk people). They were also acquainted with a large river to the south (the Kuskokwim) and from traders there they obtained clothing such as the Russians were wearing (indicating they were trading with the people of the Upper Kuskokwim). They also stayed on the Yukon River to put up fish during the summer and then returned home in the fall after the first snow. On the Yukon River they would have been trading with other Athabaskans who met annually in the spring at the mouth of the Tanana River to trade. Zagoskin's party met a party of 14 canoes further up the river that was returning from this trade fair. Each of the boats was loaded with marten and wolverine and a large bundle of beaver. They were unhappy about finding the Russians so far up the river (probably because the Russians would interfere with their trade).

They also encountered some Athabaskans who had "a black bead, rings and other iron items that could have only been released from Fort Kolmakof". This demonstrated that there were trade connections between the Koyukon people of the Yukon and the people of the Kuskokwim. This could have been through the people of the Upper Innoko that they met earlier or between the people of Telida and the Tanana people. It also indicated that all of the trails and trade connections were being used in the 1840's. Zagoskin traveled up the Yukon River, mapping as far as the Nowitna River, and then returned to Nulato for the winter. From there he continued exploring down the Yukon River.

During the winter of 1843, Lt. Zagoskin journeyed to Fort Kolmakof and visited Yup'ik communities downriver before returning to the Yukon. He then traveled up the Innoko where he visited the first village of the *Tlegon Khutana* on the right bank just below the historic site of Holikachuk. He noted how these people had helped Peter Kolmakov by letting him know about the destruction of the Russian Mission Post in 1839 (Zagoskin 1967:228). He had a copy of Kolmakov's map which he was able to use to fill in the Upper Innoko and Upper Kuskokwim areas on his map. Of the map he said, "It was drawn, to be sure, without regard to scale or any kind of system, but certain particulars are noted in detail such as the bends of the river, the direction of the mountain ridges, the position of forests, cliffs,

settlements, and so forth with which he familiarized himself while visiting these parts" (Zagoskin 1967:237).

In the spring of 1844, Zagoskin traveled over to Fort Kolmakof on the Kuskokwim River to accompany the manager Lukin on his annual trip up the river to trade with the Native people. Zagoskin made some interesting comments on how Lukin conducted his trade at the post:

> "Lukin always kept an open house; we have often seen a dozen natives in his little room who will wait silently for days at a time until he returns from his work in the woods or at the fish-trap. If guests arrive at meal time the piece of yukola (dry fish) and the teapot are divided among those present.
>
> "Owing to the difficulty of transportation the quantity of European goods traded is negligible, and the biggest turnover is in in native products, such as deer-skins, thongs, tanned sealskins and fats" (Zagoskin 1967:255).

The upriver trade was very important to the Kolmakof post. In 1841 the post had taken in 2,000 beaver pelts, but Zagoskin reported, "In 1842 through ignorance as to which tribes carried on trade with this settlement, the Kenai (Tanaina) were given the means of crossing over the mountains to the Upper Kuskokwim, and the number of furs collected sank to 1,200" (Zagoskin 1967:254). This indicates that the Tanaina Athabaskans from Cook Inlet began crossing the Alaska Range to trade with the Upper Kuskokwim Athabaskans in 1842. It also tells us that over 40% of the fur traded at Kolmakof came from upriver, and possibly 50% since the Tanaina did not get all of the fur as the following account reveals.

Zagoskin and Lukin departed on May 18th in two boats. Besides the supplies needed for the travelers they only carried about 22 pounds of beads and other trade goods. They had an interpreter who spoke the Tanaina Language. On May 22nd they passed the mouth of the George River. Athabaskans lived there who were related to the people of the Innoko River country. Zagoskin noted that there was a portage at the head of this stream which provided passage to the Innoko River. Near this stream they met a man who had acted as their guide on the lower Innoko the previous year. At one time this stream had an abundance of beaver but they had now disappeared (had they been trapped out?). On May 23rd they passed the

Holitna River. From this point on Zagoskin states that the Upper Kuskokwim is called the *Ttychannanika* (*Dichinanek'*) by the "Ttynay-Goltsan" tribes living along it. Finally, on May 26, they encountered the first Upper Kuskokwim people.

> "We were held up until noon by the necessity of drying out the boat, and toward evening by meeting six native men of the Goltsan tribe who live in the vicinity of the Challono and Tochotno Rivers (Salatna and Takotna Rivers). A mile off we heard the melodious tune of their marching song, and when we met we immediately started trading. They were coming down to the mouth of the Khukitnak (Holitna River) for the purpose of informing the manager that the people living farthest up the river would not be coming to the meeting place this year, as all their furs already had been traded during the winter to the Kenai chief Kosloma who had been sent to them from the Fort St. Nicholas side. One of the natives had an old rifle of Tula workmanship which he had bought from the Ttynay of the Tkhalknuk (Stony River).
>
> "The natives were used to our trade goods and would have made a rush for the Kolosh capes, but as they did not have a sufficient number of beaver pelts they had to select other goods. There was one who did not have to wait--he paid 15 beaver pelts for a cape of black broadcloth with a pattern of red crosses and a border. They collected with enthusiasm the quilted shirts that had been given up as impractical by the expedition. Each one covered his head with a blue cloth cap with red piping, and laid in a year's supply of tobacco, beads, flint, and sealskin thongs for taking deer (caribou). Within an hour the manager had taken in 164 beaver, 4 otter, 2 deer, and 2 black bear skins. The carefree children of the north dressed themselves up and started to dance" (Zagoskin 1976:269).

It is interesting to see that most of the pelts were traded for what could be considered luxury items: exotic clothing, beads and tobacco. Only the flint for starting fires, and the thongs for snares would have assisted them in making a living. But, as Zagoskin noted, the beaver were taken primarily for meat before the Russians arrived and their skin was of limited value. This report also indicates that at least one man had already acquired a rifle by 1844. There is no mention of trading for powder or shot so it is not clear if the rifle was in active use.

On May 29th they reached the site that was designated as a meeting place with the upriver people. It was described as being on the right bank one mile below Vinasale Mountain. Two families with a total of nine people were living there.

At this site Zagoskin met an old man who had been designated *toyon* (chief) of the area on Kolmakov's recommendation and had been given a metal inscribed "Allies of Russia". He greeted them in Russian and fired a two-gun salute. This is the second mention of rifles and indicates that they were fired. Zagoskin went on to state that they traded the Stony River Athabaskans five beaver pelts for a pound of powder. The powder originated with the Cook Inlet Tanaina, who were related to the Stony River people. The old chief presented Zagoskin with a gift of 15 beaver pelts and then traded an additional 20 to Lukin. Zagoskin gave the chief a half pound of powder in recognition of the salute (Zagoskin 1967:271).

From Vinasale Zagoskin continued up to the mouth of the Takotna River, ascending that stream about five miles. He sent his interpreter Stepanov on upriver to locate the people who lived further up. The party returned to Zagoskin's camp on June 1 with three men and two women and their children. Two of the men had previously met and traded with him on May 26. He mentions that after the usual exchange of gifts they obtained the following information about a key trading location further up the Kuskokwim:

> "From the Togtygchagno the Kenai people travel on the winter trail to meet the Ttychannanika natives, who for their part assemble to trade with them at the place called Itstsynno, near the mouth of the Togtychagno" (Zagoskin 1967:272).

This location is locally known as *Edzedochak* (mouth of the South Fork Kuskokwim) and Upper Kuskokwim elders confirm that it is a historic trading location. It appears that this location was designated a trading site after the Kenai people began coming into the area in 1842, and that trading was becoming an annual event as they met there again in 1844. In the 1920's the site once again became an important trading site when a post (Berry's Landing, later called Medfra) was opened to serve nearby gold mines and the village of Nikolai.

The Native people also told of a large lake near the headwaters of the Kuskokwim, which is probably the earliest reference to Lake Minchumina.

Zagoskin would have liked to continue on to the headwaters of the Kuskokwim but the men he had borrowed from Fort Kolmakof were needed there, so from this location on the Takotna River he headed back downstream.

In his travels, Lt. Zagoskin was able to communicate with the people of the Upper Kuskokwim through his interpreter, Stepanov, a creole who was born on the Kenai Peninsula and was a speaker of the Tanaina Language.

He was also assisted by a Kuskokwim Yup'ik man who had accompanied Peter Kolmakov in his exploration of the Upper Kuskokwim country in 1839. Kolmakov had traveled up the Takotna River and portaged over to the Innoko River. He descended that river to the vicinity of Holikachuk where he learned that the Russian post at Ikogmiut, his destination, had been destroyed by Yup'iks. They blamed the Russians for the smallpox epidemic which was devastating their village. In view of the danger, he returned to the Kuskokwim.

These two individuals undoubtedly contributed greatly to the accuracy and completeness of the information that Lt. Zagoskin reported.

FATHER ILLARION

The Russians continued to make annual trips up the Kuskokwim until selling their interest in Alaska to the United States in 1867. At times the manager of Fort Kolmakof was accompanied by a priest as he was in the following 1861 account. Father Illarion was a Russian Orthodox priest who served at Russian Mission. In his diary he wrote that they departed Kolmakof on June 1st to trade with the Kolchan (Upper Kuskokwim Athabaskans) at the mouth of the Chulitna (Holitna) River. Apparently this was a regular trading site as, in 1844, the upriver people who met Lt. Zagoskin were headed there to meet the Russians. Illarion referred to this meeting as a "fair".

The Russians arrived at the Holitna River on June 9th where they met with the people assembled. On June 12, Illarion noted:

> "The long expected Kolchanes suddenly arrived. They came in bark and skin boats. After landing, they walked towards us in one crowd, singing loudly to signal, according to tradition their peaceful relations with the Russians. The manager and his men responded with a loud shout: Hurray!" (Oswalt 1960:107).
>
> "I heard confessions of 15 Kolchanes (10 men and 5 women) and 6 Inkalits (5 men and 1 woman)."
>
> "Note" I must in all justice give credit to the Kolchanes who are more devout and zealous Christians than our (other) Kuskokwim people. They even come from their settlements on the Tlegon (upper Innoko River) and the Tokichitna (Takotna) Rivers, so far away from Chulitna, and they brought their families though at that time all of the natives are usually fishing. They forsook their important occupation for the sake of completing their Christian duties" (Oswalt 1960:109).
>
> "Wed. 13th. Not wishing to interfere with their trading operations by taking too much time for the religious service, I began the service at 4 AM and gave a brief talk about the necessity and value of morning and evening prayers for the Christians and about the holiness and power of the cross. The people listened attentively and then went about their business, i.e., to sell and to buy, which was all completed by 4 PM" (Oswalt 1960:108).

At this point the manager left to return home, leaving Father Illarion with two three-place bidarkas. Illarion had five helpers - a churchman, messenger boy, interpreter and his son, and one laborer.

Illarion further noted:

> "After the manager had gone I had more freedom to occupy myself with the Kolchanes and Inkalits. First it was necessary to register them. Unfortunately, some of them forgot their names" (Oswalt 1960:108).

He referred to their Christian names, given at baptism. This would seem to indicate that in the early years people did not use their new names, on a regular basis, after baptism.

Illarion went on to say that he had to:

> "...sort them out by settlement: then to supply information as to the names, number, and age of the baptised; by whom baptised-priest or layman; and the age & names of the unbaptised. This census taking continued until 8 p.m."
> (Oswalt 1960:108).

He did not record the total number of Kolchanes who had traveled downriver but at least 15 had gone to confession to prepare for communion on the first day. On Friday, there was a total of 80 communicants, both male and female of all ages. Illarion went on to say that Maxim was his interpreter for both the Kolchan and the Inkalit languages, thus recognizing that the mid-river Athabaskans and the Upper Kuskokwim people spoke different languages.

In the 1850's, the Russians established a trading post at Vinasale, subsidiary to Kolmakofsky Redoubt. Trade goods were shipped from Kolmakofsky to the Vinasale Post which was operated only during the summer months.

The Russians and the creoles they employed brought about several changes in the lives of the Upper Kuskokwim people. By then most were members of the Russian Orthodox Church. Russian baptismal names had replaced all of their original Athabaskan names. Starting out with a single Russian name, succeeding generations at some point adopted their father's name as their last name. Iron replaced the bone, stone and copper used in weapons

and knives. Rifles were in the process of replacing the bow and arrow and spear. This process was completed after the Americans arrived with better and more available firearms. Beads replaced porcupine quills in decorations on clothing. Western clothing replaced moose and caribou skin garments with the exception of hats, gloves and footwear. The axe and saw made it easier to work wood and Russian style cabins began replacing the semi-subterranean "beaver house," as Carl Seseui called them (see Carl Seseui's comments in the section titled Telida Village Founding). Many of those houses still occupied were heated with sheet metal stoves instead of the central fire pit located under a hole in the roof. To support all of these changes the basic economy also changed. Trapping became a major activity through the winter - earlier trapping had been a minor activity that took place in connection with hunting for food since only a few furs were needed for blankets and clothing.

These changes were viewed as positive by the people and for the most part they were chosen, not forced upon them - they were in control of the changes. As Pete Gregory stated (personal communication), "Things got better after the Russians came." He went on to explain about the fighting that had taken place before and the spiritual warfare that was carried on by the shamans. The Russians discouraged the warfare and raiding as they were not compatible with trade and were contrary to Russian Orthodox teaching. The raiding and kidnaping of women and children ceased around the end of the Russian era, or early in the American period.

The following illustrations indicate that the teachings of the Russian Orthodox Church had a direct impact on ending the warfare and the revenge killings:

> One man explained that his great grandfather on his mother's side lived below Vinasale. The great grandfather had formerly raided on the Yukon River. He went into a steam bath with two men from the Yukon. They came out of the steam bath first and then waited and attacked him as he came out. They ran away but one of them got ahead of the other who tried to catch up to him. Finally, when he saw that he couldn't catch up, he shot his own partner. The story teller's grandfather, who was a child at the time, was told by his father before he died, not to do anything about the killing to avenge it (J. Gregory, personal communication).

Andrew Gregory (personal communication) said that the last battle fought in the Upper Kuskokwim area was between some men from Vinasale and the area upriver, who went over to Dishkaket and killed some people. After they returned, all died but one. Before this raid, they had all been told about God and that it was wrong to kill, but they hadn't listened. People believe this is why they died.

American Period

AMERICAN CONTACT

Following the sale of Russian interests in Alaska in 1867, there was little immediate change in the Upper Kuskokwim area. On the Kuskokwim River the Russian posts consisted of Kolmakof Redoubt and a small post at Vinasale. In the 1870's the posts were taken over by American merchants from San Francisco who later formed the Alaska Commercial Company. The first trader under their reign was Reinhold Separe, a part Russian/part Alaska Native. Nicholai Dementov and Evan I. Andreanoff worked for him at the posts, and their primary customers at Vinasale were the Upper Kuskokwim Athabaskans. This was the only outside presence in the area for several years.

The Alaska Commercial Company later reorganized as the Northern Commercial Company, and in more recent years has again become the Alaska Commercial Company after undergoing several changes in ownership.

Toward the end of the 1800's, gold was discovered in the Interior and prospectors began to spread out along the river systems. The United States government realized that it had only vague information about the Alaskan Interior and that the maps made by the Russians, such as Zagoskin, were incomplete. Accordingly, in 1898 the United States Geological Survey sent out five expeditions to begin filling in the blank spaces on their maps.

JOSIAH E. SPURR EXPEDITION

In 1898 Josiah Edward Spurr was selected to lead an expedition for the U. S. Geological Survey, and, given his choice, he opted to explore the Kuskokwim River. Included in his party were W.S. Post, a topographer; T.S. Hincley, a naturalist; Oscar Rohn; Hartman; and Harrell. Three of these left their names on tributary streams of the South Fork - the Hartman, the Rohn and the Post Rivers. These names replaced the original Athabaskan names that were in everyday use at that time.

Spurr hired a man named Madison who had trapped in the Tyonek area of Cook Inlet for eight years and was married to a Tyonek woman. They started from Tyonek in canoes on May 4 but then had to wait at the mouth of the Susitna River until the ice went out on May 20. When they arrived at the Alaska Commercial Company post at Susitna Station they tried unsuccessfully to hire guides. Everyone said the upper Yentna River was not good for boating and that they did not go up there in the summer time. As the party proceeded up the Yentna River they met Stefano, the second chief of the Susitna Athabaskan Indians. Though he had never been to the head of the stream, he drew for them a map of what he knew.

They proceeded on upriver and on July 10, after a difficult journey, they crossed the Alaska Range into the upper Kuskokwim River country via Ptarmigan Pass. Their canoes had been patched many times and were wearing thin. On July 21, after portaging over the pass, they found a well marked Indian trail that led them to a stream they named the Styx. Descending this stream, they came to a well established Indian camp complete with a steam bath, just above the junction of the Styx River and the South Fork of the Kuskokwim River. From the signs of usage in the camp, Spurr concluded that it must have been occupied during the winter and that the people had gone downstream after breakup.

The party passed several other Indian camps as they proceeded down the South Fork, affirming that the Upper Kuskokwim people were making extensive use of the mountain locations and resources at that time (1894). Two sleds were found at one of the camps, indicating winter visits. The people had probably left the area after break-up when they had no use for the sleds.

Finally, on July 28, Spurr sighted another camp and then just half a mile below it they came upon four Indians. They were in the process of burying two people in graves which they had marked with Greek (Russian Orthodox) crosses. When the men spotted the Spurr party, they hollered to alert the other people in camp across the river. Though Madison spoke some of the Tyonek Athabaskan Language, he could not understand them or make himself understood except through sign language. The language of these people was unique to the Upper Kuskokwim area.

Spurr greeted them with the Russian term "Drastye". The chief crossed the river to greet them and introduced himself as Nicolai. They described him as being "a tall straight old fellow who was lightly bearded." He was wearing moose skin breeches. The others were dressed mostly in long parkas made of cotton cloth which Spurr thought of as Eskimo dress. Their breeches and moccasins were made of cloth or skin. Spurr also noted that "they have beautiful birch bark canoes narrow and long as fits a river canoe" (Spurr 1975:(3)54).

Most likely this location was that of the first Nikolai village at the mouth of the Tonzona River. Spurr recorded the name that they gave him for the South Fork as *Nando*, but it should have been *Edzeno*. They may have simply been referring to the direction in which the river flows, which would have been *nodo'* (downstream). They had Chief Nicolai draw them a map but had difficulty in communicating as none of these Upper Kuskokwim people knew any English at that time.

After trading for some fresh whitefish and dog salmon, the party proceeded downriver. The next day, at a fish camp, they met a family consisting of a man, his wife and two or three children. They were living in a tent, which indicates this item was already being procured through trade. They also had fresh moose meat hanging, confirming that these animals were occasionally present in 1898, although so scarce that the Spurr party saw only one and did not harvest it. He mentioned the scarcity of game, even on the Susitna side of the Alaska Range. In contrast, when his son visited some of the same country on that side of the mountains thirty years later, he encountered "great numbers of game". This agrees with what many contemporary elders have said about there being few moose in the Kuskokwim until the early 1900's.

The Spurr party continued on for another three days before encountering more people, between McGrath and Vinasale. Just above Vinasale Lake they came upon a permanent camp consisting of a log cabin, a cache, and a bark hut. There were two men, two women and some children in the camp. The old man was called Elia but no names were recorded for the others. They were living in the bark covered summer house, which was most likely the normal summer dwelling before canvas tents became available.

From that camp it was only a short trip to the long awaited Vinasale post which consisted of two cabins, two caches, and a graveyard with five or six Russian Orthodox crosses. The party had earnestly hoped to purchase food but the place was deserted! They searched the buildings, finding only some trade goods, Russian books and icons - but no food. They determined that the trader's name was Dementieff from an inscription in a book.

As they left Vinasale, the Spurr party encountered the last Upper Kuskokwim resident they were to see - a slender, lightly bearded man, traveling upriver in a canoe. He was very surprised to see them and, through gestures, they held a "conversation". He found out that they had come from the Susitna Station, not the Yukon River as he first supposed, and Spurr learned that it was about five travel days to Kolmakof Redoubt, the next trading post. When they conveyed that the party was out of tea and other supplies, the man picked up a small sack and poured out a cup of tea leaves. This was an amazing example of hospitality when one considers that there was no more tea in the area, Spurr and party were complete strangers, and the man had just gone to considerable trouble to journey down to Kolmakof Redoubt to trade. They graciously declined his offer.

While Spurr's contact with the people of the upper Kuskokwim was somewhat limited, his account does provide us a glimpse of some of the residents living there in 1898.

CAPTAIN EDWIN F. GLENN: COOK INLET EXPLORING EXPEDITION

In 1899 Captain Edwin F. Glenn, U.S. Army, was given command of a military expedition charged with exploring transportation routes in Alaska. The following orders were given to conduct these explorations:

> ..."From the permanent camp at Tyoonok (Tyonek), Alaska detachments will be sent to explore the country to the northward via the Matanuska, Shuchitna, Yentna and Kuskokwim Rivers, for the most direct and practicable route from tide water to the crossings of the Tannana River; and from these crossings Northward to the military posts established on the Yukon River, at Rampart and Circle City..." (Herron 1909:4).

The second part of the order required that:

> "This expedition will cover as much territory as possible and will collect and incorporate in the reports all information that may be valuable to the development of the country explored regarding topographical feature, available routes of travel, feasible routes for railroad construction, appropriate and available sites for military reservations, adaptability for agriculture and stock raising, mineral resources, timber, fuel, food products, and the stock best suited for food and transportation purposes; the number, location and condition of the natives of the territory explored. Maps and photographs will accompany all reports" (Herron 1909:4).

The third point required that:

> "The routes traversed by this expedition should be definitely located and properly marked in order that they may be known and used as routes of travel by the public" (Herron 1909: 4).

In order to accomplish this, the party was also authorized to:

> "--employ the necessary Indians, natives of Alaska, for duty with the expedition as guides, for such periods of time as may be necessary" (Herron 1909:5).

Most of these routes were later used to establish the routes of transportation still in use today. The route via the Susitna, Yentna and South Fork of the Kuskokwim Rivers, originally the Seward-Nome route, later became part of the Iditarod Trail. The Susitna River route was followed when the Alaska Railroad was built from Seward to Fairbanks in the 1920's and today is the route of the Parks Highway. The route up the Matanuska River became part of the Glenn Highway which was built during World War II.

These routes and the maps produced were also used by the prospectors who were spreading throughout Alaska at the turn of the century.

LT. JOSEPH S. HERRON EXPEDITION

In addition to exploring the Seward to Cook Inlet areas, a party was to find a route from salt water to the Yukon River. Lt. Glenn assigned Lieutenant Joseph S. Herron, U.S. Army, to explore the route up the Susitna and Yentna Rivers and on to the Yukon via the upper Kuskokwim River.

