

READING CLOSER

NAAQIVSIARLUNI

To Mine or Not to Mine?

Mine-arluku wall Mine-arpeknaku?

We have read how our ecosystem on the delta has been changing. For example, man made changes have happened due to over hunting moose and over fishing king salmon. There have been larger changes such as the climate slowly warming. Right now, there is a plan in place to mine gold in the hills in the upper Kuskokwim River valley. We must weigh the benefits and risks of a gold mine. The decisions made will impact the region for generations.

Naaqillruukut qaillun ecosystem-aarput delta-mi cimirturallranek. Cuqyutekluku, yuut cimircetellrit pillruut pissurpallallritgun tuntuviim cangtaqvallallrata-llu taryaqqviim. Angenritnek cimilriartangqellruuq climate-aatun puqlangyartuaralriatun. Wanirpak, pillerkiurangqertut mine-allerkaatnek suulutaamek qemini kialirnerani Kusquqviim Kuigan terlaini. Cuqtaarnarqaput arenquitali pillugutkai-llu suulutaam mine-am. Cucukellrata agtuumaciiqaa avatput amllerugarni kinguverkamteni.

The Location

Uitavia

Donlin Gold is a large mining company that wants to mine the gold and other precious metals from ground located in the Kuskokwim gold belt. The area is about 150 miles northeast of Bethel in the hills along Crooked Creek that drain into the upper Kuskokwim. The area is made up of winding streams and lakes that are prime salmon habitat. The mine will be an open

pit mine that is about 1 mile wide and 2 miles long. That's around 10,000 acres for the mine. There will also be a tailings facility, power plant, and worker's camp. Land will also be affected by a natural gas pipeline coming in from Cook Inlet to power the mine.

Donlin Gold-aq angelriaruq mining kampaniq mine-aryulria suulutaamek allanek-llu akitululrianek cavignek nunamek uitalriamek Kusquqviim suulutaarviani. Nunii angtauq aipaagni 150 agnernek negeqviim calaraqviini Mamterillerem qemini mengliini Crooked Creek-am ellngalriamun kailirneranun Kusquqviim. Tamana nunii caqialrianek kuiggaarneq nanvanek-llu pitangqertuq qurrvigkarnilrianek neqet anglivkaatnek. Mine-aq open pit-auciquq angtaluni nuniini 1 agneq iqtutaluni 2 agneregnek-llu taktaluni. Tauna nuniintuq 10,000 acres mine-arkam. Cali-llu tailings facility-ingqerciquq, kenurrivigmek, calistet-llu uitavigkaatnek. Nuna-llu agtuumaciiquq natural kaass-am cupluanek itellriamek Cook Inlet-aamek kallulillerkaanek mine-am.

The Benefits

Arenqitai

The land is owned by Calista and The Kuskokwim Corporation. Calista is a native corporation that operates for profit for the Alaska natives in the Yukon-Kuskokwim region. The Kuskokwim Corporation represents 10 villages in the region. The Donlin Gold Mine would be the biggest economic development project in the region. Building the mine and operating it could bring hundreds of jobs to the people of the delta. Donlin has committed to hiring local workers. Almost everyone who lives on the delta could see income in the form of dividend checks from their native corporations. Donlin Gold is supportive of local villages in the region. They distribute buckets with safety gear and life vests for boating. They cheer mushers at the K300 and the Iditarod. They provide needed equipment to local search and rescue programs. Donlin plans to bring natural gas to the region which will lower the cost of power for everyone. There are many benefits for everyone if the decision is made to move forward with the project.

Nuna pikestengqertuq Calista-mek cali-llu The Kuskokwim Corporation-aamek. Calista native corporation-aaruuq calilria akingengnaqluni Alaska native-aat pitekluki Yukon-Kuskokwim-aam nuniini. The Kuskokwim Corporation-aam ikayularai 10 nunacuaraat, tamaani. Donlin Gold mine-aq angenqurrauyartuq economic development project-aani avatempteni. Piurtellra mine-am ayagturcetellran-llu cikiqengyartuq amllerugarnek caliarkaitnek yuut delta-mi. Donlin-aaq akqutengqertuq calivkariarkauluni yugnek avatemenk nunamtenek-llu. Tamaklaryarpiarmeng uitalriit delta-mi tangerrisallit akimek tailriamek dividend-aarluni check-atun native corporation-aameggnek. Donlin Gold-am cingumai nunacuaraat tamaani. Aruqilartut mertarcuutnek ilaluki arenqiallugcuutnek pugtassuutnek-llu angyarcuutnek. Cheer-arituut aqvautellrianek K300-aami Iditarod-ami-llu. Paivcituuq aturyukaitnek equipment-aanek search and rescue program-aanun. Donlin-aam pillerkiurutii iluvaucillerkaanek natural kassam nunamtenun atrarciiqaa akia kalluum tamalkuitnun. Arenqitai amllepiartut tamaitnun yuut pillerkaq picuireskan project-aaq-llu ayangangareskan.

The Problems

Arenqiallugutai

The gold is mined from rock and soil that also has heavy metals in it. Sometimes the heavy metals, called tailings, find their way into the river. The tailings will kill the fish. Cyanide is a chemical that is used to remove the gold from the rock. The chemical is highly toxic (poisonous). The poison can kill the fish and if it makes its way into the drinking water, it can cause illness and death for people. The mine itself will change the land. There are several open pit mines throughout the world that are examples of the permanent changes open pit mining creates. People who have used the land for subsistence will no longer be able to use that area.