Herron's party consisted of the following:

Acting Assistant Surgeon, Henry R. Carter
Pvt. Sam L. Jones
Pvt. Gilbert Dillinger
Packer, E.M. Weber
Packer, George Brown

Two of these names are the sources of names for tributaries of the South Fork just as it leaves the mountains - the Jones and the Dillinger Rivers. *They were so named on Herron's expedition map.*

On June 9, 1899, the party arrived at Susitna Station on the Susitna River where Mr. Cleghorn was agent for the Alaska Commercial Company. He assisted Lt. Herron in calling a council of the local Indians. At this council they learned that "The Indians knew very little about the country beyond the divide, by reason of their territory and hunting, trapping and fishing grounds being restricted, by the oldest traditions and customs among the tribes, to the country east of the divide, and with certain limits, for the same reasons, in the other directions" (Herron 1909:19).

This statement indicates that the Athabaskans living at Susitna Station had a clear awareness of their band territory boundaries, and that these were defined by "the oldest traditions". The people of the upper Kuskokwim most likely had the same awareness of their boundaries in relationship to those of the other people living around them.

The Susitna people felt comfortable in speaking only about their own country. They stated that the Yentna River was headed by glaciers and did not offer a route to the Interior. Two of them were familiar with a branch of the Yentna River which could offer passage, so Herron hired them - Stepan and Slinkta. (Stepan is probably the same individual Spurr met the year

before and identified as the second chief.) They then proceeded to the head of navigation which was about three miles up the Keechatna River.

Captain Glenn, who had accompanied Lt. Herron to this point, related, "The country over which you are ordered to proceed is so little known that it is impracticable to give you anything like definite instructions as to the route to proceed. So you will be forced to depend upon the information you may be able to obtain from your Indians (guides) and such other natives as you may chance to meet en route" (Herron 1909:22).

The Herron party had 15 pack horses and a total of 3300 pounds of supplies. This meant a load of 220 pounds for each horse. The supplies included six hundred pounds of breakfast bacon in fifty-pound canvas sacks. The bacon would prove to play a key role in the success of the expedition, if not its salvation.

The party started up the river on July 1. Herron described their daily routine:

> "A reconnaissance for the best route for the day's march; a search for fords, crossings, detours around or passages through ravines, swamps and obstacles; construction of a pack trail by chopping out timber and brush in dense forests, blazing in open forests and corduroying in soft mud and tundras; fording or swimming the pack train over the rivers encountered and the building of spar bridges for the horses where necessary" (Herron 1909:27,28).

They averaged about three miles a day of travel and this might have actually been only two miles by direct distance. By July 5, after traveling about twelve and a half miles, they reached the location on the Nakochnu River where "the Indians cache their canoes" or "the head of canoe navigation." Such locations are also designated in the upper Kuskokwim, on the South Fork and on the Middle Fork of Big River. Thus all the river routes to the mountains are known. Head of canoe navigation was noted. From that point all travel was on foot when going into the mountains. On return trips skin boats might be used to float downstream from areas closer to the headwaters.

It is interesting to see the attempts made to learn the native names for geographic features though it seems there may have been some miscommunication at times. One of the hills encountered was called "Nin"

which could be the general word for ground (*nin'* in Upper Kuskokwim Athabaskan) and another hill opposite was named "Tesch" which may be the general name for hill (*tish* in Upper Kuskokwim).

On July 10 the party encountered steep country and was informed by their guides that the horses could not make it over the divide. They indicated that men had to use hand holds to get across. For the next six day the guides kept repeating that they "savvied" (knew) the country no further. They were obviously getting nervous as they came to the edge of their country. On July 17 they reached the head of the Keechatno River. Stepan shot a bull moose, the first one mentioned on the trip. They also encountered three bears, hundreds of mountain sheep (they shot two), and another moose which they did not shoot.

They finally reached the summit (Simpson Pass) on July 23. On July 28, after having failed to convince Lt. Herron that they should turn back, the two guides slipped away in the night and returned home. Herron had seen this coming but didn't see how he could prevent it short of keeping them under guard 24 hours a day.

It is interesting to note Herron's comment on the value of his guides, two men in a six-man party. "This deprivation of the Indians' energy and skill as axemen, hunters and trailers, and their craft and instinct as woodsmen and recognizance men, put more than a twenty-five percent handicap on the progress of the expedition" (Herron 1909:35).

As they proceeded down the South Fork of the Kuskokwim River, which they called the Echeatnu (*Edzena'* in Upper Kuskokwim), they came to the first of two deserted villages, this one at the mouth of the Tonzona River (*Tonilts'uno'* in Upper Kuskokwim). This would have been the village that Spurr found occupied by Chief Nikolai the year before. This may indicate that people did not summer in the same location every year. Spurr had arrived at this location on July 25 and Herron did not get there until August 8. It could have been that they had finished fishing and gone on a nomadic hunt.

At that point Herron left the South Fork and proceeded overland to the East Fork which they call Chedotlothno (*Ch'idotlu≈no'* in Upper Kuskokwim). Here they found a second deserted village, this one consisting of two cabins, a cache and a graveyard. Herron found in one of the cabins "a sled, a pair of

snowshoes, a stove, a knife, spearhead and some picture of Russian divinities and prophets" (Herron 1909:35). The presence of a stove is interesting in that it had to have been brought from one of the existing trading posts which were all a long ways distant. Later the Telida people indicated that they owned the cabins on the East Fork, again demonstrating that the seemingly abandoned villages were not really abandoned but just seasonally occupied. The sled and snowshoes may indicate that people from Telida had been there in the spring before breakup, possibly to catch fish in the early summer or to trap beaver, returning to Telida over the summer trail before Herron arrived.

The presence of Russian icons confirms the influence of the Russian Orthodox Church, telling us they were hanging icons on the wall then as they still do today, 100 years later. These would have been obtained from the priests and traders who began coming up the Kuskokwim to the mouth of the Holitna River and to Vinasale Lake in the 1840's.

It is interesting to note the construction of the houses at this village in a picture taken in 1899 (Herron 1909:39). The logs used for the walls were tapered but flattened on two sides and the corners dovetailed. This style must have been copied from the Russians after metal axes were obtained. Later cabins were built of round logs with notched corners, which is actually a simpler method of construction. To flatten the logs on the outside would serve no purpose other than to make them look like the dwellings made by the Russians. The cache, of plank and pole construction, was set on high poles.

Herron continued on to the northeast on August 25, losing two horses that impaled themselves on snags. He had to abandon the canvas canoe at this point as they no longer had a way to carry it. On September 1 they encountered the first frost. The horses weren't getting enough food so they started feeding them flour. Then the last of their dried potatoes were lost when a sack was pierced and they dribbled out on the trail. On September 4 they cached some bacon, rice and other food, then crossed a swampy area to reach the Tatlathno (*Todzo≈no'* in Upper Kuskokwim). This is the Swift Fork on current maps (locally called the McKinley Fork).

At this point Chief Shesoie (Seseui) of Telida enters the story. He was out hunting and killed a bear. When butchering the animal he found that its stomach was full of bacon. He recognized the bacon as white man's food

and wondered where the bear had found it. So he backtracked the bear and found the source was the cache left by Herron's party. Next he followed the trail left by the explorers until he caught up with them. He found them in a life-threatening situation. They had abandoned the horses and were attempting to carry their last two week's supply of food in cumbersome packs. They were constantly wet from fresh snowfall, not being dressed for winter weather, and freeze-up was approaching. Chief Shesoie convinced Herron and his men to follow him back to Telida and wait until it was safe to travel.

After they cached the bacon, they had reached the *Todzo≈no'* and thought it was flowing toward their destination, so they constructed some rafts and attempted to float downstream. They tipped over several times when they collided with sweepers, losing some food and much of their camp gear. Herron reported that the expedition was--"now reduced to the last resort, that of being its own pack train. We filed along like coolies with fifteen days food and other impediments harnessed on our backs."--"the damp snowfall loaded the trees until they bent under its weight. When we passed through the bush each tree dropped a small avalanche on our heads and kept our clothes wet, while the snow on the ground added to the labor and discomfort of walking and kept our feet wet" (Herron 1909:41)

If Chief Shesoie had not found them they might well have perished. They had no proper winter clothes. They were almost out of food and had lost much of their gear. Freeze-up was approaching and the unsafe ice on the rivers and swamps, plus the increasing snowfall, would have trapped them with no means of travel. They had begun traveling back upriver and were about to pass Telida - and there were no other villages for many miles. Chief Shesoie found them on September 18. They learned later that he was the one who had killed the bear which was also served to them.

The party welcomed him but found their mutual vocabulary consisted of only three words - "yes", "no", and "good". Herron stated that, "The deficiency was made up by using pantomime." They negotiated for eight days and then went into winter camp at Telida for two months, waiting for favorable trail conditions. During this time the villagers outfitted Herron and his men with snowshoes, mittens, hats, and winter boots. He said, "Our food during this time consisted of moose, bear, beaver, fish and tea." The only thing the Herron party could have contributed was the tea, although they may have helped with the hunting as they had rifles and ammunition.

This would have been no small burden for the village to feed six men for two months.

Lt. Herron recorded the census of Telida in 1899 as:

> Shesoie, man, age about 30 years. (Seseui)
> Barian, wife of Shesoie, age about 25 years. (Mary)
> Annisa, daughter of Shesoie, age about 12 years. (Anna)
> Gara (Carl), son of Shesoie, age about 5 years.
> Infant child of Shesoie, age about 6 months.
>
> Bacilli, age about 35 years. (Wasilly)
> Barian, wife, age about 20 years. (Mary)
> Uruska, son, age about 5 years.
> One son buried at Telida.
>
> Tenesche, man, age about 35 years. (Dennis)
> Annisa, wife, age about 30 years. (Anna)
> Eulian, son, age about 16 years. (William)
> Andre, son, age about 10 years. (Andrew)
> Kurgurvey, son, age about 8 years. (Gogomy)
> Eleana, daughter, age about 5 years. (Lena)
>
> Rubber Indian, man, age about 25 years. (Joko?)
> Yocutter, wife, age about 20 years.
> Wastinia, infant son, age about 5 months
> (Herron 1909:67).

Of the 17 residents listed none was estimated to be over 35 years of age. This gives some indication of how hard the communities had been hit by deadly epidemics in the late 1800's.

Herron also obtained information from the people at Telida about the residents of the village at the mouth of the Tonzona. He stated that there were about 20 people living there and listed the men as:

> Nikoli (chief) [Nikolai]
> Dia-sohn [Deaphon, Nikolai's son]
> Mit-ar-uska. [Petruska (?)]
> Bacilli. [Wassily]
> Kur-gur-vey [?]
> Soy-on [?]
> (Herron 1909:67).

Finally, on November 25, the Herron party, led by Chief Shesoie and three other adult men, left Telida and headed for the Tanana River via Lake Minchumina and the Cosna River. There was a village at Minchumina with about 15 residents, including Minchumina Ivan. Ivan was estimated to be about 50 years old and one of his wives about 40. These were the oldest Upper Kuskokwim people that Herron encountered. From Coschaget, the village at the mouth of the Cosna River, they journeyed down the Tanana to the Yukon River. There they found a new army post, Fort Gibbon, which had been built within the previous six months near the Tanana trading post that Shesoie had visited several times in previous years.

Carl Seseui (Gara Shesoie in the above census) was a young boy at the time of the visit by the Herron party. One of his memories was of the horses that were turned loose. They remained in the area for awhile, and Carl recalled seeing the tracks and asking his dad what kind of animal that was. Another memory he shared was the story of how his dad helped the men so much and how little he received in return.

GEORGE BYRON GORDON'S TRIP DOWN THE KUSKOKWIM

In 1907, George Byron Gordon and his brother MacLaren Gordon, built a canoe in Fairbanks and set out to explore the Kuskokwim River for the University of Philadelphia Museum. They first had to travel down the Tanana River and up the Kantishna River to Lake Minchumina. They spent about a week with the people living there - two men, three women and two children. Others of the group were off hunting. These people called themselves *Minkhotana* (Lake People).

From Lake Minchumina the Gordons portaged over to the North Fork of the Kuskokwim River. The 10 1/ 2 mile portage was a long-established trail used by the people of Lake Minchumina and the Upper Kuskokwim. They met two prospectors on the portage who were transporting a 2-year's supply of food. They met two more trappers on the North Fork who were looking for a place to trap and they found a trapper's cabin on the upper North Fork that had been occupied the winter before. More and more non-Native people were moving into the country and establishing traplines in direct competition with the local residents.

As they descended the North Fork the Gordons kept watch for an Indian camp they had been told about when they were at Lake Minchumina. They found it near the mouth of the McKinley Fork, relating:

> "In the afternoon we came to the Indian encampment for which we had been on the lookout. It was on the left bank and consisted of three fairly large brush shelters, a summer encampment.
>
> "The Indians at Minchumina had prepared us not to expect many people at the camp until the hunting season was over. We found just one very ancient Indian" (Gordon 1917:100).

From this we learn that tents had not completely replaced the traditional summer dwellings by 1907 and that old people still stayed behind when others went on nomadic hunts.

They passed the Chedotlotna River (*Chidotlu≈no'*, East Fork) and the Istna (*Edzeno*, South Fork), encountering two Indian men in birch-bark canoes on the way. Near the South Fork they had another encounter:

> "Here we met another Indian, in a canoe. He was dressed in caribou skins and carried a bow and arrow" (Gordon 1917:105).

In this area some people were still wearing traditional clothing in 1907 and using the bow and arrow.

The Gordons continued on down the Kuskokwim River. The evening after the encounter with the man in the canoe they arrived at the mouth of a large stream coming in from the left (Big River) and found a small encampment of Indians at that site. Unfortunately, no other information about the people there is presented. The Gordons did not encounter any other Upper Kuskokwim people and, for some reason, failed to mention Vinasale.

When they arrived at the mouth of the Tacotna River (Takotna) they met Peter McGrath whom George Byron Gordon had known in Nome in 1905. McGrath had just arrived that spring (1907) to record mining claims for the new gold diggings on the Innoko River (see the Gold Rush section). He had already established a small trading post at the mouth of the Takotna River.

Gordon did provide one other description of traditional clothing worn in the Upper Kuskokwim and a drawing of a man so dressed:

> "Before they adopted white man's attire they wore a long fringed coat over leggings with moccasins attached. The cut of the man's coat was the same as that of the woman, except that the man's was pointed before and behind and the woman's was rounded. These garments were made of deerskin dressed without the hair and decorated with porcupine quill embroidery. Men and women wore ornaments of Dentalium shell obtained in trade from the tribes adjoining the southern coast" (Gordon 1917:188).

TRADE

Trade has always been an important part of life in the Upper Kuskokwim area as there are things of value not locally available. Even before the Europeans arrived, extensive trade networks existed. There were trails through the mountains to Cook Inlet where the Tanaina Athabaskan people lived. They in turn had connections with the people of the Copper River country; one of the items traded for was copper which was used to make arrowheads and knives. This route may also have been used to import Dentalium shells that were used to decorate clothes and to make necklaces and other items. These shells came all the way from southeast Alaska. There was a trail from the North Fork of the Kuskokwim to the Cosna River which drains into the Tanana River. To the northwest, a trail connected the Takotna River to the Innoko River system which led to the Yukon River. A trail through Lime Village country led southwest to Nondalton and the Kuskokwim River itself acted as a highway to Yup'ik country in the west.

With the arrival of the Russians on the Kenai Peninsula in the late 1700's, trade with the Tanaina intensified. One of the Upper Kuskokwim trading locations was at *Edzedochak* at the mouth of the South Fork. This is where the Medfra trading post was later established in the 1920's. When the Russians established posts on the Yukon and the Kuskokwim in the 1830's, direct trade became possible. The Russian trader from Kolmakofsky (above Aniak) made annual trips upriver. One trading point was at the mouth of the Holitna River to which Upper Kuskokwim people traveled to trade. As was mentioned in an earlier section, Lt. Zagoskin accompanied a trader all the way upriver to where McGrath is now located. Later, the Russians established a post at Vinasale.

Carl Seseui's Grandfather is reported to have made the trip from Telida all the way to the trading post at Russian Mission on the Yukon. He had to travel over six hundred miles on two major rivers to make this journey. He brought back the first tea to be used in the upper Kuskokwim, which he introduced at a potlatch (Hosley 1966:148).

Miska Deaphon told of people meeting some Tanaina Athabaskans who were hunting sheep near Farewell. They related that the American people had opened a trading post at Susitna Station on the Cook Inlet of the Alaska Range. Later that winter people from Nikolai walked over to the store. They went through Rainy Pass pulling sleds on which they carried mink,

beaver and marten skins. These were traded for about fifty cents each and they purchased their first 30-30 rifles, some ammunition and pilot bread (M. Deaphon, personal communication).

When Carl Seseui's wife Alexandria was a young girl she walked through Rainy Pass and over to Susitna Station. She was in a party that was using dogs to pull the sleds. The Pass was sometimes dangerous due to whiteout conditions which could cause travelers to lose their way. They were always careful not to make any noise when approaching the Pass, believing that noise was what brought on the whiteouts. On this trip the dogs must have made too much noise for in whiteout conditions Alexandria became separated from her family. Finally she became tired and laid down. It was snowing at the time and she was soon covered over. Grandpa Esai was traveling along behind Alexandria's family. His dogs were following the trail of those ahead as it was not possible to see the trail. Suddenly his dogs stopped. When he went up to check on them he found that they had stopped by the still form of Alexandria. He put her on his sled and finally caught up with the others - they were waiting for him in the timber on the other side. They were really happy to see that he had found the girl as they had just realized she was missing but had no idea where she might be in the whiteout conditions (G. Esai, personal communication).

Around the turn of the century the first American traders made their way up the Kuskokwim River. They had the first steamboat that was seen in the country. Miska Deaphon's father went downriver to Medfra in a canoe where he met them. He guided them up the South Fork as they didn't know the channel. It was fall time and the water was low. They were stuck for awhile on a bar but finally made it up to what became Old Nikolai, where they stayed for the winter (M.Deaphon, personal communication).

At the same time a Russian Orthodox priest went upriver to minister to the people of Chief Nikolai's village at the mouth to the Tonzona River. He passed the traders on the way up. He advised the people to move their village down to where the steamboat was as the traders had lots of groceries. They did move the village and it remained there until 1918. In the Nikolai Reader (1975:16) this is reported as having taken place in 1892. However, in the newspapers of the time (Iditarod Pioneer 1/22/11) it was reported that John Holten went up the Kuskokwim River, established a roadhouse and trading post, and wintered over in 1910-11. This later date is more likely because the village had not yet been moved when Spur floated down the

South Fork in 1898 and met Chief Nikolai. The Gordons make no mention of any traders in the Upper Kuskokwim in 1907 except the two Indian traders at the mouth of Big River and the new post just established in McGrath.

The Alaska Commercial Company, which took over the Russian American Co.'s trading property, had a seasonal post at Vinasale. In 1909, the AC Co., which had reorganized as the Northern Commercial Co., built a store at McGrath. They have remained the major store in the area up to the present time. There have however, been other stores in McGrath. Many of the early posts bought fur and some of them extended credit and grubstaked trappers.

The trading post that was established at Medfra in 1920 played a major role in the lives of the people of Nikolai and Telida until it closed in the 1980s. In addition to all the basic foods, this store carried a wide variety of goods needed by trappers - from dog harnesses to sled runners and hardware, a wide assortment of traps and snares as well as ammunition and rifles. You could purchase chainsaws, outboard motors and gasoline for your motors and blazo for your lanterns. The post bought fur and in the summer, cordwood, for local use or shipment to McGrath when the annual barge came in with supplies. Many families from Nikolai and Telida spent the summers in their fish camps. For many years, this was the closest post office to Nikolai. The airstrip and radio allowed for a plane to be sent to Medfra in the summer when firefighters were needed. World would go tout on the radio that a plane was coming, and the men would come in from the fish camps to be hired for fire fighting. Fourth of July celebration was held at Medfra with games, foot races and prizes in addition to food!

When snowmachines began replacing dog teams in the 60s, they were also available at Medfra. The Snow Jet was one of the most popular early machines.

C.F.H. Spencer opened the first post in about 1917. Arthur Berry bought him out, and the location became known as Berry's Landing. In 1922, the post office opened and the location was renamed Medfra. In 1937, Clint and Bertha Winems bought the store. After Clint died in 1958, Bertha continued to operate the store until she sold it to Jack and Nadine Smith in 1963.

Trader's house at Medfra, built by men from Nikolai for Clint and Bertha Winans; Late 1930's or early 1940's. Ray Collins photo, 1965.

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GOLD RUSH

The discovery of gold brought about major changes in the Upper Kuskokwim. Prior to the 1906 strike on Ganes Creek, a tributary of the upper Innoko River, only a few non-Natives lived in the region. Fur traders had made their annual trips to the area. A few prospectors wandered through and a few trappers were showing up and establishing traplines but they were "few and far between". Except for the small trading post at Vinasale, established at the end of the Russian era and occupied by Dementieff in the early American era, there were no permanent non-Native settlements.

Frank Densmore was one of the first, if not the first, prospectors to pass through the area. He entered the Kuskokwim via the Native-made portage from Lake Minchumina in 1889 with a party of about five men and descended the North Fork of the Kuskokwim (Brooks 1953: 292). He did not find what he was looking for and continued on down the river in a boat that was loaded with people and dogs. Gleman Esai reported that this was the first party of Americans his father, Old Esai, saw as a child (personal communication). Old Esai was living at Big River village at the time. He had stated that this occurred prior to Lt. Herron's trip in 1899. He also remembered three other men who walked over the mountains (Alaska Range) and went by Big River in the spring, about the same time. They made it as far as the vicinity of the Tatlawiksuk River before the snow got too soft to travel.

In 1906 Thomas Ganes, Mike Roki, John Maki and FCH Spencer crossed the Native-made portage trail between the Kuskokwim and the Innoko Rivers. This trail went up the Big Creek of the Takotna River, across the divide and down what became Ganes Creek. During a lunch break they did some experimental panning and found gold. Hearing of other strikes on the Kuskokwim, the judge at Nome appointed Peter McGrath the U. S. Commissioner of the Kuskokwim that year. He settled at what became McGrath in the spring of 1907, opening a trading post and recording mining claims for the Innoko District. Although Abraham Appel had opened a trading post at the same site in 1904, when Peter McGrath arrived and started a trading post it was called McGrath's (Seward Weekly Gateway, 4/27/1907). In 1913 the post office was established and named McGrath (Ricks 1965:40).

The strikes on Ganes Creek and several other upper Innoko creeks brought hundreds of men to the area. This in turn created the need for regular river boat freighting on the Kuskokwim and Innoko Rivers to bring in supplies and mail. The riverboats created a need for wood for fuel and the Gregory brothers and others spent time in wood camps along the Kuskokwim River cutting wood for the steamboats. Other local people worked as deck hands and firemen on the boats and even acted as captains at times. Pete Gregory, of Vinasale and later Nikolai, worked on the riverboats for years.

The boats wintered near McGrath and each spring had to be repaired and made ready for the next season on the river. Boats that had been pulled out had to be re-launched. Besides this work and wood cutting, Pete Gregory worked his way up and became an oiler during the 1960's. (Oil had replaced wood and the engines needed regular maintenance.) Pete also took over the wheel at times and always piloted the boat from McGrath to Nikolai up the shallow, winding South Fork to deliver supplies to Medfra and Nikolai.

But riverboats could only operate from May to September while the river was open, so from the beginning of the influx of newcomers a winter trail was needed for personal travel and to bring in mail and supplies during the winter.

Lieutenant Herron had anticipated the need for trails, as stated in his 1899 report. He made the following report based on information he gained from Chief Shesoie and other people at Telida:

> "In exploring my route I found that there already existed throughout its length winter sled trails cut, blazed and in regular use by the Indians and coinciding with or paralleling my trail throughout. I have indicated these on the maps of this report. These trails represent the result of a knowledge of the country accumulated during many generations, as well as the labor of many Indians. They follow direct lines and traverse advantageous ground. These can be economically followed, connected, plainly marked, and made ready for general use.
>
> "A branch trail much used by the Indians leaves the Indian village (Nikolai's village) on the Echeatnu (South Fork) for Vinasale on the Kuskokwim, and a winter sled trail leaves Vinasale for the Yukon. A winter sled trail comes into the Yukon at Nulato from the Kuskokwim.

If these are joined they will connect at Nulato with the winter route to Nome and St. Michael.

"Indian guides, familiar with these trails, can be obtained at Tyoonok, the Indian village (Nikolai) on the Echeatnu, Vinasale, and Nulato (Herron 1909:54)."

He was referring to the old trail that led from Vinasale up Beaver Creek, over the divide to the Takotna River, then up Big Creek and over the divide to the Innoko River. The trail then went down the Innoko River to Dishkaket and from Dishkaket cross-country to Nulato.
In 1908 W.L. Goodwin, Engineer in Charge for the Alaska Road Commission, was directed to conduct the initial survey of the new Seward to Nome trail. He left Seward on January 31, 1908, on the Alaska Railroad, which was under construction, disembarking at Mile 54 out of Seward. From there the route he surveyed went to Turnagain Arm, up Glacier Creek, down Eagle River and cross-country to Old Knik. Goodwin then had to cross the Knik Arm to New Knik and then went cross-country to Susitna Station. The trail then went up the Yentna River, the Skwentna and Happy Rivers, Pass Creek to Rainy Pass, down Dalzell Creek, Rohn River and the Kuskokwim River to a point near the mouth of the Tonzona River. From there they went cross-country to the mouth of the Takotna River at McGrath, up the Takotna and cross-country to Takotna Slough, over rolling hills to Ganes Creek, down Ganes and cross-country to Ophir Creek, cross-country to Dishkaket, thence across to the Kaiyuh Slough and on to the Yukon River, up the Yukon to Kaltag. From Kaltag the party followed the existing overland mail trail to Unalakleet and on to Nome.

The survey party traveled with 2 sleds and 15 dogs. They "paced" the whole distance from the end of track to Kaltag and checked their pacing periodically with and without snowshoes. They had with them the 1904 USGS map of Mt. McKinley, the 1898 map of Spurr and Post, and the 1899 map by Lt. Herron. They were able to confirm the maps through to Farewell Mountain but from there to Kaltag found they were in error.

Goodwin's party met Chief Nicholi (Nikolai) at the mouth of the Tonzona River and had him pilot them cross-country to Nicholomas opposite the mouth of the Big River (later known as the Big River village). Except for Chief Nicholi, Goodwin didn't make any other comments concerning Native people of the Upper Kuskokwim area. At Nicholomas they obtained

information from a man named Wilson on the route to McGrath's, a trading post and the office of the U.S. Commissioner. About a dozen men rendezvoused there but spent their time hunting and trapping (Goodwin reported that he found game plentiful everywhere). At Tacotna (Takotna) they found few people but many caches as this was the head of pole boat navigation. In 1908 about 200 people lived in the Ophir area, down from some 450 in 1907. Ophir, on the Innoko River, had become the center of the gold mining area.

In the winter of 1910 and 1911 Goodwin completed another trail survey which included straightening and improving the trail. He departed from Nome on November 9, 1910, and arrived in Seward on February 25, 1911. On this trip nine men and six dog teams with seven dogs in each accompanied him. The trail was measured by cyclometers attached to bicycle wheels which were fastened to sleds.

They survey party set up markers each place the trail left the river and tripods across all the open areas. The tripods consisted of two 8-foot poles and a third that was ten or twelve feet long and hung over the trail.

From Dishkaket they marked a side trail to Dikeman where it joined a well marked trail to Iditarod. From Tacotna (Takotna) they cut out a trail that went by the north side of Appel Mountain to Berry's (at Big River). From Berry's they cleared a trail eight to ten feet wide by the straightest route from Big River to Farewell. This is part of the trail still in use today that goes by Salmon River and through the "Farewell Burn". The Farewell to which Goodwin referred is the roadhouse site on the South Fork. Trail work ended at Happy River.

Dan Callahan standing under the sign at his roadhouse on the Kuskokwim at the mouth of the Big River, late 1920's or early 1930's. A store and Callahan's quarters are in the wing to the right. Alaska Road Commission photo, Juneau Historic Library, 61-283.

It is amazing to see how quickly entrepreneurs took advantage of the trail. By the time Pat O'Cotter published an article on the trail in the Alaska-Yukon Magazine in July of 1911, he reported that there were roadhouses at all points on the trail approximately a day's travel apart. In some places they were only a half day apart. This was a walking distance of about 20 miles so many travelers were able to walk in over the trail and sleep at a roadhouse every night and get a meal. Sometimes they could even stop for lunch. The roadhouses served meals for $.50 to $1.50 apiece and beds cost $.50 to $1.00. There were also dog houses for the teams at most stops and dog food for a nominal cost. This meant a constant stream of travelers along the trail from late October to the end of April.

Local people sold dried fish and meat to the roadhouses and in some cases operated the roadhouses. Bobby Esai told of earning his first wages by helping the mail team drivers who stopped at Big River to unharness their dogs in a dog barn and to feed them. The dog barns had a door at both ends so teams could be driven in one end, tied up in stalls along the side walls,

and then hitched up in the morning and driven out the other end. The sled sat in the aisle where it stopped during the night and did not have to be moved (B. Esai, personal communication).

Shortly after the Alaska Railroad was completed through the Alaska Range in 1922, a mail trail was opened on the north side of the mountains. It was routed through Lake Minchumina, Telida and Nikolai to Big River where it joined the Seward-Nome trail. These communities became more directly involved in the trail activities. People at Telida opened a roadhouse. Miska Deaphon and Carl Seseui were hired to carry the mail over sections of the trail. There also were a roadhouse and dog barn in Nikolai.

Most of the people in the Nikolai and Telida areas continued their traditional life of hunting, fishing, and trapping during this era. A few men worked for short periods at placer mines during the summer or assisted miners with assessment work on their claims but most of their time was spent in more traditional activities. When the airplane replaced the dog team in hauling mail and supplies (in the mid-1920's), during the winter the flow of traffic on the trails ceased and the roadhouses closed. There were few non-Native people in the villages and most families spent their summers in fish camps. Their contact with English speakers was limited to trading in Medfra and McGrath and some summer employment at these places. Daily activities in the villages and camps were conducted in the Athabaskan language which remained strong up into the 1960's.

AIRPLANES

In 1924, an event took place that was to bring about dramatic change to life in the Upper Kuskokwim as well as the rest of rural Alaska. Previously all transportation was by river or trail, both of which took days or even weeks to move mail and goods from one center to another. On February 21, 1924, at 9:00 a.m., Carl Ben Eielson lifted off from Fairbanks heading southwest in a DeHavilland IV airplane. He landed at McGrath at 11:49 a.m., just 2 hours 49 minutes later, with mail. It was the first commercial airmail flight in Alaska, Eielson having been given a contract for this experimental service. In less than ten hours he had made the round trip, allowing some residents in McGrath to answer their mail the same day they received it! The same trip by dog team over the mail trail would have taken 10 days to 2 weeks. On the return trip, Eielson left McGrath at 2:35 p.m. and landed in Fairbanks at 6:30 p.m., in the dark. The plane tipped up on landing and bent the propeller but this did not deter him from going on to complete seven additional airmail deliveries to McGrath, as well as many other trips throughout Alaska (Kusko Times 2/23/24).

This was an indication of things to come and in a few years the airplane completely replaced the dog team mail system and the trail traffic came to a stop except for local travel. The planes not only hauled mail but also passengers and freight.

Miska Deaphon told of hearing that first airplane:

> "The first airplane came in 1924. It flew from Fairbanks to McGrath. The pilot was Ben Eielson. Miska went to Telida that day. He was out hunting moose. There was a rattling noise in the sky. Miska looked up and saw the plane. He stood on his snowshoes and watched the plane. Miska was frightened but he didn't run away. He didn't get a moose. He went home that day with no meat" (Nikolai Reader 1975:4).

Because planes on skis could use many different kinds of landing sites during the winter - such as lakes, rivers, and swamps - people began hiring them to get to and from traplines or to fly in supplies. The following account shows that planes had their down-side as well as up-side. One winter, about 1947, Miska Deaphon and Bobby Esai were staying with their wives in a camp on a large swamp below Jack Stewart's cabin on Big River. It was cold during the month of January and they almost ran out of food.

Earlier they had taken furs to Medfra and sold them. They purchased supplies which the mail plane from Fairbanks was to drop off at their camp but the weather turned cold and the planes were not flying. Miska finally got a moose when they were down to one last sheefish they had stored in Stewart's cache (M.Deaphon, personal communication).
Airstrips soon began to appear near Upper Kuskokwim settlements. Old Slow Fork village is located on the Nikolai-Telida trail about four miles above Nikita Petruska's trapline cabin on the East Fork of the Kuskokwim. (This village was originally about a mile above the village but it flooded regularly so it was moved to higher ground.) An airstrip was built right behind the village by Wassily and Sergei Petruska and Alufa Evan soon after airplanes began to make regular trips from Fairbanks to McGrath.

The Telida airstrip was built later by Carl Seseui who did most of the work by hand. In the 1980's, after the school opened in Telida, the village organized a Council. They began to receive funding for the community and with it they purchased a tractor which was driven overland from Lake Minchumina in the winter. The tractor was used to improve the airstrip and keep it clear of snow. Until the presence of a school made possible regular mail flights to Telida, Carl Seseui chartered a plane about once a month to get mail and supplies delivered. He maintained a short-wave radio to arrange these flights with an air taxi operator in McGrath.

Nikolai was one of the last communities in the area to build an airstrip. In the summer and fall of 1962 the original strip was cleared behind the village but it was not in regular use for the first few years. During the winter three alternate areas were used at various times. The river ice in front of the village was the first choice. If this was not available, due to overflow or when the spring thaw weakened the ice, a runway was packed on a large swamp above the village. A third option was *Nikotl'mina'* (Salmonberry Lake) about a mile behind Nikolai. This lake was particularly useful for large planes.

During the summer, sandbars along the South Fork served as landing strips. One was right across the river from Nikolai but it was sometimes too short. A better sandbar was about a mile upstream, on the left. As soon as the river dropped after spring breakup these bars were cleared of any driftwood left by the high water, and utilized as landing strips. The new airstrip behind the village took time to dry up. There was no equipment for removing the snow so it remained until it melted naturally. Additionally, there was no

equipment except pick and shovel to lengthen the strip by leveling high spots and filling the low areas.

After the school opened in Nikolai in 1948, scheduled mail flights were made to Nikolai for a few years. Teacher Agnes Rodli arranged to get a post office opened in 1949 but it was discontinued in 1951 after Rodli left, since the Territorial teacher who replaced her did not remain in the village year 'round. Prior to this the closest post office was in Medfra. It opened in 1922 to serve the developing mining camps twelve miles north of Medfra. All Nikolai mail was sent to Medfra before and after the short opening of the Nikolai office, until 1963 when the villagers, assisted by the Collins', successfully petitioned to get weekly mail service during the winter. Nearly everyone in town gathered at the plane on mail days and the mail was sorted and claimed right at the airstrip, as no individual was "in charge of it." Finally, in the late 1960's, a contract post office was opened that is still in service today.

A regular practice in the early years for most villagers was to meet every plane and see who was coming and going. This continued up into the 1970"s. Battery-operated radios were tuned to the air traffic frequencies in McGrath to keep track of the planes. When an airplane approached the village the tethered sled dogs would set up a howl before the plane was discernible to the human ear. This howling was unique to airplanes and was the signal to head for the airstrip. This alarm system did not fall into disuse until the early 1970's when the dog teams were mostly replaced by snowmachines.

In the late 1960's, Don Harris, a contractor in McGrath, was awarded a contract to do some work at the Nikolai school. The river barge had brought in a prefabricated kitchen which was to be attached to the school building for a lunch program. And larger generators were received and had to be installed. Harris had a Caterpillar tractor shipped to Nikolai on the barge to help complete this work and while there he did some improvement work on the airstrip.

Nikolai village began getting project money after incorporating and some of the State's oil revenue began to flow into rural Alaska for construction projects. Equipment was purchased that could be used on the projects and on the airstrip. Finally in the 1980's the State appropriated the money to lengthen and widen the airstrip, gravel the surface, and construct a building

to house a grader for keeping the runway cleared of snow. With these improvements the alternate fields ceased being used with the exception of Salmonberry Lake, which could be cleared to handle large freight planes in late winter or early spring when the ice was thick enough.

STARVATION, SICKNESS AND HEALTH CARE

There are some stories that tell of periodic starvation which had significant impact on the population of Upper Kuskokwim people. However, epidemics of diseases brought by the Europeans had far reaching and devastating effects on Native populations.

It is not clear when the first epidemics reached the Upper Kuskokwim. There is an early record, in the 1830's, of smallpox decimating many Alaskan communities. When it hit some Yup'ik communities in western Alaska, they blamed the Russians who had recently arrived in the area and had established trading posts on the lower Kuskokwim and Yukon Rivers. In 1838, in retaliation, the Yup'iks attacked and destroyed Russian Mission (Zagoskin 1967:236,237). Whether this particular epidemic affected the Upper Kuskokwim is not known; there are no specific accounts in oral tradition.

At some time in the 1800's various diseases began reaching the Upper Kuskokwim. When Lt. Herron visited Telida in 1899, there were no residents that he estimated to be over 35, nor were there many children. The ages of people at Minchumina were similar, though one resident was about 50 years of age and another about 40. Life seemed to be particularly hard on the elderly and the young.

The situation continued to deteriorate. In the early 1900's, when contact with the outside world began to intensify, the only medical treatment available was that practiced by the shamans, and traditional herbal remedies. Neither of these remedies was effective in dealing with the new diseases introduced by newcomers. When Hudson Stuck traveled in 1910 through Telida, East Fork village and Nikolai (second location), he noted a large number of new graves, of which many were children.

The world-wide influenza epidemic of the early 1900's apparently reached the Upper Kuskokwim. Miska Deaphon (personal communication) related that his grandfather, Chief Nikolai, had five sons. Three of them died at this time, leaving only Deaphon and Miska Nikolai. The sickness was described as a form of flu similar to whooping cough. People would cough very hard, then choke and die in a very short time. Gleman Esai reported that his family and a few others spent the winter out in the Alaska Range and

therefore avoided this sickness. Many of Bobby Esai's family (the Wassilys) died at this time. Bobby and a brother who survived were taken in and raised by Grandpa Esai.

In the late 1920's, when Gleman Esai was about 30 years old, he went to a gathering of shamans over on the Kantishna River between Birch Creek and Nenana. Five shamans had gathered there to attempt to deal with sickness that was sweeping through the area. This may have been the last organized attempt by the shamans to deal with serious illness. Gleman was told that if he wanted to avoid the sickness, when he left for home he was not to look back for the first few miles. Each night he was to pass by his intended campsite, tie the dogs, and then return to his camp alone. When Gleman went through Nikolai on his way to Big River everyone was sick except Antone Pitka and his sister Anna. They were taking care of the fires for everyone in the village. Carl Seseui and Andrew Dennis were also on the trail at this time, returning from the gathering (G.Esai, personal communication).

The Upper Kuskokwim people began to embrace western medicine, but not every experience was a positive one. One example of the unorganized and chancy nature of health care from sources outside the villages is the following story about Helen Nikolai Esai. In 1948, when Helen was three years old, she was living in Telida with her parents. She was a sickly child and unable to walk. One day a bush pilot stopped at the village and the parents asked him to take their daughter to a hospital. He accommodated, taking her to the Public Health Service Hospital at Tanana where he left her. The problem was that he left without giving them any information about Helen, so the hospital registered her as "Jane Doe". They had no idea who she was nor where she was from. She spoke her own language as a 3-year-old would, but not English, so she could tell them nothing about herself. Helen was treated for rheumatic fever and her health was restored. Her family moved to Nikolai when the school opened and the parents asked Agnes Rodli and Mildred James, the teachers, to write to Tanana to see if their child was there. The doctor replied immediately and within a short time Helen was reunited with her family in Nikolai after having been gone for a year! (Rodli 1963:139).

Tuberculosis (TB) reached epidemic status in rural Alaska in the 1940's and 1950's. Some families, such as that of Mrs. Gogomy Dennis, lost several children and spouses to the disease. Treatment was just becoming available

and many patients were sent to the Alaska Native Service Hospital in Anchorage, a treatment facility in Sitka, Alaska, and even a hospital in Tacoma, Washington. With medication and sometimes surgery, some were healed and allowed to return to their homes.

Junior Gregory, who spent many months in the hospital in Anchorage, received some medical training while he was being treated for TB. When he returned to Nikolai, he served for many years as the health care provider for the village. He was given a limited supply of medicines and, when he could make radio contact, would receive advice from the Public Health Nurse at McGrath or doctors at the Alaska Native Service Hospital in Anchorage. He served for many years as a volunteer, daily making rounds of all the homes to check on people's health needs (J. Gregory, personal communication).

Around 1970 an organized Health Aide program was established by the Tanana Chiefs Conference with more extensive training provided, and village clinics were established.

In 1949 two nurses from the Alaska Native Service, Esther Schaubel and Ruth Grover, made the first medical visit to Nikolai. They tested everyone for TB and only eight of the tests were negative; all the others had been exposed to the disease (Rodli 1963:138). It was not until 1963 that a physician from the Alaska Native Health Service, Dr. Gloria Parks, held a general medicine clinic in Nikolai, just in time to diagnose the first case of mumps in village history. In the following three months 80 of the 100 residents contracted the disease - only the very young and the very old were spared.

Until the mid-1960's nearly all babies were delivered by traditional mid-wives. Then the Alaska Native Health Service began to provide more hospital care, paying airplane fare for expectant mothers and others needing medical care to travel to the hospital in Anchorage.

When Upper Kuskokwim people became reliant on western medicine to treat these new illnesses, and even such routine events as childbirth, the practice of traditional medicine was pretty much abandoned.

Gogomy Dennis taking his daughter Martha to the airplane to be hospitalized at Seward for Tuberculosis treatment. Theodore Pitka on the right, 1948-50. Agnes Rodli photo.

RUSSIAN ORTHODOX CHURCH

The Russian Orthodox Church began to influence the people of the Upper Kuskokwim soon after their arrival on the Kuskokwim River in the 1830's. The traders were authorized to conduct services and baptize. They were also accompanied by priests in later years.

When people were baptized they were given a Russian name. When the priest Illarion went up to the mouth of the Holitna River and conducted services for the Upper Kuskokwim people who traveled there in 1861, he commented on their devotion. They had given up important summer fishing time and had brought their whole families to benefit from the priest's services. The men could have gone alone had they just wanted to trade but the people were already committed to the Church and brought their families with them.

When Illarion started to bring his records up to date he indicated whether the people were baptized by priest or layman, but found that many had forgotten their names (new baptismal names). By the end of the 19th century the people had adopted Russian surnames. If they were given Athabaskan names none have survived. It is very seldom in oral histories that an Athabaskan name shows up but everyone has a Russian name. This switch may have been facilitated in part by the traditional practice of avoiding personal names and using kinship terms when referring to someone, or addressing them. People may have found it easier to use the new "church" names. Athabaskan names have only survived as nicknames in the Upper Kuskokwim.

In the early years the priests ascended the Kuskokwim River no farther than the Holitna River. In later years they went as far upriver as Vinasale and all the people would gather there from throughout the Upper Kuskokwim area. Edward Hosley was told that a priest made his first visit to the Tonzona village of Chief Nikolai in 1900, one year after Lt. Herron's visit (Hosley 1966:168). If so, this would not have been the priest that came the same year as the first steamboat because the first steamboat arrived in 1910.

The first church in the upper Kuskokwim country, St. Nicholas Russian Orthodox Church, was built at Old Nikolai in 1910. It was moved to the current site of Nikolai in 1918. A few years later it was replaced by a new church building constructed by Theodore Pitka. Old Man Gregory bought

most of the lumber for it. Miska Deaphon related that his father, Nikolai Deaphon, traveled all the way down the river to Kolmakofsky to obtain icons for the new church. At some time a church bell was also purchased and installed. When the original church was replaced at Nikolai a small structure was placed over the location of its altar and marked with a cross. It can still be seen in the cemetery adjacent to the church.

The first visit by a priest to Telida was in approximately 1914 (Hosley 1966:174) and the first church, St. Michael's, was built in Old Telida in 1918. After Telida was moved to the current site, Carl Seseui took the church building apart and moved it. It is the oldest surviving church in the Upper Kuskokwim basin. The churches at Nikolai and Telida were built and paid for entirely by local people.

After the church at Nikolai was built it became the custom for all the people from Vinasale and Telida to gather there on January 7 for the celebration of Russian Orthodox Christmas. Whenever possible, a priest was brought in. After the Telida church was built, the priest sometimes journeyed there for Russian New Year's on January 14.

The practice of Slavic, or "starring", was introduced by the Church and is carried on in Nikolai today as it is throughout Alaska in communities with Russian Orthodox congregations. Carolers visit each home for three days in a group, carrying elaborately decorated, candle-lit pinwheels called the "star" and "moon". Food is then offered to the carolers - sometimes an entire meal. At times an airplane is chartered to convey some of the carolers to Telida, and in more recent years some have made the trip by snowmachine so that both communities are involved in the celebration.

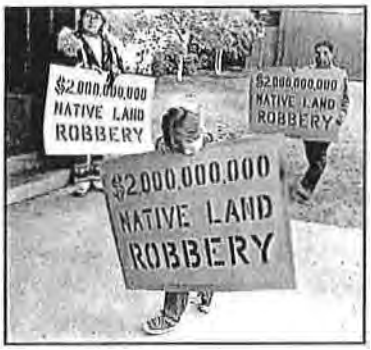
St. Nicholas Russian Orthodox Church, Nikolai, Alaska, 1965. Ray Collins photo.

Russian Orthodox Church at Telida, 1949. C. Craft LeFebre photo.

TIMELINE TO THE
Alaska Native Claims Settlement Act

1728 Vitus Bering, of Russia, sites St. Lawrence Island.
1778 Capt. James Cook of England explores Arctic Ocean.
1784 First white settlement in Alaska on Kodiak Island.
1799 Czar Paul claims Alaska as Russian possession. Aleksandr Baranov named first Russian governor of Alaska.
1802 Baranov moves his headquarters to Sitka.
1843 First mission school for Eskimos was established in Nushagak by Russian-Greek Orthodox Church.
1867 Russians sell Alaska to United States for $7.2 million.

Walter Hickel



Protesters

1880 Gold is discovered near Juneau.
1884 The Organic Act makes Alaska a district with appointed governor and other officers; protection for lands used and occupied by Natives promised.
1898 Gold rush escalates, with findings in Klondike and Nome. Gold seekers swarm to the territory.
1900 Congress authorizes transfer of government seat to Juneau.
1906 Native Allotment Act is passed, allowing the secretary of the Department of the Interior to allot up to 150 acres of non-mineral land to Alaska Natives who applied.
1906 Congress authorizes Alaska to send a non-voting delegate to Congress. First is Frank Waskey.
1912 Alaska Native Brotherhood founded the first modern Alaska Native organization.
1912 Alaska becomes a territory with its own legislature.
1924 Indian Citizenship Act grants citizenship to Native Americans, including Alaska Natives, without terminating tribal rights and property.
1924 First Native, William L. Paul, elected to territorial legislature.
1936 Indian Reorganization Act is expanded to include Alaska Native governments.
1945 An Act establishing Feb. 16 as "Elizabeth Peratrovich Day"
1945 Alaska passes an antidiscrimination law, the first such law in America, providing for equal treatment of Natives and whites in businesses and public places.
1948 The Venetie and Arctic Village Reservation is formed, the largest in Alaska.
1956 Voters approve the Alaska Constitution.
1959 President Eisenhower signs Alaska Statehood Bill into law. Includes provision to not take lands of Native peoples.
1961 Alaska Natives organize to protest "Project Chariot" - a plan to use nuclear weapons to blast an artificial harbor into existence in Northwest Alaska.
1962 The Tundra Times is established, the first statewide newspaper devoted to representing the views and issues of Alaska Natives.
1966 Alaska Federation of Natives formed in Anchorage.
1968 Arco Alaska Inc. and Humble Oil (now ExxonMobil) strike oil on the North Slope. The corporations, plus BP, form the Trans-Alaska Pipeline System.
1968 Final judgment on Tlingit/Haida case established Native claims basis. $7.5 million awarded.
1969 Formal land freeze in Alaska/Native rights need to be defined.
1969 State of Alaska vs. Udall holds; Secretary of Interior needs to define Native possessory rights first, pre-state selection.
1970 North Slope oil lease auction, bids total $900 million.
1971 Congress passes the Alaska Native Claims Settlement Act, granting Natives 44 million acres of land and $962.5 million.
1972 The Marine Mammal Protection Act becomes law with the provision that Alaska Native would be able to continue traditional use of marine mammals.
1973 President Richard Nixon signs into law a bill authorizing the construction of the trans-Alaska oil pipeline. It ultimately cost $8 billion.
1976 The so-called "Molly Hootch" (Tobeluk vs. Lind) case is settled with the commitment by the state to provide local schools for Alaska Native communities as it had in predominately white communities in the state.

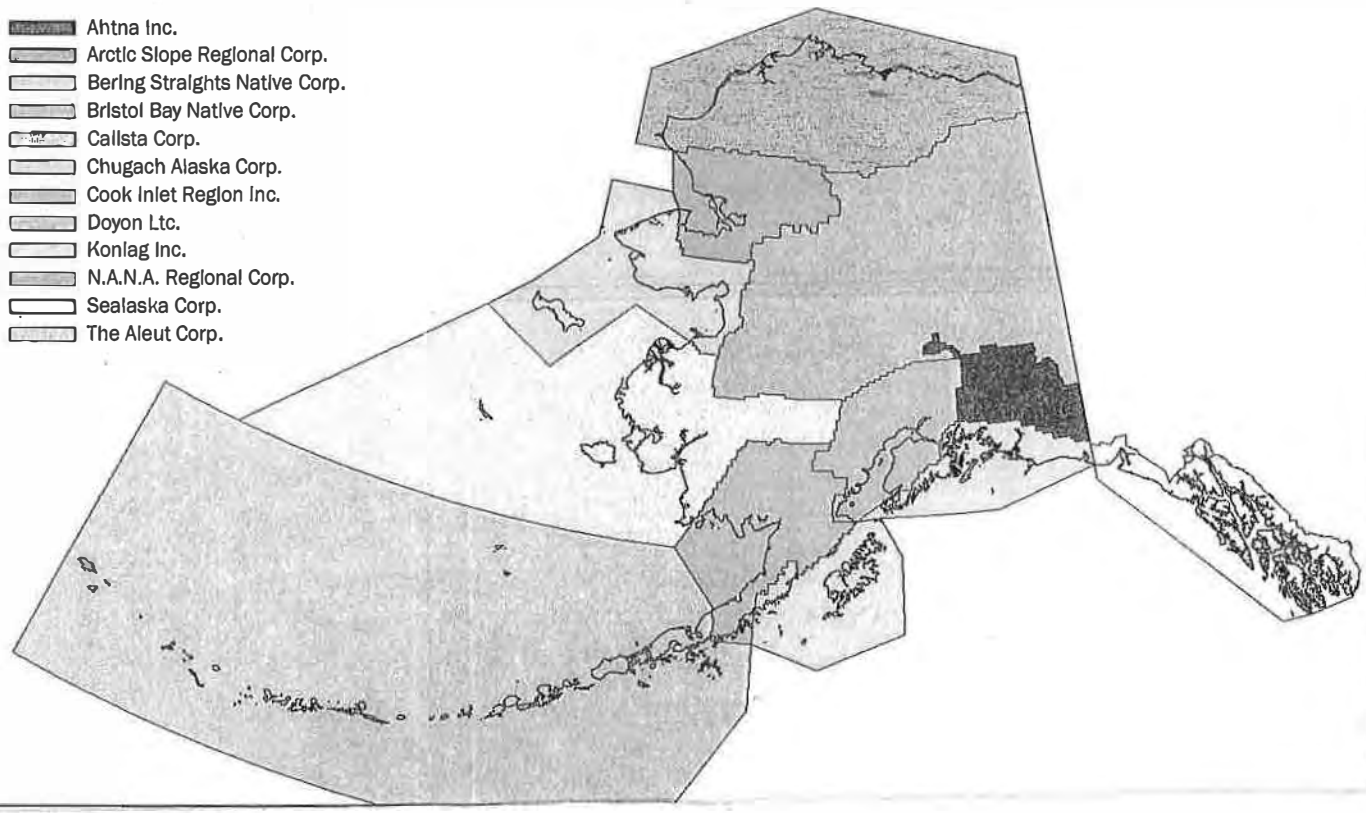
UAA students

ASRC building

1977 First oil flows through the trans-Alaska oil pipeline.
1980 The Alaska National Interest Lands Conservation Act becomes law creating more than 80 millions acres of additional parks, preserves and monuments in Alaska. It also contains language supporting continued traditional and customary use on designated federal lands.
1982 Alaska voters uphold subsistence laws
1982 $962.5 million in ANCSA moneys paid to corporations.

Sources: www.alaskool.org, Alaska Stylebook

Regional Corporations under ANCSA



Honor Those Who Came Before Us

As we celebrate the 40th Anniversary of the passage of the Alaska Native Claims Settlement Act (ANCSA), I'm once again reminded how important it is to honor the past and those whom came before us. As President/CEO of First Alaskans Institute I read each article submitted for inclusion in the magazine. This edition in particular has been a history lesson of sorts. The personal accounts of the individuals at the forefront of the landmark settlement are not recorded in history books, nor are they shared with our school children.

As you read the articles, the historical importance of the legislation begins to unfold. In this 40th year of ANCSA, it only seems fitting that we reflect on where we have been and where we are going. Echoing and honoring this sentiment, the Alaska Federation of Natives Convention theme this past October was "Strength in Unity" and the Elders and Youth Conference theme was "Honoring the Past, Celebrating the Present, Preparing for the Future." The ANCSA@40 Committee also worked to ensure a variety of gatherings were held to share the impact of the Act.

Despite challenges, both internal and external to our Native community, and both praise and criticism for the Act itself, we have not strayed far from the roots of who we are. The passage of the ANCSA four decades ago illuminates that even in challenging times, Alaska Native people protect what is most central and sacred, our self-determination and our tie to our traditional lands.

Only time will tell what the next 40 years will hold, but we must never forget who we are and where we come from. On behalf of our Board of Trustees, our employees, and myself, I wish to take this opportunity to thank all the individuals, families, and communities who truly demonstrated "Strength in Unity". Through their tireless efforts, tremendous sacrifice, and determination we remain stewards of our traditional lands. ■

— DENISE R. MORRIS
Aleut, President/CEO, First Alaskans Institute

Look ahead to the Next 40 Years, but remember the past

The rise of the Alaska Native corporations has been nothing short of stunning.

In 1985, six of them were among the state's top 49 companies, according to Alaska Business Monthly. This year, there were 22 in that illustrious list of 49, including eight of the top 10.

Many are reshaping the state on several fronts. Last year they pooled their political might and helped vault U.S. Sen. Lisa Murkowski to victory in her uphill, write-in campaign against Joe Miller. And as you'll see in the following pages, they're transforming the state's economic landscape. Some are scouting new energy prospects to help Alaskans overcome looming shortages of gas, oil and other resources. Others push boundaries in different ways, such as NANA's jumping into the state's nascent film industry. Many of them are contributing mightily to the Alaska economy, annually providing tens of millions of dollars in dividends to their Alaska Native shareholders. And they've launched nonprofits that are hugely successful in promoting educational opportunities and sustaining culture and language.

In this issue, we celebrate some of those victories, made possible by a unique federal law that turned 40 in December. The Alaska Native Claims Settlement Act launched more than 200 Native village corporations and 13 regional corporations, seeding them with nearly $1 billion and 44 million acres to help improve social and economic conditions for Alaska Natives.

Getting those corporations on their feet was an overwhelming task, but it may have been the easy part. Now that the corporations have found success, they have something to lose. And that might make the next 40 years tougher than the first 40.

The corporations came from humble backgrounds. Many early leaders grew up in villages sleeping on dirt floors, living off the land for meat and fish, with death through disease or hunger sometimes close at hand. To survive, they relied on a culture of sharing, with fortunate communities distributing their bounty to the needy. That culture was reflected in one of the act's most unique clauses: a sharing provision that requires the regional corporations to distribute more than two-thirds of their resource-development profit with their peers. It's helped the poorest Native corporations survive lean times.

Overall, the companies seem well-positioned to prepare for future scarcity, a fate that's possible if Congress limits the controversial federal-contracting advantages the corporations have enjoyed under the Small Business Administration 8a program.

The companies have created endowments to support shareholder education. They've established funds to continue paying dividends for decades to come. They've invested in opportunities around the world to weather regional slumps.

But the most valuable tool Alaska Native corporations have? Their past. They shouldn't forget their modest backgrounds, those unpredictable and lean times that fueled the effort to create the corporations and establish a fair land settlement with Congress. As young Natives take the reins of leadership, they'll do well to remember the land and the people that gave rise to their success. ■

Quyana,

—ALEX DEMARBAN
Editor

TELL US WHAT YOU THINK: Have something to say about the magazine—or an issue facing the Native community? E-mail your thoughts (with your name and contact information) to *magazine@firstalaskans.org* or write to: Letters to the Editor, *First Alaskans* magazine; 606 E Street, Ste. 200, Anchorage, AK 99501.

MTNT LIMITED

MCGRATH ◆ TAKOTNA ◆ NIKOLAI ◆ TELIDA

2008 ANNUAL REPORT

Celebration of Life

Lena Evan Petruska

On March 3, 2009, Lena Petruska attained the distinction of being the first of our shareholders to reach the age of 100! Her family and friends honored Lena by celebrating this momentous occasion with her in Nikolai.

Lena was born in the vicinity of the Tatlawiksuk River, along the middle-Kuskokwim. Her grandmother was from the Innoko River area but had fled to the Kuskokwim to get away from the warring on the Innoko. Her father was an Evan whose relatives lived at Slow Fork.

When Lena was about a year old her Mother died and her grandparents took her to live with them. When Lena was a few years old, she and her Grandma walked cross-country from Vinasale to the Big River in the Lone Mountain area. There they lived with Lena's sister Aniska and her husband. They lived the traditional subsistence life-style, hunting and gathering and trapping. When a moose was killed they would move their camp to the kill area and remain there until the meat was gone. When her grandma died she was buried by Lone Mountain. Later Lena's sister, Aniska, married Jack Stewart and they spent summers at McGrath. After her sister died, Lena lived with the Vanderpool family at McGrath.
In her late teens Lena married Sergie Petruska and they lived at Telida and Slow Fork before moving to Nikolai where Sergie died in 1953. She worked right along with her husband to provide for their family. Early in their marriage they went with another family, walking from Slow Fork to the mountains to hunt moose. Then they built a boat with driftwood and raw moose hides, and floated downriver with the meat. When she told of looking over the edge of the boat and seeing the rocks on the bottom of the clear stream, she said, "It'iyats tsighe!" (Really scary!) Lena has lived through a century of change – from the hunter/gatherer lifestyle to modern day community living. Seeing her drive a 4-wheeler for the first time was a shock to some of us, but it is evidence of her acceptance of change.

Lena is the mother of nine children, six of whom are living today. Her family continues to increase as the great and great-great grandchildren come along! Lena has a warm and accepting spirit, and through the years she has also "collected" other children and grand-children not of her culture who are blessed by her love and friendship.

Though she had little "formal" education, Lena learned many traditional stories from her Grandmother which have been written and shared through the Nikolai Bilingual Program. And, like her Grandmother, Lena is a gifted story teller. She is actually trilingual – speaking Upper Kuskokwim Athabaskan and Yupik, as well as English!

Lena loves to play cards (and can beat your socks off!), and she also loves to play Bingo. Her hands have produced a lot of moose and caribou skin boots, moccasins, knit stockings and gloves, and countless items of exceptionally fine beadwork which are part of her legacy to us. Centenarian Lena, we honor you!

MTNT's sincere thanks go to Sally Collins for the bio and to Ray Collins for the photo

MTNT, LIMITED
MISSION STATEMENT

INCREASE CORPORATE PROFITABILITY, PROVIDE SHAREHOLDERS WITH ECONOMIC BENEFITS AND OPPORTUNITIES, AND PROTECT OUR CORPORATE ASSETS AND LAND BASE WHILE RECOGNIZING THE TRADITIONAL CULTURAL VALUES AND SUBSISTENCE LIFESTYLES OF OUR SHAREHOLDERS.

MTNT

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1000 O'MALLEY ROAD, SUITE 107

ANCHORAGE, AK 99515

TELEPHONE (907) 569-6868

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The New MTNT Logo

MTNT embraces a dual vision for its Shareholders: Developing a prosperous business while still retaining ties to our Culture and our Past. A representation of that vision is a new logo we have adopted for MTNT and our family of companies. You will notice that we have equally sized each letter, representing the equality of the relationships among the villages of McGrath, Takotna, Nikolai, and Telida. Each village has an equal footing, with qualities that strengthen all our villages. This reminds us of our ties to one another as people, our strength in unity, our history, our heritage, our future, and how all of that is held together by a force larger than one person, larger than one village.

The Sky

The color blue was chosen for the MTNT letters to represent the endless expanse of the sky. The sky is our roof in so many regards and a window into eternity. The sky throws down heat rays, tosses out snowflakes, wrings out rain drops, and lights our winter nights with a thousand stars driven sometimes alongside the moon, graced at other times by the sun and across its canvas many colors are painted - sometimes just for pure joy, other times to warn of storms. Our sky is an endless presentation of the beauty of our home.

The Land

Below the lettering is a green line that represents our land—the land of our ancestors and our childhood; the land of our children, that gave birth to us and that receives us when our days are over. We are tied inexorably to the land like an unborn child to its mother.

The Water

Below the land is the water. The color blue represents the Takotna, Kuskokwim, and Big Rivers, and all the rivers and streams in the MTNT Region around which our lives revolve for subsistence and for gathering, bringing together people, places, and things. Just as a river is always in a constant state of change, so is our family of companies.

The Moose

In the not too far distant past, Athabascan people living in interior Alaska were nomadic—a characteristic dictated by our environment. We subsisted on a changing food chain impacted by seasons and climatic conditions. In the summer, we gathered along various waterways, where we caught salmon, whitefish, sheefish, and grayling. In the winter, we followed big and small game, but it was the moose that provided the primary source of food. Moose are neither stationary, nor easily found. We have come to honor this animal for its many gifts. Moose not only fed us, but clothed us as well. Nothing is more important to us than a healthy moose harvest every fall, knowing that we can enter winter with a supply of food that is both good for our bodies and provides us with physical security.

It is in our nature to store resources in preparation for hard times. We know we will eat well during the harsh winter months as we face frigid winter temperatures, a significantly reduced amount of daylight, and the added physical labor involved to keep the wood stoves full and our families safe. Today, we still hunt the moose browsing along our rivers, but we also hunt for subsistence in the form of business opportunities throughout the World that will provide dividends to our Shareholders.

The Sun

The sun brings light in all seasons, as it did to our ancestors and as it does now, always bringing beauty and hope to our hearts and minds. In the warmer seasons, the sun cheers our hearts; in the cooler/cold seasons, the sun shows us a world of crystal clear beauty. The sun lights our path and shows us the possibilities of the future. At the same time, it keeps our past visible.

MTNT, Limited

McGrath, Takotna, Nikolai and Telida

September 4, 1976 Plan and Agreement of Consolidation approved
Approved by each Alaska Native Village Corporation in October 1976
Filed for Record, State of Alaska, November 15, 1976

Gold Creek, Ltd. (Takotna)
Capitol Stock: 10,000
Original Shareholders: 38
Last Annual meeting Held: October 14, 1976

Seseui, Inc. (Telida)
Capitol Stock: 5,000
Original Shareholders: 26
Last Annual Meeting Held: October 29, 1976

Don Lee, Inc. (Nikolai)
Capitol Stock: 20,000
Original Shareholders: 93
Last Annual Meeting held: October 28, 1976

Chamai, Inc. (McGrath)
Capitol Stock: 50,000
Original Shareholders: 176
Last Annual Meeting held: October 22, 1976

MTNT, Limited
Capitol Stock: 85,000
Original Shareholders: 333
2008 Number of Shareholders: 340
First Annual Meeting held in 1977.

Mission Statement

Increase corporate profitability, provide shareholders with economic benefits and opportunities, and protect our corporate assets and land base while recognizing the traditional cultural values and subsistence lifestyle of our shareholders.

MTNT's Villages

McGrath is located 221 miles northwest of Anchorage and 269 miles southwest of Fairbanks in Interior Alaska. Slightly more than half of the population are Athabascans, Aleuts and both Yupik and Inupiaq Eskimos. McGrath was a seasonal Upper Kuskokwim Athabascan village which was used as a meeting and trading site for Big River, Nikolai, Telida and Lake Minchumina residents. The Old Town McGrath site was originally located across the river. It is adjacent to the Kuskokwim River directly south of its confluence with the Takotna River. McGrath is located in the Mt. McKinley Recording District. The area encompasses 48.9 sq. miles of land and 5.7 sq. miles of water. The McGrath area has a cold, continental climate. Average summer temperatures range from 62 to 80, winters temperatures can range from -64 to 0. Precipitation is light, averaging 10 inches per year, including an average snowfall of 86 inches. The Kuskokwim River is generally ice-free from May through early October. There are no road connections to McGrath, but there is an infrastructure of local roads. Winter trails are marked to Nikolai (50 mi.) and Takotna (20 mi.) Residents rely on air service and barges to deliver cargo. U.S. Census data for Year 2000 showed 206 residents as employed. The unemployment rate at that time was 10.43 percent, although 27.97 percent of all adults were not in the work force. The median household income was $43,056, per capita income was $21,553, and 9.8 percent of residents were living below the poverty level. McGrath has a population of 315 (*City of McGrath 2008).* It is a check point for the Iditarod sled dog race. 2008 fuel prices per gallon were $7.04 for Heating Fuel and $6.45 for gas. (*Alaska Digest August 2008)*

Nikolai is an Upper Athabascan Village relying heavily on subsistence activities. Nikolai is located in Interior Alaska on the south fork of the Kuskokwim River, 46 air miles east of McGrath. Nikolai is an Upper Kuskokwim Athabascan village. Nikolai is located in the Mt. McKinley Recording District. The area encompasses 4.5 sq. miles of land and 0.3 sq. miles of water. Nikolai has a cold, continental climate with relatively warm summers. Average summer temperature range from 42 to 80, winter temperatures range from -62 to 0. Precipitation is light, averaging 16 inches per year, including an average snowfall of 56 inches. The River is ice-free generally from May through late October. Nikolai has been relocated at least twice since the 1880s. One of the former sites was reported in 1899 to have a population of six males. The present site was established around 1918. Nikolai was the site of a trading post and roadhouse during the gold rush. It was situated on the Rainy Pass Trail, which connected the Ophir gold mining district to Cook Inlet. It became a winter trail station along the Nenana-McGrath Trail, which was used until 1926. U.S. Census data for Year 2000 showed 18 residents as employed. The unemployment rate at that time was 37.93 percent, although 70 percent of all adults were not in the work force. The median household income was $15,000, per capita income was $11,029, and 27.63 percent of residents were living below the poverty level. Access to Nikolai is by air or water. A winter trail is marked to McGrath (50 mi.) Nikolai's population is 93. (*State 2006*). It is a check point for the Iditarod sled dog race. 2008 fuel prices per gallon for Heating Fuel was $7.00 and $9.00 for gas. (*Oline Petruska April 2009)*

Takotna is a mixed population of non-Natives, Ingalik Athabascans and Eskimos and is heavily reliant on subsistence activities. Takotna is located in Interior Alaska on the north bank of the Takotna River in a broad scenic river valley, 17 air miles west of McGrath in the Kilbuck-Kuskokwim Mountains. Takotna is located in the Mt. McKinley Recording District. The area encompasses 23.5 sq. miles of land and 0.0 sq. miles of water. Takotna has a cold, continental climate. Summer temperatures average 42 to 80, winter temperatures range from -42 to 0. The Takotna River is generally ice-free from May through late October. Takotna has been known as Berry Landing, Portage City, Takotna City, Takotna Station, and Tocotna. U.S. Census data for Year 2000 showed 12 residents as employed. The unemployment rate at that time was 0 percent, although 58.62 percent of all adults were not in the work force. The median household income was $14,583, per capita income was $13,143, and 16.22 percent of residents were living below the poverty level. Access to Takotna is by air or water. Cargo is offloaded at Sterling Landing, 24 miles southeast of Takotna. The community has 80 miles of local roads that connect with Tatalina AFS, Sterling Landing and existing mines. A winter trail is marked to McGrath (20 miles.) Takotna's population is 53. *(State 2005)* .) It is a check point for the Iditarod sled dog race. 2008 fuel prices per gallon were $ 5.15 for Heating Fuel and $4.72 for gas. (*Dick Newton April2009)*

Telida is an Upper Athabascan Village relying heavily on subsistence activities. Telida located on the south side of the Swift Fork (McKinley Fork) of the Kuskokwim River, about 50 miles northeast of Medfra and approximately 250 air miles northeast of McGrath. Telida is located in the Mt. McKinley Recording District. The area encompasses 57.0 sq. miles of land and 0.9 sq. miles of water. The area experiences a cold, continental climate. Summer temperatures average 42 to 80, winters can range from -60 to 0. The Kuskokwim is generally ice-free from May through October. The village has had three locations; the first was located over one mile upstream, and was first visited by army explorers in 1899. When the course of the Swift Fork changed, the first site was abandoned for a move to what is now called "Old Telida." In 1916, some residents moved to the present day site, "New Telida," four or five miles downstream from Old Telida. U.S. Census data for Year 2000 showed 0 residents as employed. The unemployment rate at that time was 0 percent, although 0 percent of all adults were not in the work force. The median household income was $0, per capita income was $0, and 0 percent of residents were living below the poverty level. Access to Telida is primarily by air. There is no road connection, but a winter trail connects the village with Nikolai. Telida's population is 3. (*State 2005*) No fuel prices available.

McGrath

Current Population:	341 (2011 Alaska Department of Labor Estimate)
Incorporation Type:	2nd Class City
Located In:	Yukon-Koyukuk Census Area
Taxes:	Sales: None, Property: None, Special: 10% Bed Tax

Location and Climate

McGrath is located 221 miles northwest of Anchorage and 269 miles southwest of Fairbanks in Interior Alaska. It is adjacent to the Kuskokwim River, directly south of its confluence with the Takotna River. The community lies at approximately 62.956390° North Latitude and -155.595830° West Longitude. (Sec. 18, T033N, R033W, Seward Meridian.) McGrath is located in the Mt. McKinley Recording District. The area encompasses 48.9 sq. miles of land and 5.7 sq. miles of water.

The McGrath area has a cold, continental climate. Average summer temperatures range from 62 to 80 °F, and winters temperatures can range from -64 to 0 °F. Annual precipitation is light, averaging 10 inches per year, with an average snowfall of 86 inches. The Kuskokwim River is generally ice-free from June through October

History, Culture and Demographics

McGrath was a seasonal Upper Kuskokwim Athabascan village that was used as a meeting and trading place for Big River, Nikolai, Telida, and Lake Minchumina residents. The Old Town McGrath site was originally located across the river. In 1904, Abraham Appel established a trading post at the old site. In 1906, gold was discovered in the Innoko District and at Ganes Creek in 1907. Since McGrath is the northernmost point on the Kuskokwim River accessible by large riverboats, it became a regional supply center. By 1907, a town was established and named for Peter McGrath. In 1909, the Alaska Commercial Company opened a store. The Iditarod Trail also contributed to McGrath's role as a supply center. From 1911 to 1920, hundreds of people walked and mushed over the trail on their way to the Ophir gold districts. Mining sharply declined after 1925. After a major flood in 1933, some residents decided to move to the south bank of the river. Changes in the course of the river eventually left the old site on a slough, useless as a river stop. In 1937, the Alaska Commercial Company opened a store at the current location. In 1940, an airstrip was cleared, the FAA built a communications complex, and a school was opened. McGrath became an important refueling stop during World War II as part of the Lend-Lease Program between the U.S. and Russia. In 1964, a new high school was built, attracting boarding students from nearby villages. The city was incorporated in 1975. The federally recognized Tribe in McGrath was established in 1993.

A federally-recognized tribe is located in the community -- the McGrath Native Village; Medfra Traditional Council (not recognized). Slightly more than half of the population are Athabascans and Eskimos. As a regional center, McGrath offers a variety of employment opportunities, but subsistence remains an important part of the local culture.

According to Census 2010, there were 195 housing units in the community and 147 were occupied. Its population was 36.7 percent American Indian or Alaska Native; 41.6 percent white; 0.6 percent Asian; 0.9 percent Pacific Islander; 19.9 percent of the local residents had multi-racial backgrounds. Additionally, 2.6 percent of the population was of Hispanic decent.

Facilities, Utilities, Schools and Health Care

McGrath operates a piped water system that serves nearly all 178 households; a few homes have individual wells or haul water. Individual septic tanks are used by the majority of residents; a limited city sewage system serves approximately 34 homes. A private firm, McGrath Trash & Refuse, collects refuse for disposal at the city landfill. Electricity is provided by McGrath Light & Power. There are 2 schools located in the community, attended by 177 students. Local hospitals or health clinics include McGrath Health Center. The clinic is a qualified Emergency Care Center. Emergency Services include river floatplane and air access. Emergency service is provided by 911 Telephone Service volunteers and a health aide. Auxiliary health care is provided by Kuskokwim Valley Rescue Squad (Dispatch 907-524-9111 Office 524-3299).

Economy

McGrath functions as a transportation, communications, and supply center in Interior Alaska. It has a diverse cash economy, though many families rely upon subsistence. Salmon, moose, caribou, bear, and rabbits are utilized. Some residents trap and tend gardens. In 2010, 1 resident held a commercial fishing permit.

The 2006-2010 American Community Survey (ACS) estimated 237[1] residents as employed. The public sector employed 40.9%[1] of all workers. The local unemployment rate was 6.0%[1]. The percentage of workers not in labor force was 20.0%[1]. The ACS surveys established that average median household income (in 2010 inflation-adjusted dollars) was $70,750 (MOE +/-$10,465)[1]. The per capita income (in 2010 inflation-adjusted dollars) was $34,285 (MOE +/-$5,723)[1]. About 8.8%[1] of all residents had incomes below the poverty level.

Transportation

McGrath is not connected to Alaska's road system, but local roads are used by ATVs and trucks. Winter trails are marked to Nikolai (50 mi) and Takotna (20 mi). Residents rely on air service and barges to deliver cargo. Air facilities include a state-owned 5,936' by 100' wide asphalt runway with a 2,000' by 60' wide crosswind landing strip. The Kuskokwim is the seaplane base. A boat launch ramp site is available.

Organizations with Local Offices

City - City of McGrath
P.O. Box 30
McGrath, AK 99627
Phone 907-524-3825
Fax 907-524-3536
E-mail mcgrathcityclerk@gmail.com
Web http://www.mcgrathalaska.net/

Electric Utility - McGrath Light and Power
P.O. Box 52
McGrath, AK 99627-0052
Phone 907-524-3009
Fax 907-524-3062

E-mail legrass@mtnt.net

School District - Iditarod Area School District
P.O. Box 90
McGrath, AK 99627
Phone 907-524-3033
Fax 907-524-3217

Web http://www.iditarodsd.org

Tribe - federally recognized - McGrath Native Village
P.O. Box 134
McGrath, AK 99627

Phone 907-524-3024
Fax 907-524-3899
E-mail mnvc@mcgrathalaska.net

Village Corporation - MTNT, Limited
P.O. Box 309
McGrath, AK 99627
Phone 907-524-3391
Fax 907-524-3062
Web http://www.mtnt.net/

Regional Organizations

Regional Native Corporation - Doyon, Limited
1 Doyon Place, Suite 300
Fairbanks, AK 99701-2941
Phone 907-459-2000
Fax 907-459-2060
E-mail info@doyon.com
Web http://www.doyon.com

Regional Nonprofit Organization

Tanana Chiefs Conference
122 First Ave, Suite 600
Fairbanks, AK 99701
Phone 907-452-8251
Fax 907-459-3851

Web http://www.tananachiefs.org

Native Housing Authority - Interior Regional Housing Authority
828 27th Avenue
Fairbanks, AK 99701
Phone 907-452-8315
Fax 907-456-8941
E-mail icatalone@irha.org
Web http://www.irha.org/

Nikolai

Current Population:	101 (2011 Alaska Department of Labor Estimate)
Incorporation Type:	2nd Class City
Located In:	Yukon-Koyukuk Census Area
Taxes:	Sales: None, Property: None, Special: None

Location and Climate

Nikolai is located in Interior Alaska on the south fork of the Kuskokwim River, 46 air miles east of McGrath. The community lies at approximately 63.013330° North Latitude and -154.375000° West Longitude. (Sec. 36, T028S, R023E, Kateel River Meridian.) Nikolai is located in the Mt. McKinley Recording District. The area encompasses 4.5 sq. miles of land and 0.3 sq. miles of water.

Nikolai has a cold, continental climate with relatively warm summers. Average summer temperature range from 42 to 80 °F, and winter temperatures range from -62 to 0 °F. Annual precipitation is light, averaging 16 inches per year, with 56 inches of snow. The river is generally ice-free from June through October.

History, Culture and Demographics

Nikolai is an Upper Kuskokwim Athabascan village and has been relocated at least twice since the 1880s. One of the former sites was reported in 1899 to have a population of six males. The present site was established around 1918. Nikolai was the site of a trading post and roadhouse during the gold rush. It was situated on the Rainy Pass Trail, which connected the Ophir gold mining district to Cook Inlet. It became a winter trail station along the Nenana-McGrath Trail, which was used until 1926. By 1927, the St. Nicholas Orthodox Church had been constructed. In 1948, a private school was established, and in 1949 a post office opened. Local residents cleared an airstrip in 1963, which heralded year-round accessibility to the community. The city was incorporated in 1970.

A federally-recognized tribe is located in the community -- the Nikolai Village. Nikolai is an Athabascan community. Residents are active in subsistence food-gathering. The sale, importation, and possession of alcohol is prohibited in the city.

According to Census 2010, there were 48 housing units in the community and 37 were occupied. Its population was 80.9 percent American Indian or Alaska Native; 7.5 percent white; 11.7 percent of the local residents had multi-racial backgrounds.

Facilities, Utilities, Schools and Health Care

All 47 households and facilities use individual wells; of these, only 2 units lack plumbing. Thirty-three (33) homes, including 10 HUD housing units north of the airport, are connected to the piped sewage system. The remaining 15 homes use septic tanks. Electricity is provided by Nikolai Light & Power Utility. There is one school located in the community, attended by 18 students. Local hospitals or health clinics include Nikolai Clinic. Emergency Services have river and air access and are within 30 minutes of a higher-level satellite health care facility. Emergency service is provided by volunteers and a health aide.

Economy

Village employment peaks during the summer when construction gets underway. The city, state, and federal government provide the primary year-round employment. Residents rely heavily on subsistence activities for food and wood for heat. Some residents tend gardens. Salmon, moose, caribou, rabbits, and the occasional bear are utilized. Trapping and handicrafts also provide income.

The 2006-2010 American Community Survey (ACS) estimated 15[1] residents as employed. The public sector employed 53.3%[1] of all workers. The local unemployment rate was 58.3%[1]. The percentage of workers not in labor force was 30.8%[1]. The ACS surveys established that average median household income (in 2010 inflation-adjusted dollars) was $15,625 (MOE +/-$11,403)[1]. The per capita income (in 2010 inflation-adjusted dollars) was $5,785 (MOE +/-$1,711)[1]. About 92.6%[1] of all residents had incomes below the poverty level.

Transportation

Access to Nikolai is by air or water. A state-owned 4,003' long by 75' wide gravel airstrip is available. Barges supply fuel and heavy equipment. Boats, ATVs, and snowmachines are used for recreation and subsistence activities. A winter trail is marked to McGrath (50 mi). Nikolai is a checkpoint for the Iditarod Trail Sled Dog Race held in March.

Organizations with Local Offices

City - City of Nikolai
P.O. Box 9145
Nikolai, AK 99691-0045
Phone 907-293-2113
Fax 907-293-2120
E-mail cityofnikolai@yahoo.com

Electric Utility - City of Nikolai
P.O. Box 9145
Nikolai, AK 99691-9145
Phone 907-293-2113
Fax 907-293-2120
E-mail cityofnikolai@yahoo.com

Tribe - federally recognized - Nikolai Village
P.O. Box 9105
Nikolai, AK 99691
Phone 907-293-2311

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Takotna

Current Population:	49 (2011 Alaska Department of Labor Estimate)
Incorporation Type:	Unincorporated
Located In:	Yukon-Koyukuk Census Area
Taxes:	No taxing authority

Location and Climate

Takotna is located in Interior Alaska on the north bank of the Takotna River in a broad scenic river valley, 17 air miles west of McGrath in the Kilbuck-Kuskokwim Mountains. The community lies at approximately 62.988610° North Latitude and -156.064170° West Longitude. (Sec. 35, T034N, R036W, Seward Meridian.) Takotna is located in the Mt. McKinley Recording District.

Takotna has a cold, continental climate. Summer temperatures average 42 to 80 °F, and winter temperatures range from -42 to 0 °F. The Takotna River is generally ice-free from June through October.

History, Culture and Demographics

Takotna has been known as Berry Landing, Portage City, Takotna City, Takotna Station, and Tocotna. In 1908, merchants in Bethel hired Arthur Berry to bring supplies up the Takotna River. The village was founded at the farthest point on the river Berry's small sternwheeler was able to reach. By 1912, the community had several stores that supplied miners. Gold discoveries in the upper Innoko Region enabled the town to prosper. By 1919, there were several commercial companies, roadhouses, a post office, and about 50 houses. In 1921 the Alaska Road Commission improved the Takotna-Ophir road, and an airfield was constructed. In 1923 a radio station began broadcasting in Takotna, and the town had its own newspaper, The Kusko Times. Low waters at times precluded the arrival of steamboats, so the Takotna-Sterling Landing road was constructed to the Kuskokwim River in 1930. During the 1930s, however, McGrath became the more dominant supply center, and the ACC store closed. In 1949, construction was begun on nearby Tatalina Air Force Station. It was the site of a White Alice communications system, but operations were phased out during the 1980s.

A federally-recognized tribe is located in the community -- the Takotna Village. Takotna is a mixed population of non-Natives, Ingalik Athabascans, and Eskimos. Subsistence is a prevalent activity. The sale of alcohol is prohibited in the village.

According to Census 2010, there were 41 housing units in the community and 22 were occupied. Its population was 23.1 percent American Indian or Alaska Native; 50 percent white; 26.9 percent of the local residents had multi-racial backgrounds. Additionally, 5.8 percent of the population was of Hispanic decent.

Facilities, Utilities, Schools and Health Care

Water from Gold Creek is treated and hauled by residents from the washeteria. Water is also hauled from the Takotna Waterworks. Approximately 20% of homes have storage tanks with running water for the kitchen, but no homes are completely plumbed. Community buildings use individual wells and septic tanks. Honeybuckets and outhouses are used for sewage disposal. The high school has no running water or restrooms. Electricity is provided by Takotna Community Assoc. Utilities. There is one school

located in the community, attended by 13 students. Local hospitals or health clinics include Takotna Clinic. Emergency Services have limited highway river and air access. Emergency service is provided by volunteers and a health aide. Auxiliary health care is provided by Takotna Rescue Squad (907-298-2114).

Economy

Takotna has a combined cash and subsistence economy. Employment is through the school district, post office, clinic, local businesses, and seasonal construction. Most residents are involved in subsistence activities. Moose and salmon are the primary meat sources. Many residents garden during the summer.

The 2006-2010 American Community Survey (ACS) estimated 24[1] residents as employed. The public sector employed 20.8%[1] of all workers. The percentage of workers not in labor force was 31.4%[1]. The ACS surveys established that average median household income (in 2010 inflation-adjusted dollars) was $59,167 (MOE +/-$40,041)[1]. The per capita income (in 2010 inflation-adjusted dollars) was $9,007 (MOE +/-$5,661)[1]. About 56.3%[1] of all residents had incomes below the poverty level.

Transportation

Access to Takotna is by air or water. There is a state-owned 1,717' long by 45' wide gravel airstrip and a 3,800' gravel runway at Tatalina Air Force Station ten miles southeast of town. Cargo is offloaded at Sterling Landing, 24 miles southeast of Takotna. The community has 80 miles of local roads that connect with Tatalina AFS, Sterling Landing, and existing mines. A winter trail is marked to McGrath (20 mi). It is a check point for the Iditarod Trail Sled Dog Race.

Organizations with Local Offices

Community Non Profit - Takotna Community Association
P.O. Box 7509
Takotna, AK 99675
Phone 888-856-6186
Fax 907-298-2325
E-mail tca@starband.net

Electric Utility - Takotna Community Association Incorporated
P.O. Box 7509
Takotna, AK 99675
Phone 888-856-6186
Fax 907-298-2325
E-mail tca@starband.net

Tribe - federally recognized - Takotna Village
P.O. TYC
Takotna, AK 99675
Phone 907-298-2212
Fax 907-298-2314

Telida

Community Overview

Telida is located on the south side of the Swift Fork (McKinley Fork) of the Kuskokwim River, about 50 miles northeast of Medfra. The area experiences a cold, continental climate. Summer temperatures average 42 to 80 °F, and winters can range from -60 to 0 °F. The Kuskokwim is generally ice-free from June through October.

Athabascan Indian folklore indicates Telida's descendants are from two sisters, survivors of a Yukon Indian attack, who fled from the McKinley area to Telida Lake where they discovered whitefish at its outlet. Telida means "lake whitefish" in Athabascan. The women were later discovered by stragglers from the Yukon party, who married the women and settled at the lake. The village has had three locations; the first was located over one mile upstream and was first visited by army explorers in 1899. When the course of the Swift Fork changed, the first site was abandoned what is now called "Old Telida." In 1916, some residents moved to the present day site, "New Telida," four or five miles downstream from Old Telida. A Russian Orthodox chapel, St. Basil the Great, was built at the old site in 1918. In 1920-21, Telida was a stopping point on the McGrath-Nenana Trail, and hundreds of people used the roadhouse. In 1935, the old village flooded, and the remaining residents relocated to the new site. In 1958, a fire cleared an area, in which the villagers constructed an airstrip. Many families moved to Takotna during the school year and lived in Telida only during summer months. A local school was built in the 1970s, but the population has declined since, and the school has been closed. Telida is an Upper Kuskokwim Athabascan village. Subsistence is an important activity.

Telida is heavily dependent on subsistence activities. Employment is primarily in seasonal summer jobs. Trapping, handicrafts, and gardening also sustain residents. Access to Telida is primarily by air. A locally-maintained 1,900' long by 40' wide turf/dirt airstrip is available. Small boats can reach Telida, but snags and sticks downriver prevent large boat access. There is no road connection, but a winter trail connects the village with Nikolai. Snowmobiles, motor bikes, and ATVs are used.

Contact Information

Tribe - federally recognized - Telida Village
3131 North lazy 8 Circle
Wasilla , AK 99645
Phone 907-864-0629
Fax 907-376-3540
E-mail kuskoyim@aol.com

From:	Bob Sattler
To:	donlingoldeis, POA
Cc:	Paul Mayo
Subject:	[EXTERNAL] Donlin Gold Draft EIS comment
Date:	Wednesday, May 25, 2016 7:38:41 PM
Attachments:	2016_MayDonlin_EIIS_comments.pdf

Dear Sirs,

Please find attached, comments on draft EIS on the proposed Donlin Creek Gold Mine.

Thanks you,

Robert Sattler
Environmental Quality Analyst
Tanana Chiefs Conference

May 25, 2016
Army Corps of Engineers
Alaska District
Re: Donlin Gold Mine Draft EIS comments

Dear Sirs,

These comments provide written comment on the draft environmental impact statement for the proposed Donlin Creek Gold Mine sites on the middle Kuskokwim River. You may know that Tanana Chiefs Conference (TCC) is the regional ANCSA non-profit consortium for Native villages, or federally recognized Tribes of Interior Alaska. Members of the TCC include the Upper Kuskokwim villages of Nicholia, McGrath, Takotna and Telida and these villages constitute an ethnogeographic subregion of Interior Alaska. The Upper Kuskokwim villages are potentially affected parties in the federal environmental review for the Donlin Gold Project. Project managers Donlin and the Army Corps have
PUB 1 met and consulted with representatives of the Upper Kuskokwim villages during the National Environmental Policy Act review for the proposed mining project and must continue a meaningful dialogue to address their concerns, sentiments and perspectives. The consortium of Upper Kuskokwim villages should be afforded the opportunity to understand the socioeconomic and demographic implications of the project as the Donlin project advances through the permitting and beyond.

Consultation and Coordination

Comment provided here are compilations based on previous meetings between Donlin, Army Corps and Tribal leadership of the Upper Kuskokwim villages, public hearings on the project, conversations between Trial members and TCC staff, a review of the EIS by internal professional staff at TCC and discussions between TCC staff, tribal leaders, ethnographers and linguists familiar with the cultural landscape of the region. Though many of the observations expressed in these comments are based on communications between multiple interested parties, these comments are provisional and subject to change as the project evolves. Similarly, as the lead federal agency, the Army Corps, should advance
G2G 1 consultations with Upper Kuskokwim villages and ensure that their interests, concerns and perspectives are considered throughout the project planning and operation phases of the proposed project. Consideration of their views throughout the life of the Donlin Mine project is a primary Tribal issue to conform to Tribal consultation and coordination, socioeconomics and environmental justice considerations.

With this background, these comments are not intended to supercede interests and perspectives of the Upper Kuskokwim village members and leadership. Consequently, the Army Corps and other
MON 11 cooperating agencies in the Donlin EIS need to continue a meaningful dialogue with those villages. Consultation and coordination with the Upper Kuskokwim villages during the planning phase should serve their interests in the construction and operational phases of the project. In this sense, the Upper Kuskokwim villages need to be included in the Mitigation Monitoring and Adaptive Management plans for the project. Membership in the monitoring component should ensure that the villages in the headwaters of the Kuskokwim River have a voice in the process for perceived and inadvertent adverse effects.

Natural Gas Pipeline

What has emerged as one of the largest concerns among discussions with tribal members and leadership are issues over the placement and activities relating to the proposed natural gas pipeline.

SUB 8 The siting of the pipeline happens to fall in the high-yield subsistence areas and poses interference to the habitats and home ranges of large mammal subsistence taxa. Further concerns were expressed at

LAND 3 the McGrath public hearing about access the pipeline corridor may provide into the northern Alaska Range from the large population center in southcentral and percolate user conflicts, trespass and encroachment problems for Upper Kuskokwim peoples throughout their customary and traditional use areas. The construction of new airfields along the routing to support construction and

SUB 8 maintenance also poses significant user conflicts.

To offset this concern, however, are interests of bringing lower cost energy to the villages. Should the

TWL 4 pipeline be designed to accommodate the energy needs of the Upper Kuskokwim villages, the potential benefit may offset the negative repercussions of the pipeline that traverses their tradictional and customary subsistence lands. In the McGrath public hearing, suggests were offered to relocate the

PAA 24 pipeline footprint to reduce the impacts to the natural habitats of game animals, the visual environment and the socio-cultural environment relating to the geography along the northern foothills of the Alaska Range

River Barging

FISH 5 The transportation system proposed in the Kuskokwim River is another large topic of concern among stakeholders in the reaches of the river. Barge traffic to the extent proposed in the draft EIS causes concern to the fish populations and other habitats. Particularly, anadromous salmon make their way beyond the project area into the Upper Kuskokwim to spawn where fry develop in the freshwater habitats and return to the ocean as smolt in a year or two after they hatch. The extent of the proposed barge traffic may pose significant adverse effects to the adult salmon migrating upstream through the barging reach of the Kuskokwim River and the heavy barge traffic may affect smolt as they descend the river from the headwater spawning grounds.

FISH 6 For example, a comparable case where a large boat wake has adversely effected migratory salmon comes from the Upper Yukon River. The leisure cruise company, Holland America, formerly ran a large catamaran between Dawson and Eagle during summer months as a transportation link between boat and bus transport of their customers. Local residents observed and voiced concerns over adverse effects including noise, hazards posed to small boaters capsizing, and effects to salmon smolt in their outmigration to the ocean. Particularly disturbing were observations that the wake upon breaking along the shoreline would displace schools of migrating smolt onto the dry ground where the smolt would desiccate. Another significant adverse effect observed included accelerated erosion along

BARG 8 riverbanks, especially during high water that contributed to rapid bank retreat. This latter issue would be a potential complication to barge traffic in a particularly shallow river system such as the middle Kuskokwim. Accelerated erosion along the margin of channels would increase the sediment supply and contribute to the formation of shoals. Shallow reaches, or shoals, formed by increased erosion would impede or halt barge traffic.

FISH 6 The potential interference the barge traffic may cause to the riverine habitat and associated salmon migration is a concern that needs further assessment. People in the Upper Kuskokwim have begun seeing a return of large salmon the headwater spawning grounds and care to preserve this trend. The proposed several-fold increase in barge traffic poses intermittent or cyclical effects to river erosion,

shoal development, disturbances to upstream migratory pathways of salmon and possible increased mortality to ocean returning smolt.

Socioeconomic

SER 5 In the socioeconomic human environment, a universal issue and promotional theme of the mine project is job creation and the opportunity for long-term employment. The villages in the Upper Kuskokwim region are particularly sympathetic to the socioeconomic environment the mine would bring to the region. As an area upstream of the immediate census domain of the project, residents are very interested in employment opportunities and associated socioeconomic improvements to the region. Along with employment are related private sector opportunities, job training and related technical and profession education workforce development components. Employment is a big concern since it is one of the largest potential benefits to moderate, or balance, the potential impacts the project poses to the upper Kuskokwim communities.

Cultural Resources/Subsistence

CUL 2 The cultural resources section of the environmental review may be expanded to include sensitive ceremonial or other religious use of places, plants, animals and minerals. These types of resources go beyond the conventional physical archaeological site survey methodology within a corridor or project facilities footprint and may be classified as traditional cultural properties, sacred sites, cultural and ethnographic landscapes or historic mining landscapes. As you may know, traditional cultural landscapes are places associated with cultural practices or beliefs of a living community that are rooted in that community's history and are important in maintaining continuity in cultural identity of that community. These are often areas that represent locations where important traditional events, activities, or cultural observances have taken place in the past, yet remain active in the community's or tribes's cultural practices (quoted from definition of TCPs, Parker and King 1992, National Register Bulletin, National Park Service).

Shortcomings of the cultural resources and subsistence portions of the affected environment include ethnographic, linguistic and subsistence literature sources. Noticeably absent are the Alaska Division of Fish and Game subsistence reports for the natural gas pipeline route. Further, the archaeological surveys sponsored between 2004 to 2014 apparently did not make use of all the background documents that may have augmented their search for potential sites. Archival collections that pertain to the ethnographic landscape of the Donlin gold pipeline route include Ray Collins archival collection of his Upper Kuskokwim notes and recordings which date from 1963. In that collection are significant recordings make by Chief Miska Deaphon (1903-1984) of Nikolai, a compilation that detail accounts about hunting, wildlife, places, and trails throughout the Upper Kuskokwim language area. A supplemental source is the Mixe Mellick Collection, a group of tape recordings of middle Kuskokwim between Crooked Creek and McGrath. Further information about the ethnographic context of Athabascan groups that have occupied the areas of the Donlin Pipeline route for the Cook Inlet Basin can be found in Kari and Fall (2003).

Conclusion

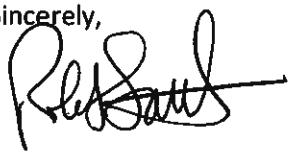
We appreciate the opportunity to comment on the Donlin Gold Mine, federal environmental review and welcome the Army Corps and cooperating agencies to continue meaningful dialogues with the

Upper Kuskokwim villages. In the spirit of NEPA, the federal environmental review needs to

PUB 1 accomodate the interests of the Upper Kuskokwim communities. We urge the Army Corps to invite and designate, as appropriate, the coalition of Upper Kuskokwim villages and their technical advisors, such as Tanana Chiefs Conference, to be involved in deliberations as a cooperating agency entity on the mitigation, monitoring and adaptive management initiatives that evolve during the project.

For further information, please contact me at bob.sattler@tananachiefs.org or Paul Mayo, Director of Natural and Cultural Resources, at paul.mayo@tananachiefs.org, or at 907-452-8251, ext. 3261 and 3343, respectively.

Sincerely,



Robert Sattler

Environmental Quality Analyst

From: Steve Teller
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Tuesday, May 31, 2016 7:22:55 PM

Donlin Draft EIS Comment

I am writing in **support** of the Donlin Gold Project Proposed Action alternative. The Donlin Gold Project:

- has been very well run for many years and I expect this to continue for many more.
- has been an example of how to accommodate local needs in employment, resulting a very high rate of local hire and job satisfaction.
- has been exemplary in their environmental practices throughout the exploration phase and in their approach to project design. There are many examples of the Donlin Project selecting a more expensive option because it is the most environmentally sound approach. The tailings pond design is an example with a full lining and the downstream dam raise method.
- will have a positive influence on one of the poorest regions in the state by offering many good paying jobs for local residents and their descendants for many years.

SER 5

In summary, I **support** the Proposed Action alternative in the Donlin Gold Project Draft EIS.

Steve Teller
PO Box 670454
Chugiak, Alaska 99567
Phone: 907-242-0036
Email: teller.steve@outlook.com

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Thursday, February 25, 2016 6:54:03 AM

-----Original Message-----
From: Student [mailto:logan_tetoff@lksd.org]
Sent: Wednesday, February 17, 2016 9:55 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Logan Tetoff III
PO Box 1049
Bethel, AK 99559
logan_tetoff@lksd.org <mailto:logan_tetoff@lksd.org>

February 17, 2016

U.S. Army Corps of Engineers
Blockedwww.poa.usace.army.mil <Blockedhttp://www.poa.usace.army.mil/>
Keith Gordon, Project Manager
Keith.Q.Gordon@usace.army.mil <mailto:Keith.Q.Gordon@usace.army.mil>
907-753-5710

Amanda Andraschko, Tribal Liaison
Amanda.M.Andraschko@usace.army.mil <mailto:Amanda.M.Andraschko@usace.army.mil>
907-753-5674

To Whom It May Concern:

Hello my name is Logan Tetoff, and I am from Kalskag AK. Long before gold was ever found, Alaska natives were taught to value and respect the land. Growing up, my culture taught me to respect the land and the animals. For once, we relied on them for survival. I am against Donlin gold because of risks of major fuel spills, with increased amount of traffic on the river, and risks of catastrophes. Donlin Gold says that they will need about forty million gallons of gas each year of their mining. If there was ever a little mishap to happen that caused a fuel spill. It would be affecting the fish and rivers along the kuskokwim. Along with the use of all that fuel, large amounts of carbon dioxide will be released that is already a risk all around the world causing pollution

TWL 3

FSR 2

CLIM 3

Another thing Donlin expects, is 122 diesel and cargo barge round trips for every summer season on the kuskokwim river. Our river is home to many native people that rely on subsistence fishing. With the increased amount of barges, means that they would be in the way of many subsistence fisherman. Starting from the beginning of the kuskokwim to the Donlin mine, there are about 13 villages below the site. Most of those villages stop at Bethel, the Hub of the kuskokwim for a quick pickup of food and other services that they need. Our river is already busy with travelers and they way of life for the people of the kuskokwim. We don't need anymore barges interfering with the lives of the that live the Kuskokwim.

TRAN 1

One of my biggest fears the mine may bring is a catastrophe. Why risk the land of the kuskokwim just for some silly pebble in the ground? Berrick already owns multiple mining grounds along the use and other parts of this world. We don't need another mine to put our native people at risk. Berrick already had mines that failed before with their tailing storage systems. The tailings fluid contains sulfuric acid, which is used in batteries as battery acid. Donlin also expects to build a pipeline from anchorage to the site that is 277 miles away. What would we do if that pipeline were to burst, or something to had happened to it? Our land would have to take the damage everytime donlin has a mishap. How would this affect the villages below the mine, such as Chuathbaluk, Aniak, Kalskag, Tuluksak, Akiak, Akiachak, kwethluk, Bethel. Would Donlin gave money back to the community if there was any catastrophes to

DAM 2

FSR 1

come?

Once again I declare that I am against the mine, because of these three reasons; The risk of major and minor fuel spills, doubled the amount of traffic on the Kuskokwim river, and the risks of catastrophes. It is not worth it to risk so much, for something that people don't really need in their lives. Once again I say, We should value the land and its life. For it is what us Alaska natives were taught, long before gold was ever important. I support the land and the people, not a mine that ruins the land and the habitat around it.

TWL 3

Sincerely,

Logan Tetoff III

From:	Bellion, Tara
To:	Evans, Jessica
Subject:	FW: DEIS Comments
Date:	Wednesday, May 25, 2016 4:45:01 PM
Attachments:	DEIS Comment Combined Final 5.25.16.docx

-----Original Message-----
From: Gordon, Keith POA [mailto:Keith.Q.Gordon@usace.army.mil]
Sent: Wednesday, May 25, 2016 4:42 PM
To: Isaacs, Jon; Bellion, Tara
Subject: FW: DEIS Comments

-----Original Message-----
From: Rachel Klein [mailto:rlk@Kuskokwim.hostpilot.com]
Sent: Wednesday, May 25, 2016 4:32 PM
To: Gordon, Keith POA <Keith.Q.Gordon@usace.army.mil>
Cc: Andraschko, Amanda M POA <Amanda.M.Andraschko@usace.army.mil>; Maver Carey <mec@Kuskokwim.hostpilot.com>
Subject: [EXTERNAL] DEIS Comments

Hi Keith-

Please see TKC's comments for the DEIS. There are two letters included in the document.

We will send the hardcopy in the mail today, along with our board member, Lorraine Egnaty's comments.

Thanks,

Rachel Klein

Alaska Consult Services, LLC

907-229-0383

rlk@kuskokwim.com

Mr. Keith Gordon
U.S. Army Corps of Engineers
www.poa.usace.army.mil
Keith Gordon, Project Manager
Keith.Q.Gordon@usace.army.mil
907-753-5710

May 25, 2016

Dear Mr. Gordon,
As surface owner of the land on which the Donlin Gold mine is proposed, The Kuskokwim Corporation (TKC) finds it imperative that any development on our land be carried out in a thoughtful manner that safeguards our shareholders' way of life. Over the past 12 years as CEO of TKC, I have developed a close working relationship with Donlin Gold, and I can say my experience with them has been undeniably positive.

With the recent release of the U.S. Army Corps of Engineers' Donlin Gold draft environmental impact statement (DEIS) for public comment, the proposed project has been an increasing topic of discussion. Therefore, I would like to take the time to discuss Donlin Gold's great efforts toward listening to shareholders to fully understand what a safe project means to Kuskokwim residents.

PUB 6 Donlin Gold has conducted numerous informational meetings throughout our corporation's 10 villages to communicate project details and hear feedback from residents. When we voiced concerns over the number of barges traveling up and down the Kuskokwim River, Donlin Gold heard us and restructured their plan, which now includes the construction of a buried natural gas pipeline that significantly reduces the amount of fuel to be barged to support the project.

Not only does the proposed underground pipeline offer a solution to reduce barging traffic on the Kuskokwim River, but it is also designed as an open access pipeline that could benefit communities in the future.

SER 5 The construction of the Donlin Gold mine, as well as corresponding infrastructures such as the pipeline, also bring significant job opportunities to the Kuskokwim region, one of the poorest areas in the State of Alaska. During operation, the mine could offer up to 3,000 jobs, and between 600 to 1,200 high-paying, full-time jobs during the mine's estimated 27-plus years of operation. With some of our villages lacking running water, an economic stimulus that provides a new and sustainable source of revenue is worthy of consideration.

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SER 2 Revenue benefits are not solely limited to those living in the TKC region. Calista Corporation shareholders, who own subsurface rights where

the project is located, will also benefit greatly from increased revenue opportunities. Additionally, through the Alaska Native Claims Settlement Act's (ANCSA) 7(i) and 7(j) revenue sharing provisions, a portion of revenue from mine operations would be shared between Alaska Native corporations. To further benefit those in the region, Donlin Gold is contractually obligated to offer a local hire preference, and has demonstrated their commitment to this through their 90 percent Native hire rate during exploration.

SVE 1 While job and revenue opportunities are of high importance, they are weighted equally with the protection of our land and our way of life. Many are concerned over the possible environmental impacts a new mine could bring after experiencing carelessness from other mines such as Red Devil. Donlin Gold is a mine of a different breed however, and has made sustainability, as well as environmental responsibility during construction, operations and closure, key priorities. Donlin Gold has stated that when operations cease, environmental monitoring and protection will not. The mine has a stringent reclamation plan and proposes onsite monitoring of the water far beyond operations. Additionally, Donlin Gold will be required by the State of Alaska to have financial assurances in place to fund reclamation, re-vegetation and protection of the land.

SER 24 Our shareholders have already seen great benefits by working with Donlin Gold through job training during exploration, through funding of scholarships and numerous community efforts. Agreements between TKC and Donlin Gold provide TKC's 10 villages with a strong financial future, viable opportunities of employment, and opportunities for ongoing input.

As a mine that focuses on environmental responsibility, meaningful dialogue with communities, job opportunities and economic stimulus for one of the poorest regions in the entire state, Donlin Gold has TKC's full support. To show our support, TKC has strongly recommended to the Army Corps that Donlin Gold move forward with alternative No. 2.

Along with this letter, we have provided some technical comments on the DEIS.

Thank-you,

Maver Carey
President/CEO
The Kuskokwim Corporation

U.S. Army Corps of Engineers
www.poa.usace.army.mil
Keith Gordon, Project Manager
Keith.Q.Gordon@usace.army.mil
907-753-5710

May 25, 2016

Dear Mr. Gordon,
Please find the following technical comments on the Draft EIS for the Donlin Gold project provided by the Kuskokwim Corporation. We would also like to reference that oral comments in support of the project have been provided by our President/CEO and Board of Directors during public meetings, and more will be submitted in written format. Along with these technical comments, please see the attached letter in support of Alternative 2 as a favored approach for the DEIS for the Donlin Gold Project.

Please let us know if you have any questions or need clarification on the comments.

Sincerely,

Maver Carey
President, CEO
The Kuskokwim Corporation

	Section Number	Page	Original Language	Proposed Language or Comment	Disposition (CAs should leave blank)
NEP 4	1.3.2 Purpose and Need	1-9	"The purpose of the proposed project is to profitably produce gold from ore reserves owned by Calista, an ANCSA corporation, utilizing open pit mining methods and conventional, proven milling processes suitable for application in remote western Alaska. The need for the proposed project is to enable Calista and TKC to maximize economic benefits for their shareholders, from lands with mineral potential selected and conveyed to them under ANCSA, by producing gold to meet worldwide demand. Gold is an established commodity with international markets."	The privately owned lands the proposed project sits on were specifically chosen for conveyance under ANCSA for potential resource development. If the project goes forward, it will provide jobs and economic development in a region with little other economic opportunities. TKC has negotiated benefits for current and future generations of Shareholders during the life of the proposed project and beyond. In addition to direct jobs for those employed by Donlin Gold, TKC will form new subsidiary companies to support the mine, which will provide more jobs and benefits to TKC Shareholders.	
LAND 8	3.15.1.2 Socioeconomics	13-15	The TKC Board of Directors and Land Committee manage the greater than 950,000 acres of TKC surface estate for the benefit of	The TKC Board of Directors and Land Committee continually re-examine existing policies and procedures to emphasize promoting positive and responsible development, in conjunction with	

			shareholders and in accordance with an adaptive Land and Resource Management Plan. Management objectives include the pursuit of economic opportunities that ensure the profitability and growth of TKC, and the overall land management direction is for moderate development of resources for inriver markets, emphasizing local employment and beginning at a low level of investment (Tanana Chiefs Conference, Inc. and TKC 1997).	maintaining traditional and subsistence land uses.	
SER 28	3.18.1.1.4	3.18	Kuskokwim River Communities – Income and Unemployment There are no income and unemployment statistics available specifically for the Kuskokwim River communities. It is likely that unemployment rates in these communities are among the highest in the state and per capita incomes are among the lowest, as they are in other	Income and unemployment statistics are readily available through the State of Alaska. The Department of Commerce, Community, and Economic Development Community Database Online lists all income and poverty information, while the Department of Labor and Workforce Development lists all employment and unemployment data. Middle Kuskokwim community's (Lower Kalskag to Stony River) income levels range from $19,614 per capita to $6,019 per capita; with those falling below the poverty line ranging from 88.7% to 19%.	

			small villages in the Y-K region. See the Y-K region description above for additional details.		
SER 28	3.18.1.2.2 SCHOOLS	3.18-23	The Y-K region encompasses several school districts which combined include dozens of schools. However, there are no local schools in some Y-K region communities; children are homeschooled or attend schools in other areas. The State of Alaska provides parents with the option of home-schooling their children.	Data missing from the Kuspuk School District. The Kuspuk School District in TKC's region operates 9 schools in 7 communities. As with most rural schools in Alaska, these schools are vital to the health and wellbeing of their communities. In an effort to cut the State of Alaska budget, some legislators have proposed raising the threshold for school state funding from a minimum of 10 students enrolled in a community to 25 students. If that happens, four community schools within the Kuspuk School District; Chuathbaluk, Crooked Creek, Sleetmute and Stony River, would lose funding to operate, and would be forced to close. As most families in the region do not have the economic luxury to home school, so many will have to either move out of their homes, or send their children to live with relatives to receive education.	
SER 13	3.18.2.2.1 EMPLOYMENT, INCOME, AND SALES	3.18-36	Donlin Gold is also committed to hiring shareholders and descendants, under agreements with Calista and TKC. These agreements include	TKC, Calista and Donlin Gold have a partnership to build a regional training center on the Middle Kuskokwim to prepare shareholders for future mining related jobs. Until that facility is built, TKC is assisting shareholders with attending existing training facilities that can lead to jobs today. TKC	

		provisions for local hire, training, and shareholder scholarships (Donlin Gold 2014e). In addition, some of the materials, supplies, and services required during project construction are expected to be provided by Calista and TKC subsidiaries	has also invested in the secondary training non-profit EXCEL Alaska to guide young shareholders into career pathways that can lead to future jobs in the region, either at Donlin Mine or at a supporting subsidiary company.	
3.18 Direct Effects	3.18-39	Donlin Gold has expressed a commitment to hiring qualified Y-K region residents during operation of the mine and other project components and agreements with Calista and TKC commit Donlin Gold to shareholder and descendent hiring preference. The agreement with TKC included initial plans for regional training, including a potential training facility in Aniak (Dischner 2014).	Donlin Gold has contributed hundreds of thousands of dollars to assist TKC Shareholders with post-secondary training. Work on a regional training facility continues. TKC and Donlin's scholarship partnership allows for Shareholders to attend other training programs within Alaska in preparation for future jobs in the region.	
SER 14 3.18.2.2.2 TAX REVENUE AND OTHER FISCAL	3.18-42	Construction and operations would generate revenues for local governments and the State of	TKC is assisting Middle Kuskokwim River communities in the creation of a new borough government to capture some of the revenue potential for local communities.	

	EFFECTS		Alaska. The various sources of these government revenues are discussed below, including right-of-way acquisition costs, property taxes, mining license taxes, corporate income taxes, sales taxes, and miscellaneous taxes.	This process is lengthy, and a vote on whether or not to incorporate would coincide with a Donlin Gold go, no-go decision on mine construction.	
SER 28	3.18.2.2.3 LOCAL PUBLIC INFRASTRUCTURE AND SERVICES	3.18-47	The potential for the project to exacerbate existing social problems in communities may be increased by intense work schedules and rotating shifts at project worksites that involve long periods away from home. In addition to adversely affecting the wellness of individuals, families, and communities, an escalation of social problems would increase demand for local and regional health care, social services, and protective services. Current levels of funding for local and regional public service	Studies should be referenced. Direct studies most likely are available to be referenced showing increased employment reduces social problems. Also reference Donlin's zero tolerance work program.	

			providers may be inadequate to cover this increased demand for services		
SER 14	3.18.2.2.3 LOCAL PUBLIC INFRASTRUCTURE AND SERVICES	3.18-48	Incorporation of a New Borough It is possible that the project would lead to the incorporation of a new borough that would include some portion of the Bethel and Kusilvak Census Areas. In 2004, a regional economic summit held in Bethel established a steering committee to address the prospects of incorporating a borough encompassing the Association of Village Council Presidents – Calista region. Interest in borough formation was prompted by the prospective development of the Donlin Creek mineral deposit (Alaska Local Boundary Commission 2007), together with the potential decline in state and	Middle Kuskokwim communities; Lower Kalskag, Upper Kalskag, Aniak, Chuathbaluk, Napaimute, Crooked Creek, Georgetown, Red Devil, Sleetmute and Stony River, are currently working with TKC on the creation of a Kuspuk Borough. A payment in lieu of taxes (PILT) agreement with Donlin Gold would allow provide increased services and benefits for the residents of the communities closest to mine operations. Kuspuk Borough formation would insulate these communities from some of the impacts of reductions to both state and federal budgets and programs, and would help families live and work in the region. Community representatives are currently working on draft documents for borough incorporation, which would be determined by popular vote.	

			federal funding for critical regional services such as education, health care, and public safety (Cotten 2007).		
	ENVIRONMENTAL JUSTICE				
SER 1	3.19.3.1 ALTERNATIVE 1 – NO ACTION	3.19.15	The advance royalties that Donlin Gold pays to Calista (estimated at $1 million per year) would cease under the No Action Alternative. These revenues contribute to dividends and employment opportunities Calista provides to its shareholders.	Though the agreement is confidential, the negotiated payments to the Kuskokwim Corporation would cease under the No Action alternative, as well as the major scholarship contributions and shareholder hire opportunities. These revenues directly benefit TKC shareholders through community development, dividends, training, and job opportunities.	
SER 15	3.19.3.2.1 EFFECTS FROM CHANGES IN SOCIOECONOMIC RESOURCES	3.19-17	Donlin Gold has committed to hiring qualified Y-K region residents.	Donlin Gold has committed to hiring qualified Y-K region residents, and has a negotiated shareholder hire preference for TKC and Calista shareholders and descendants.	
SER 11	3.19.3.2.2 EFFECTS FROM CHANGES IN SUBSISTENC	3.19-17	Employment and income from all project components would have low to medium intensity beneficial effects, with the	The combination of rotating shift work and increased income would arguably have a high intensity beneficial effect on Kuskokwim River communities. Families would have more opportunity and financial	

	E RESOURCES		greatest magnitude of these effects occurring in the smaller Kuskokwim River communities during construction (which are low-income and minority communities). Income could be used to purchase subsistence tools and transport, such as fuel for snowmachines. The rotational shift nature of employment and potential for workers to relocate for jobs may cause adverse impacts of low to medium intensity to sociocultural aspects of subsistence, particularly in smaller communities. The mine site would have negligible impacts to subsistence	resources for subsistence activities during construction, operations, and closure.	
EJ 9	3.19.3.2.5 SUMMARY FOR ALTERNATIVE 2	3.19-19	Overall, Alternative 2 would have minor to moderate adverse impacts and beneficial health impacts to minority and low-income communities in the Y-K region. Alternative 2 would	Based on the previous comment above, this should be re-evaluated if it is determined that subsistence beneficial impacts are high impact.	

			have disproportionately adverse effects to minority and low-income populations. Thus, Alternative 2 would raise an environmental justice concern.		
PHL 8	3.22 HUMAN HEALTH	3.22-1	Community health in Alaska, with its environmental and social setting and complex blend of health determinants, is in many ways different from national health trends in the United States (ADHSS 2011).	*Overall comment on the Human Health Section:* The HIA as a whole should prioritize health determinants specific to rural Alaska. The safe access to emergency medical services, and primary need of access to sewer and fresh water, has been undervalued in this health assessment to make it effective for the DEIS.	
PHL 8	3.22.3.4.6 HEC 6: WATER AND SANITATION	3.22-	Key preventable risk factors for the spread of infectious diseases are the lack of clean running water and proper sewage disposal which are prevalent in rural Alaska (NewFields 2015). As of 2008, the YKHC had water and sanitation service for 58 percent of their communities which was the fewest of the 14 regional	This section needs to be detailed and expanded. Lack of water and proper sanitation is one of the leading health hazards in rural Alaska, and the importance of this is drastically under emphasized in this section of the DEIS.	

			health corporations.		
PHL 7	3.22.3.5 TRANSPORTATION FACILITIES	3.22-26	(General Comment)	This section and section 3.22.3.4 need to discuss and highlight the importance of safe runways and airport navigation equipment to assist with emergency services and medivacs in rural Alaska. For rural communities, often air travel is the only transportation means of receiving medical attention.	
PHL 8	3.22.3.6.6 HEC 6: WATER AND SANITATION	3.22-22	There are many part-time occupied houses (recreational and seasonal purposes) within the potentially affected communities... Most have individual wells, either outhouses or septic sewage systems, and either burn refuge or use local landfills; only McGrath has formal garbage service.	The data in this section does not accurately describe the water and sanitation conditions in the communities closest to the mine site. A large percentage of households are not on sewer or water systems, and are fully occupied housing. The research area is too broad to accurately define conditions specifically.	
PHL 19	3.22.3.6.8 HEC 8: HEALTH SERVICES INFRASTRUCTURE AND CAPACITY	3.22-33	The Fairbanks Memorial Hospital (110 workers) serves 35 villages of the interior including Nikolai, McGrath, and Takotna. Services include pharmaceutical, patient education, medical records, nutrition services, and social outreach services.	This section is lacking information on YKHC and localized clinic facilities.	

			The McGrath Health Center is a subregional Emergency Care Center clinic and supports the 50 Community Health Aides and Practitioners in the area. Central Kenai Peninsula Hospital and the Dena'ina Health Clinic serve the KPB. There is a lack of medical services for Beluga, Susitna, Skwentna, and Red Devil (NewFields 2015).		
PHL 3	3.22. Rates of Substance Abuse	3.22-40	In other places where a number of people have been employed at past and present mine sites, the increase in disposable income led to noticeable increases in drug and alcohol use and gambling in the local communities (Diavik 1999; UBC 2014).	Direct data from Donlin's existing zero tolerance policy and drug and alcohol programs should be referenced here. The data may reflect a beneficial significance.	
PHL 8	Alternative 2, HEC 6 Impact Summary: Water and Sanitation	3.22-83	The summary impact level for increases in morbidity and mortality rates due to changes in the availability and quality of	This section needs the discussion of the probable improvements to water and sanitation with any economic benefit to the communities, through government taxes or borough services. The existing sanitation	

			water and sanitation services is low for Alternative 2. It is unlikely that water and sanitation services of communities located near the proposed project would be affected.	situation has been well documented and addressed both politically and through Alaska media. It is most likely that water and sanitation improvements would be a priority with any economic development or financial benefits to the region.	
PHL 7	3.22.4.2.8 HEC 8: HEALTH SERVICES INFRASTRUCTURE AND CAPACITY	3.22-91	There is the potential to impact access to healthcare services and overwhelm local and regional capacities due to emergency situations that could occur during implementation of the proposed project.	There should be discussion on the likelihood that economic benefits to the region from the Donlin mine will be channeled to improvements to local medical clinics, telemedicine, and improved transportation access to emergency services.	

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EDIT 4	2.3.	40	"To ensure adequate funding for potential perpetual water treatment,	N/A – new comment	There is no specific mention of a Post-Reclamation and Closure Maintenance in the

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			a Post-Reclamation and Closure Maintenance Trust Fund would be established during construction and operations to cover the costs of the WTP operations and maintenance, as well as post-closure monitoring."		preceeding Section 1.10.4 (Financial Assurance for Reclamation and Closure). There is reference to a trust fund, but recommend consistency in use of terminology around this important consideration.
BARG 18	2.3.2.2.1 Barge Traffic	46, 127	"A barge-loading plan for each trip would be based on expected river conditions and a forecast of the minimum available draft on the river for the duration of the trip between Bethel and Angyaruaq (Jungjuk) Port." "Donlin would implement barge guidelines for operating at certain river flow rates, and conduct ongoing surveys of the Kuskokwim River navigation channel to identify locations that should be avoided to minimize effects on bed scour and the potential for	N/A – new comment	Would the developed barge-loading plans also include consideration of potentially sensitive salmon migration and/or spawning periods? This does not appear to be directly or indirectly addressed in the referenced plans.

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			barge groundings."		
HYD 4	3.5 Surface Water Hydrology	78, 79	"In the above average precipitation scenario, the average annual precipitation would be 20.8 inches, based on the wettest year in the available 30-year consecutive precipitation record" "In the below average precipitation scenario, the average annual precipitation would be 18.6 inches based on the driest year in the available 30-year consecutive precipitation record"	There appears to be only about 10% difference in above average and below average precipitation scenarios – is there this little variability between wettest and driest years over a 30-year precipitation record?	Comment remains, the below and above average precipitation range appears overly constricted.
HYD 4	3.5 Surface Water Hydrology	88	"The emergency spillway would be constructed in the west corner of the pit and discharge to Crooked Creek"	N/A – new comment	Can it be explained when the emergency spillway be constructed? It does not appear to be necessary until about Year 52 post-closure.
WAQ 9	3.7 Water Quality	110, 112, 115	"In this case, even in Year 99, all constituents of interest exceed AWQC, showing the importance to treatment costs of	Given the importance of maintaining a stratified pit lake for 99 years has a contingency plan been established to address the potential need for RO to treat sulfate and TDS? It would be	It is noted that the advanced water treatment (AWT) process was developed by Hatch in 2015. This includes, if necessary, a reverse osmosis

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			maintaining a permanently stratified pit lake, because this result would likely require reverse osmosis to treat the sulfate and TDS." "It is possible, however, if the trend continued for a long enough time, that eventually the pycnocline would be close enough to the surface that wind and/or winter overturn could cause the lake to completely mix to the surface." "a decreased-salinity system could be more vulnerable to overturn and mixing throughout the water column than the base case."	useful to have a sense of scale for the differing treatment costs.	final polishing step and an ion exchange step to reduce selenium. Again it reiterated to have a sense of scale for the differing treatment costs should the additional steps referenced above be required. It is assumed that RO treatment would significantly escalate long-term water treatment costs.
WAQ 29	3.7 Water Quality	117, 118	"Although the water in the mine facilities would not be considered waters of the State of Alaska nor waters of the U.S., and are not subject to regulation under the Clean Water Act or the	These statements appear to contradict each other with respect to the need, or lack thereof, for APDES permitting.	Yes an APDES General Permit will be required for discharges.

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			APDES permitting program, their expected water quality is discussed in this section for comparison to baseline water quality conditions in the American Creek, Anaconda Creek, and Snow Gulch watersheds." "treated effluent water would be discharged through an APDES permitted outfall to Crooked Creek"		
WILD 3	3.12 Wildlife	9	"Overall, based on the estimated HQs alone, both the American dipper and tundra vole are possibly at risk in the TSF (and in the pit lake), primarily from exposure to arsenic." "Considering more representative exposure assumptions, the lack of attractive habitat features, and chronic intense disturbance from mining equipment, wildlife are not	The descriptions of potentially mitigating factors to this risk are well described. However the discussion would benefit from any actual case studies that may be relevant to the project site. In addition some brief discussion of monitoring should be discussed, given the uncertainty regarding predictions of use. A reference to planned adaptive management should then be included in the event observed impacts are unacceptable. (Reference Section 5 – Mitigation)	The additional study described above adequately describes modelling studies to predict impacts. However the original comments remains unaddressed: "the discussion would benefit from any actual case studies that may be relevant to the project site. In addition some brief discussion of monitoring should be discussed, given the uncertainty regarding predictions of use. A reference

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			expected to be at risk due to ingestion of water from the TSF or from ingestion of food and sediment."		to planned adaptive management should then be included in the event observed impacts are unacceptable. (Reference Section 5 – Mitigation)"
WILD 6	3.12 Wildlife	34	"Donlin Gold would develop a Wildlife Avoidance and Human Encounter/Interaction Plan to minimize the attractiveness of camps and other facilities and minimize the risk of adverse human/animal interactions"	Will this plan be developed subsequent to the finalization of the EIS? If so is there a regulatory driver, or is this a commitment made within the EIS?	No further clarification has been provided as to the timing or scope of this plan. Clarification is requested as to when this plan would be developed and who will be reviewing its content (i.e., is Human Encounter/Interaction Plan driven by a regulatory requirement, or is the commitment being made here in the EIS).
WILD 6	3.12 Wildlife	35	"Considering the relatively low populations of moose and caribou, the influx of new people and increased mobility could lead to increases in hunting and trapping pressure that could reduce local game populations and necessitate changes in wildlife	This statement reflects anticipation in reduction in numbers of these species. What information is available from Alaska Dept. of Fish and Game regarding what future changes in wildlife management may be necessary?	Original comment remains: "This statement reflects anticipation in reduction in numbers of these species [moose and caribou]. What information is available from Alaska Dept. of Fish and Game regarding what future changes in wildlife management may be

	Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
			management regulations."		necessary?"
WILD 8	3.12 Wildlife	41	"Donlin Gold intends to prohibit public use of the access road for safety reasons, including use by local residents. Traditional use of the surrounding area for subsistence hunting, trapping, and berry picking could be inhibited, with indirect beneficial impacts on game species and furbearers through reduced hunting and trapping pressure. However, access to these areas by traditional means and routes may not be affected unless they crossed mine-restricted property."	Can it be clarified as to if access to traditional use areas will be restricted from mine infrastructure? That would seem to be the case, but is left ambiguous here. Has it been determined that restriction of subsistence use of some areas would benefit wildlife (i.e., are any of these species uncommon)?	It is not clear what is meant by the statement that subsistence uses could be "inhibited" by mine infrastructure. A reference to a separate discussion would be helpful. Further has it been established that "inhibition" of subsistence use of some areas would benefit wildlife (i.e., are any of these species uncommon and are there data and/or anecdotal evidence that subsistence use leads to declining populations)?
BIRD 3	3.12 Wildlife	148	"Because of the warm tailings during operation the pond nearest where the tailings are deposited (six locations) may freeze somewhat later or thaw somewhat earlier than	Are there cast studies that can be referenced from other arctic operations as to the attractiveness of open water sources relative to adjacent surroundings? Would be beneficial to insert a brief reference description for monitoring of	Language is now contained on page 9. Original comment remains: "Are there cast studies that can be referenced from other arctic operations as to the attractiveness of open water sources relative to

	Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
			natural water bodies. If open water sources were available earlier in the spring at this facility than in surrounding water bodies, it might be attractive as a rest stop for migratory water birds." "While they may be attracted to open water areas, birds are not likely to remain long due to the lack of food resources."	behavioral impacts.	adjacent surroundings? Would be beneficial to insert a brief reference description for monitoring of behavioral impacts."
BIRD 6	3.12 Wildlife	150, 151	"Factors that contribute to this increasing threat [aircraft collosion with birds] are increasing populations of large birds" "Casualties are not expected to cause population-level impacts." "Therefore; [sic] the loss of nests and nesting habitat in the immediate project vicinity, while it may affect local populations, is not	Is it the case that there are increasing populations of large birds in the US and/or Alaska? Can the statement of lack of expected population-level impacts be more specifically put in context relative to species of concern (i.e., that these species are not at significant risk from these impacts)?	It appears that the language regarding increasing populations of large birds has been modified to include increasing populations of large birds near airports. It would be helpful to have a specific statement regarding lack of expected population-level impacts to any species of concern (although eagle nesting trees are specifically addressed : "Any loss of eagle

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			likely to impact birds outside the affected area."		nest trees would have to be permitted through FWS' Eagle Permit Program.")
BIRD 1	3.12 Wildlife	153, 158	"Although all wastes would be managed to avoid attracting scavengers, no management program achieves 100 percent control, therefore minor impacts on birds are expected as a result of the production of organic waste." "The impact of organic waste potentially causing an increase in predators would be low intensity, long-term duration, local extent, and could affect common or important species."	Suggest more language related to implementation of best practices to limit attraction to domestic organic waste. Although "100 percent control" is a perhaps unachievable there are best practice techniques to minimize attraction of wildlife to domestic waste (e.g., strict segregation of organics; frequent covering of disposed organics to limit availability, etc.).	Original language remains as there has been no feedback or modification to the text. Original comment: "Suggest more language related to implementation of best practices to limit attraction to domestic organic waste. Although "100 percent control" is a perhaps unachievable there are best practice techniques to minimize attraction of wildlife to domestic waste (e.g., strict segregation of organics; frequent covering of disposed organics to limit availability, etc.)."
BIRD 1	3.12 Wildlife	163	"The mitigation measures described could substantially reduce impacts by designing the overhead power line to be raptor-safe therefore." [sic]	It is not clear what mitigation measures will be used to reduce collision impacts. Are they the "standard industry best practices for avian protection and relevant State and Federal guidelines" described above?	The original comment remains. What are the standard industry best practices for avian protection and relevant State and Federal Guidelines? Is this further discussed in another section (e.g., Section

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					5)?
FISH 7	3.13 Fish and Aquatic Resources	114	"Potential impacts from barge traffic on migrating adult salmon are expected to range from negligible to minor since adults have sufficient swimming and sensory ability that would generally allow them to sense and avoid approaching tug propeller flow fields as vessel traffic is encountered."	Is there a reference for this expected behavior, especially for a sediment-heavy system such as the Kuskokwim River?	Original comment remains as text has not been modified on page 138: "Is there a reference for this expected behavior, especially for a sediment-heavy system such as the Kuskokwim River?"
FISH 6	3.13 Fish and Aquatic Resources	117, 120	"Therefore, impacts from bed scour on fish and aquatic life in areas not previously subjected to natural flooding or existing barge traffic would be moderate to major depending on how and where tugs are operated, water depth, channel geometry, character of riverbed substrates, and life stages of fish and aquatic species in the vicinity of	The potential impact is understood, but it is not immediately clear on what section or sections of the river this potential impact would be especially acute. Would future studies include more precise mapping of the river channel to determine sensitive locations? When will information become available to better assess these potential impacts, as well refine planning to address?	Page 150 of the plan states the following: "Future studies of barge passages during the early construction phase are proposed that would provide an improved basis for evaluating potential areas of risk relative to impacts from riverbed scour, bank erosion, and nearshore velocities at various depths, locations, and channel configurations. Such studies also could determine the feasibility and effectiveness related to

Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
		propeller hydraulic forces. Future studies of Donlin Gold tug-barge passages during the initial phase of construction would provide an improved basis for assessing effects of barge traffic on riverbed scour, bank erosion, and nearshore velocities at variable depths and channel configurations. Such studies also could determine if it would be feasible and effective to alter the speed of downriver barge traffic in certain segments of the river to minimize impacts on fish and aquatic habitats including areas identified as important to rainbow smelt spawning." "In addition, an undetermined level of injury or mortality may occur to eggs, larvae, and possibly young-of-year resident or		adjusting the timing, speed, or line of travel of barge traffic in certain areas to avoid or minimize impacts on fish and aquatic habitats including areas uniquely identified as important to rainbow smelt spawning." It is not clear when these studies would be completed and/or if they would be required in a regulatory context. Would the studies be a part of the previously referenced "barge loading plans"?

	Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
			anadromous fishes that encounter shear forces from tug propellers, especially where these populations are concentrated in confined channel segments." "The extent and intensity of impacts would depend on the timing and locations in the river channel where concentrations of these fishes would intersect with vessel traffic."		
FISH 6	3.13 Fish and Aquatic Resources	120, 126	"In summary, barge traffic navigating deeper sections of the Kuskokwim River typically would not pass close to shore, depending on the river channel's width and geometry."	It is not clear if there will be any need for near-shore barging. Are there sections where the channel width and geometry would require this? Page 126 makes reference to "constricted areas of the Kuskokwim River navigation channel".	Page 152: "In more confined segments of the channel, however, a relatively higher level of injury or mortality could occur to eggs, larvae, and possibly young-of-year resident or anadromous fishes that encounter shear forces from tug propellers, especially where these populations are concentrated." It is still no immediately clear if this near-shore barging will

	Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
					be necessary. It appears so, but the locations do not appear to be specifically or broadly designated.
FISH 11	3.13 Fish and Aquatic Resources	121	"As a result, anticipated fish injuries or mortalities from tug and barge traffic would range from negligible to moderate depending on the seasonal timing of fish migrations, life stages, time of day, and the concentration of fish relative to confined and shallow channel segments. " "Although fish species potentially at risk would be common to the Kuskokwim River system, the mainstem and its tributaries have an important context in that they are regulated as Essential Fish Habitat since these waters provide habitat that supports key life stages of salmon important to the Kuskokwim subsistence	Does this level of impact have any implications for project construction/operations in areas designated as Essential Fish Habitat under the Magnuson-Stevens Fishery Act?	Original comment remains. It is unclear what impact, if any, the designation of Essential Fish Habitat has had in project design. What is the timing for EFH consultation?

	Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
			community."		
FISH 15	3.13 Fish and Aquatic Resources	122	"Construction at the Angyaruaq (Jungjuk) Port site would be conducted consistent with the requirements of the project's Title 16 Fish Habitat Permit. Construction would take place over an area of about 26 acres including about 10,000 cy of dredged material removed from the shoreline area for completing the berthing facilities."	The potential impacts to aquatic resources of siltation/sedimentation from dredging for port construction should be described. Will the Title 16 Fish Habitat Permit likely require silt fencing or some other mitigation?	Original comment remains: "The potential impacts to aquatic resources of siltation/sedimentation from dredging for port construction should be described. Will the Title 16 Fish Habitat Permit likely require silt fencing or some other mitigation?"
FISH 15	3.13 Fish and Aquatic Resources		General	Given potential for direct impacts, cumulative effects, and risk of fuel spill, has a contingency plan been developed in case of observation of further declining fish populations in the Kuskokwim River? How will these populations be monitored to ensure there are not unacceptable adverse affects? Does the project intend to coordinate with the Kuskokwim River Salmon Management Working Group?	Original comment remains. However it is noted that the following language has been added under Additional Monitoring and Mitigation for Alternative 2: "Coordinate construction and operations phase fish population and water quality monitoring with agencies or

	Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
					working groups (such as the Kuskokwim River Salmon Management Working Group). Continue baseline Project fish and water quality studies to help track possible incremental impacts for development adaptive management strategies as necessary if impacts occur beyond what are expected". It is unclear what triggers would lead to implementation of additional adaptive management strategies.
WILD 4	3.14 T&E Species	27, 32, 34, 37	"However, given the exceedingly small North Pacific right whale population size (about 30 individuals), injury to or mortality of even one individual would have population level effects." "The proposed Dutch Harbor to Bethel barge corridor traverses the designated Critical Habitat	The assessment of the potential impacts of barge traffic/noise to North Pacific right whale and Cook Inlet beluga whales is vague. Although there certainly is a risk of injury/collision, there is possibly a greater risk or avoidance/modified behavior which may have significant impacts to this species, of which apparently only 30 individual exist. Are there any mandatory restrictions on project operations in the designated	There does not appear to be any additional information provided in the DEIS; thus the original comment remains.

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		in the Bering Sea." "studies off the coast of New England suggest that masking effects are more severe for right whales than for singing fin or humpback whales, since right whale calls are not as loud as fin and humpback songs (Clark et al. 2009). In addition, there is evidence that exposure to low-frequency ship noise induces chronic stress in North Atlantic right whales" "Additional diesel tanker traffic across Cook Inlet into Tyonek could increase the potential for behavioral disturbance of Cook Inlet beluga whales, as the shipping route traverses Cook Inlet beluga critical habitat." "Alaska Native beluga whale hunters noted that Cook Inlet belugas are very	Critical Habitat areas of these species? What are the referenced sonic "injury thresholds" that the project will operate below? These thresholds reference direct injury but not potential behavioral considerations. Suggest reference to the Cumulative Effects section(Section 4).	

	Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
			sensitive to boat noise and will leave areas of high vessel use." "Intermittent, short-term behavioral disturbance of fin, humpback, or right whales could periodically occur along the Dutch Harbor to Bethel barge corridor in areas where the species coincide with the shipping route."		
WILD 4	3.14 T&E Species	30	"North Pacific right whales would be considered unique, given their exceedingly small population size (approximately 30 whales) and the fact that the barge corridor traverses one of only two areas designated as critical habitat for this species"	There should be more discussion in this section on presence of critical habitat in the barge corridor. This discussion should include an evaluation of impact to critical habitat, including potential behavioral impacts.	See previous comment; the significance of critical habitat for North Pacific right whales in the barge corridor could use more specific discussion.
REC 2	3.16 Recreation	1	General	It should be referenced in this section that over the last decade there has been a decline in Chinook salmon runs on the Yukon and Kuskokwim Rivers.	Original comment remains. There is direct reference to commercial fishing closures but some information on

	Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
				This has implications for recreational impacts.	decreased salmon runs should also be stated.
REC 8	3.16 Recreation	6	"On its lands, TKC does not allow entry for hunting by non-shareholders, and other access to TKC lands is not allowed for non-shareholders during hunting season in order to increase hunting opportunity for shareholders."	Perhaps a statement can be included here indicating that this sovereign administration of hunting rights will be maintained during the construction and operations phases.	Original comment still applicable.
REC 7	3.16 Recreation	12	As a result, the existing low levels of recreation which currently occur at the mine site, such as sport hunting or snowmachining, would be prohibited due to mine safety standards and therefore be displaced from an area of approximately 78.5 square miles. This displacement would occur during the construction period and extend throughout the life of the mine.	How will the prohibition be enforced - fencing, patrols, or some combination?	Original comment still open.
REC 2	3.16 Recreation	10, 14	"Chinook salmon on the	Are more recent commercial fishing	It appears the reference to

	Section Number	Page	Original Language	Proposed Language or Comment from May 2015 PDEIS Review	Resolution or Additional Comment from April 2016 DEIS Review
			Kuskokwim and Yukon rivers, as well as elsewhere in Alaska, have created economic and social hardships in many communities (ADF&G 2012c). "In 2012, a total of 393,319 salmon were commercially harvested from the Kuskokwim Area. A total of 477 individual permit holders (making at least one recorded landing) participated in area commercial fisheries"	statistics available? If would be helpful to have some sense of the trend over time, as well as a more quantitative assessment of impact to the local economy. Perhaps a cross-reference to the Fisheries section would be helpful (Section 3.13). It is noted that the Subsistence section contains the following information that is not referenced here: *"Chinook salmon in the Kuskokwim River were unusually low in 2012 due to regulatory closures caused by poor returns so that data on total harvests collected in 2012 may not be representative compared to years where there were no restrictions"*	commercial harvesting numbers has been removed from the text. It would still be beneficial to have this information including in this section, as well as an assessment of impact to the local economy.
SUB 11	3.21 Subsistence	114	"A significant portion of the employment and income from the mine may go to residents of Bethel, the regional center in the Kuskokwim drainage, and to residents of other communities in the Lower Kuskokwim subregion. This could lead to increases in	Would in-migration to the Lower Kuskokwim Subregion necessarily lead to increased subsistence harvests (i.e., is it expected that new arrivals would be eligible for subsistence harvesting)? What are the factors that would moderate this impact – further game management regulation?	Original comment remains; text has not been revised nor has comment been addressed.

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			population above current projections by the Alaska Department of Labor that could lead to increased subsistence harvests by residents of this subregion and the possibility of increased competition between communities in the Kuskokwim drainage for highly-valued resources such as Chinook salmon and moose. The extent to which subsistence harvests increase may be moderated by other factors."		
SUB 19	3.21 Subsistence	120	"Under Alternative 2, the construction and operation of the mine site would result in on-going direct impacts to subsistence resources and harvest practices of four types....and contamination of waterfowl in the TSF, pit lake and other water retention structures."	Suggest changing this language to suggest this *could* be an impact. The current language suggests that contamination of waterfowl is inevitable.	Language on page 138 now reads "....and perceived contamination of waterfowl in the TSF, pit lake and other water retention structures." The other describes impacts would occur, however this last impact may not occur with good communication of successful monitoring results.
SUB 19	3.21 Subsistence	121	"As noted in Section 3.12.4,	Suggest rewording. Although it is	Minor comment; however still

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			Wildlife/Birds, the standing waterbodies would have varying levels of contamination, with the TSF likely to have higher concentrations of antimony, arsenic, and selenium than the pit lake"	likely that metal concentrations will be elevated at these facilities this does not necessarily suggest that the facilities themselves are "contaminated".	suggest rewording.
SUB 11	3.21 Subsistence	130	"A small number of non-local employees may find the region to be attractive, and they may establish households in the project area – most likely in Aniak or Bethel."	Has an attempt been made to quantify this influx? Is there consideration to a limitation on the number of project employees that will be allowed to establish households in the area?	Original comment remains; no additional text/explanation has been provided.
SUB 4	3.21 Subsistence	137	"Note to Reviewers: Additional analysis of propeller wash forces has raised more uncertainty about impacts to spawning rainbow smelt and out-migrating juvenile salmon. Results summarized here may be revised, based on the 2015 field studies."	Noted given significance of declining salmon species populations.	It is not clear what 2015 field studies have been undertaken to further the understanding of the potential impacts of propeller wash forces to spawning rainbow smelt and out-migrating juvenile salmon. The commentator cannot find discussion, or references, to the section of the EIS in which this information is made available.

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SUB 19	3.21 Subsistence	140	"Chinook salmon and moose for which the context would be important due to the exceptional conservation measures implemented in recent years"	It does not appear the outright restriction on harvesting of king salmon will have any restriction to project construction/operations, but this should be clarified (e.g. no restrictions to barging schedule). Do these exceptional conservation measures have any impact on planned monitoring (e.g., coordination with the Federal Subsistence Board)?	Original comment remains; no additional text has been provided with respect to this consideration.
EDIT 7	5 – Mitigation Measures	46	"The Corps will require that Donlin Gold prepare a mitigation monitoring and adaptive management plan to monitor success of mitigation efforts that includes a process for making changes to or adding mitigation as needed."	The referenced mitigation monitoring and adaptive management plan should be capitalized. This plan has not been highlighted in previous sections but suggest it should be, especially in T & E Species and Fish and Aquatic Resources sections.	Again reiterate that the formal adaptive management plan should be capitalized. Noted that draft measures for monitoring and adaptive management are included as Table 5.7-1.

From:	Craig, Bill
To:	Bellion, Tara; Evans, Jessica; Smith, Neal
Subject:	FW: Donlin Gold Draft EIS comment
Date:	Wednesday, April 20, 2016 1:07:11 PM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Wednesday, April 20, 2016 10:29 AM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: Garry Thomsen [mailto:garrythomsen@lfag.net]
Sent: Tuesday, April 19, 2016 6:24 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To Whom it May Concern,

NSB 1

I have had the opportunity to work on the initial surveys into the Donlin Gold project and support the development of the mine.

In all circumstances, the Donlin management have demonstrated their concerns for the environment and the local people.

We need development into the interior of Alaska and this opportunity will provide jobs for the residents of Alaska.

Thank you

Garry Thomsen

Director of Operations

Last Frontier Aviation Group

Ph: (907) 745-5722

C: (907) 707-5925

SAFETY IS AN INTEGRAL PART OF OUR BUSINESS - IT IS NOT AN OPTION

USACE
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JUN 13 2016
AK REGULATORY

May 23
McGrath AK
99627

To The Corp –

Thank you for extending the comments deadline. I live in a historic gold mining town and I am generally a very enthusiastic supporter of the mine. Donlin has done an exemplary job of communicating their proposals and have been generous in their support of good causes. My only issues with the project center on the gas lines route through the historic Iditarod Trail. Though Donlin has sort of minimized the impacts, this will still be very intrusive to a fragile wilderness and will not so subtly change the character of the race and the whole untouched nature of that portion of the trail. I have

IDIT 8

traveled on the trail and except for Rohn Roadhouse, Rainy Pass Lodge and a handful of vogel houses along the trail it is a pure wilderness, pretty much untouched by the hand of man. I would really like to see Dunlin address this issue. Thank you for your attention.

W. Mill Tierney

T
WILLIAM M. TIERNEY
P.O. Box 142
Mc Grath, AK 99627

The public comment period on the Donlin Gold project has been extended.
Use this postcard to comment.

Please send your postcard to the U.S. Army Corps of Engineers with postmark before the **May 31, 2016** deadline.

I think it's very important 5-25-16 that Donlin Gold has given priority for hire to the shareholders of TKC and Calista. That way, the money being paid out will stay in our community and contribute to this economic hardship our state is going through.

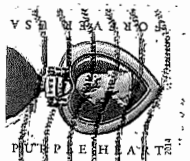
SER 15

– RAY TINKER

Russian Mission

I hope to get a good paying job with Donlin Gold when I get out someday ... (1)

Russian Mission & Calista Corporation Shareholder ...



RAY TINKER #431709
Spring Creek Correctional Center
3600 Bette Cato Ave
Seward, AK 99664

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U.S. Army Corps of Engineers
Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Spring Creek Correctional Center
3600 Bette Cato Ave
Seward, Alaska 99664

From:	Craig, Bill
To:	Bellion, Tara; Evans, Jessica
Subject:	FW: [EXTERNAL] Donlin Gold Draft EIS comment
Date:	Wednesday, March 16, 2016 8:02:32 AM

Bill Craig
Environmental Department Manager
D 1-907-261-6703 C 1-907-441-7207
bill.m.craig@aecom.com

AECOM
700 G Street, Anchorage, Alaska 99501
T 1-907-562-3366 F 1-907-562-1297
www.aecom.com

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Monday, March 14, 2016 12:32 PM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment

-----Original Message-----
From: Martha Toon [mailto:toonster@gci.net]
Sent: Wednesday, March 09, 2016 11:35 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

NSB 1

I just read about the new rule of the Iditarod for new racers to disallow them from not speaking their minds if they choose, about environmental impacts of projects in Alaska - esp. ones which would affect rural Alaskans and resources.

I vehemently oppose this rule - in fact, I've decided NOT to follow the race this year because of it. BS and smacks of suck up to corporate sponsorship. It's the corporate sponsors that benefit from the Iditarod - not the other way around. We could replace them all with smaller, conscionable, and ethical businesses in a heartbeat. At this rate, you are selling out the Iditarod and its symbolism for hard work and fierce independence.

Get rid of that rule and I hope you get tons of blowback from it. Disgusting.

M Toon

Juneau Alaska

36 yr Alaskan resident and Alaska native

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March 11, 2016

3560 Spinnaker Drive
Anchorage, AK 99516

Mr. Keith Gordon
Project Manager
U.S. Army Corps of Engineers, Alaska District
CEPOA-RD-Gordon
PO Box 6898
JBER, AK 99506-0898

Ref: Donlin Gold Project DEIS

Dear Mr. Gordon,

I would like to voice my support for the Donlin Gold Project as outlined in the Draft Environmental Impact Statement.

The proposal includes a number of safeguards for the environment such as a synthetic liner for the tailings facility, mercury emission controls and an active water treatment system. The plan to bring natural gas from Cook Inlet will greatly reduce barge traffic on the Kuskokwim River and reduce the potential for fuel spills.

SVE 1 The economic benefits of this project greatly outweigh any potential environmental risk and will provide sorely needed employment for the region and revenue for the State of Alaska.

Sincerely

Dr. Keith Torrance

Environmental Geologist

14 MAR 2016 PM 4 L

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endicia.com endicia.com endicia.com

Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska
District
CEPOA-RD-Gordon, P.O. Box 6898
JBER, AK 99506-0898

99506$0898

Smith, Neal

From: Tom Irwin <tirwin@ithmines.com>
Sent: Wednesday, April 27, 2016 8:29 AM
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS Comment Letter from THM April 27, 2016
Attachments: Donlin Gold Draft EIS Comment Letter from THM April 27, 2016.pdf

Keith Gordon, Project Manager
Army Corps of Engineers, Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

Mr. Gordon,
Please find attached – Donlin Gold Draft EIS Comment Letter from Tower Hill Mines, Inc.
Respectfully,

Thomas E. Irwin
President
Tower Hill Mines, Inc.
(907) 347-8685

TOWER -HILL- MINES INC.

LIVENGOOD GOLD PROJECT

April 27, 2016

Keith Gordon, Project Manager
Army Corps of Engineers, Alaska District
CEPOA-RD-Gordon
P.O. Box 6898
JBER, AK 99506-0898

POA.donlingoldeis@usace.army.mil

RE: Donlin Gold Project Draft EIS

Mr. Gordon,

Tower Hill Mines, Inc. (THM) appreciates the opportunity to express support of Donlin Gold's Proposed Project Development Plan – Alternative 2. This project presents a rare opportunity for the State of Alaska and is one that THM believes will provide significant socioeconomic benefits statewide.

SER 5

An estimated 3,000 jobs will be created during the approximate four-year construction phase and up to 1,200 jobs for the estimated 27.5 year mine life. These are excellent paying jobs covering a wide variety of professional disciplines that provide both employment and training opportunities for the local communities. Additional opportunities exist for businesses supplying services, equipment, and materials associated with the project. These jobs will have a significant and positive impact on the economy of the region and the state. Revenues flowing through the ANCSA corporations will benefit both the rural and urban Alaska Native populations throughout Alaska.

The project description demonstrates a thorough understanding of environmental concerns and features sound management principles that protect the environment and subsistence resources in the region. These plans are based on the rigorous evaluation of dozens of project alternatives as well as 17 plus years of scientific environmental, geological, and engineering studies. We believe that the proposed site-specific plans included in Alternative 2, such as a fully-lined tailings facility, a natural gas pipeline from Cook Inlet through Rainy Pass, and barge

506 Gaffney Road, Suite 200, Fairbanks, Alaska 99701
Tel: 907.328.2800 | Fax: 907.328.2832

TOWER HILL MINES INC.
LIVENGOOD GOLD PROJECT

transport of supplies to the Junjuk port site are the most practicable approaches to providing the best environmental protection possible consistent with the project purpose. Donlin Gold's partner companies, Barrick Gold Corporation and NOVAGOLD Resources, are professionally positioned to make the proposed project alternative a safe and viable reality.

The Donlin Gold Project proponents have also demonstrated a commitment to responsible development through community engagement and transparent communication with its stakeholders. Donlin Gold hosted numerous community meetings throughout the expansive Yukon Kuskokwim region and has even provided informational materials translated into the Yup'ik language to inform residents about the proposed project. This multi-year effort underscores Donlin Gold's commitment to responsible development of the project in a manner that will benefit a rural region with few private sector opportunities.

Thank you for the opportunity to support Donlin Gold's Proposed Project Development Plan – Alternative 2.

Respectfully,

Thomas E. Irwin
President
Tower Hill Mines, Inc.

(907) 347-8685

Smith, Neal

From: Craig, Bill
Sent: Friday, April 22, 2016 1:13 PM
To: Bellion, Tara; Evans, Jessica; Smith, Neal
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment

Follow Up Flag: Follow up
Flag Status: Flagged

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Friday, April 22, 2016 12:47 PM
To: Craig, Bill
Subject: FW: [EXTERNAL] Donlin Gold Draft EIS comment

-----Original Message-----
From: Charles Tuel [mailto:tuelsequipment@yahoo.com]
Sent: Friday, April 22, 2016 9:28 AM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

To whom it may concern.

My name is Charles Tuel.
I am a life long Alaskan.
My wife and I plan to live out our years in Alaska with our four children.
I am writing to comment on the donlin mine project.

I am for the responsible development of Alaska's resources for the betterment of Alaskans.
I have worked in remote bush Alaska for 21 years throughout the state from Sitka to barrow, many Yukon and kuskokwim river villages and everywhere in between, I have also worked as a miner at red dog mine in northwest Alaska and have seen the direct impact that a mine of this scale can have on the people, economy and environment.

SVE 1

The mining industry today has many regulations that are set in place to care for the people and environment and productively develop our resources For the betterment of the people of Alaska.

I believe we can develop this mine and conserve our fish and animal resources for future generations and keep our environment safe and clean.

Please consider our resources, people, environment, economy and future generations and help develop this mine for the betterment of Alaska.

Thank you for your time and consideration.
Regards
Charles Tuel.

From: donlingoldeis, POA
To: Craig, Bill
Subject: FW: Iditarod Trail
Date: Thursday, February 25, 2016 7:01:24 AM

-----Original Message-----
From: R Tullis [mailto:lived9lives@hotmail.com]
Sent: Thursday, February 18, 2016 1:59 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Iditarod Trail

IDIT 8

Please do not destroy the historic Iditarod Trail. There are other alternatives which should be addressed rather than raping a NATIONAL historic trail. It must be preserved at any cost. Please do the right thing.

Thank You

Rochelle Tullis

KASHUNAMIUT SCHOOL DISTRICT/KCUK-FM RADIO
985 KSD WAY
ph: 907-858-7014fax:907-8587279
website: kcukradio.org

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AK REGULATORY

April 19, 16

Mr. Keith Gordon, Project Manager
U.S. Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, Alaska 99506-0898

Dear Mr. Gordon,

Thank you for allowing me this opportunity to comment on the Donlin Gold Project Draft Environmental Impact Statement(EIS), My name is Peter Tuluk and Im from Chevak, Alaska within the Yukon-Kuskokwim Delta Region and I am a shareholder at Calista Corporation under the Alaska Native Claims Settlement Act(ANCSA). I was born and raised in Chevak area by my parents whose livelihood is subsistence hunting/fishing way of life for I learned from and depend on subsistence resources for food. I raised my family for 40 years living around Chevak, Alaska. Presently I work for our school district as General Manager for its educational radio since 1984.

I am writing to express my opinions and support for Alternative 2 of the Environmental Impact Statement on Donlin Gold Project. Donlin Gold Project would provide economic opportunities for the people of TKC and people of Calista Corporation Region. The project will bring long term jobs the people of our region as planned while maintaining our subsistence lifestyles.

SER 5

As Calista Corporation selected the mineral rights at Donlin Gold, and The Kuskokwim Corporation selected the surface estate during ANCSA to benefit their shareholders and their future generations. Donlin Gold project is a big project. We do not take it lightly and want Donlin Gold development and mining be done with utmost assurance in safety operation procedures and environmentally sound.

Within the Yukon-Kuskokwim Delta Region village are the most underserved and are within the most economically depressed region of Alaska. Cost of living, such as goods, energy and transportation is very high and unemployment is very high too. Many younger generations need jobs and Donlin Gold Project can provide them with training and jobs. Donlin Gold would help our people in this region with programs that would help promote better healthy families and communities while maintaining their subsistence lifestyles.

Donlin Gold Project should move forward for development for the benefit of Calista Corporation shareholders and The Kuskokwim Corporation Shareholders.

Sincerely,

Peter Tuluk

From: Jason Davis
To: donlingoldeis, POA
Subject: [EXTERNAL] Donlin Gold Draft EIS comment
Date: Tuesday, April 26, 2016 11:48:47 AM

NSB 1

Turnagain Marine supports the responsible development of the Donlin Mine. Donlin's proposed practices and methods of design insure that this world class operation will be conducted to the highest standards of the industry. The State of Alaska, the region and the native populations will benefit from the economic stimulus during the construction and operation of the mine. Please do not delay in granting the approval of this mine. Delay will adversely impact the State and all who work and live here.

Jason Davis

Turnagain Marine Construction
Cell 907-602-7412

Office 907-261-8960
9330 Vanguard Dr. Suite 100
Anchorage, AK 99507
www.turnagain.build

COMMENT FORM

2/17/16

Donlin Gold Mine EIS

ANILCA 810 Subsistence Hearing

Give form to BLM or mail to:
BLM Anchorage Field Office
Attn: ANILCA 810 Subsistence Hearing
4700 BLM Road
Anchorage, AK 99507

You may also fax this form to 907-267-1267 or email to bseppi@blm.gov

OPTIONAL: Your name and contact information

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Emma Turrentine
POBOX 234
Kwethluk AK 99621
emmaturrentine@gmail.com

Your comments regarding subsistence impacts from the proposed Donlin Gold Mine:

SUB 1

I am concerned about our subsistance gathering and fishing placees. Especially where the fish spawn and the fact that it will ~~affect~~ the areas where we gather berries and some wild plants that we gather for the winter, as well as the moose and caribou that might be migrating in the area where ~~they~~ they raised ~~it~~ & going to be. Also the water that we drink, that is supplied from the river.

(Continue on reverse if needed)

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(Continue on reverse if needed)

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: Donlin Gold Draft EIS comment
Date: Wednesday, March 30, 2016 10:22:17 AM

-----Original Message-----
From: donlingoldeis, POA [mailto:POA.donlingoldeis@usace.army.mil]
Sent: Wednesday, March 30, 2016 6:21 AM
To: Craig, Bill
Subject: FW: Donlin Gold Draft EIS comment

-----Original Message-----
From: Twitchell, Danny [mailto:DTwitchell@barrick.com]
Sent: Tuesday, March 22, 2016 2:53 PM
To: donlingoldeis, POA <POA.donlingoldeis@usace.army.mil>
Subject: [EXTERNAL] Donlin Gold Draft EIS comment

Hello my name is Dan Twitchell, I am a Calista share holder and was born and raised in rural Alaska and was a 36 year Alaskan resident until I moved out of State for work in 2014. I love the outdoors, I enjoy bringing my children fishing, camping and hunting, some of our best times are spent at our fish camp located along the lower Kuskokwim River. I am in strong support of the Donlin Gold project and would like to see it develop into a mine. I have worked for Barrick and Nova gold companies and I have seen firsthand how they operate and their belief that safety for their employees and the environment are at the top of their priority list. In the 10 plus years I have worked for Barrick, the number one message to the work force has been safety first and this message has been conveyed from the top managers all the way through the entire work force including contractors and consultants. I feel confident that with the resources, experienced professionals Barrick and Nova Gold have and the advancement in technology the Donlin Gold Mine could be built and operated responsibly with minimal impact to the environment. I also see a huge need for economic advancement in our region that is one of the poorest in the nation. While I was employed at Donlin Gold for 9 years I witnessed the benefit of gainful employment in our region and the profound effect it had on our people and their families. We have an abundance of very smart, motivated and hardworking young people in Rural Alaska and I am excited at the possibility of those people getting an opportunity to learn, work and grow with the careers that will be created by an operating mine in our area.

SER 5

From: Craig, Bill
To: Bellion, Tara; Evans, Jessica
Subject: FW: Donlin Gold Draft EIS comment
Date: Wednesday, March 30, 2016 10:22:35 AM

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SER 5