Suulutaaq mine-aumalartuq teggallqunek nunamek-llu uqamailngurnek tegglirtalegnek iliutni. Iliini uqamailnguut tegglit, atelget tailing-aanek, kuigmun pilartut. Tailing-aat tuquciiqait neqet. Cyanide-aq chemical-aaruuq atumalleq anluku suulutaaq teggallqumek. Chemical-aaq cakneq

tuqunarqeqaapiartuq. Pioson-aam tuqucugngai neqet tuall' meqengamtenun ayakan, naulluutmek tuqumek-llu yugnun piyugngaluni. Mine-aqainaam cimirciqaa nuna. Qavcinek pitangqertuq open pit mine-anek iluani ellarpiim cuqyutngulriit cimillernek open pit mining-aam unitallritnek. Yuut nerangnaqluteng nunamek aturtek'lallrita aturciigaliciqaat tamatum nunii.

What to Do?

Callerkauga?

All of us must decide. We all are responsible for what happens. Some people are against it. Bethel's Bev Hoffman, one of the co-chairs of the Kuskokwim River Salmon Management Working Group, said, "I wish I could say I trust the mine can be developed without impacting salmon/wildlife habitat, and the way we live in this region, but I can't." Others are more optimistic. "We wouldn't be supporting this program if we didn't feel it was safe and responsible," said Calista's communications manager, Thom Leonard.

What do you think? Is the economic gain worth the permanent change to the local ecosystem?

Tamamta cucuklirarkaugukut. Tamamtenun tusngauq cam pillra. Ilaityuut ingluliraat. "Qaneryugyaaqua ukveqaqa mine-aq piurcugngauq taugaam agtuavkenaki neqet/wildlife habitat-at, cali yuulput maani, taugaam pisciigatua." Mamterillerem Bev Hoffman-ara, iliit co-chair-at Kuskokwim River Salmon Management Working Group-at qanertuq. Allat neryuniunruut. "Wangkuta cingumayanritaput una program-aaq akngircingaicukekumteggu ellaitnun-llu tusngavkarluki ca pillugeskan, "qanertuq Calistam qanercuucuirtiin atanra, Tom Leonard-aaq. Qaillun umyuarteqsit? Economic gain-aqaa ikayuutnguciiquq akwarpak ayuqcirkaan cimirillerkaa nunam ecosystem-aaran?

We have read how our ecosystem on the delta has been changing. Some changes are natural, while others are caused by humans. Right now, there is a plan in place to mine gold in the hills in the upper Kuskokwim River valley. Mining gold will generate a lot of money for our region, but it comes with a cost. How does mining affect Earth's systems?

The Location

Donlin Gold is a large mining company that wants to mine gold from ground located in the Kuskokwim gold belt. The area is about 150 miles northeast of Bethel in the hills along Crooked Creek. This area is prime salmon breeding habitat that drains into the Kuskokwim River. The mine will be an open pit mine that is about 1 mile wide and 2 miles long. That's around 10,000 acres for the mine. There will also be a tailings facility, power plant, and workers' camp along with a natural gas pipeline coming in from Cook Inlet to power the mine. This development project will affect the ecosystem.

The Benefits

There are many benefits to developing this mine. The land is owned by The Kuskokwim Corporation and the minerals below the surface are owned by Calista. The Kuskokwim Corporation represents 10 villages in the region. Calista is a corporation that operates to generate profits and dividends for the Alaska Natives in the Yukon-Kuskokwim region. The Donlin Gold Mine would be the biggest economic development project in the region. Building the mine and operating it could bring hundreds of jobs to the people of the delta. Donlin has committed to hiring local workers. Almost everyone who lives on the delta could see income in the form of dividend checks from their native corporations.

Donlin Gold is supportive of local villages in the region. They distribute buckets with safety gear and life vests for boating. They cheer mushers at the K300 and the Iditarod. They provide needed equipment to local search and rescue programs. Donlin plans to bring natural gas to the region which will lower the cost of power for everyone. There are many benefits for everyone if the decision is made to move forward with the project.

The Concerns

Just as there are potential benefits to a mine, there are potential concerns. The gold is mined from rock and soil that also has heavy metals in it. The leftover materials after the gold is mined are called tailings. If the tailings find their way into the river, they could kill the fish. Cyanide is a poisonous chemical that is used to remove the gold from the rock. If the cyanide enters the river, it can kill the fish. And, if it makes its way into the drinking water, it can cause illness and death for people. There are regulations in place to protect the land and people, and Donlin has already received many of the permits necessary to move forward. However, accidents can happen. The mine itself will change the land. There are several open pit mines throughout the world that are examples of the permanent changes open pit mining creates. People who have used the land for subsistence will no longer be able to use that area.

What to Do?

All of us must weigh the benefits and concerns in order to make informed decisions about our land. Some people are against it. Bethel's Bev Hoffman, one of the co-chairs of the Kuskokwim River Salmon Management Working Group, said, "I wish I could say I trust the mine can be developed without impacting salmon/wildlife habitat, and the way we live in this region, but I can't." Others are more optimistic. "We wouldn't be supporting this program if we didn't feel it was safe and responsible," said Calista's communications manager, Thom Leonard.

What do you think? Is the economic gain worth the permanent change to the local ecosystem?

We have read how our ecosystem on the delta has been changing. Some changes are natural, while others are caused by humans. Mining is one of many ways humans change the land. An industry such as mining often generates money for the region, but it comes with a cost. How does mining affect Earth's systems? What do you do that affects the ecosystem in which you live?

The Benefits

The benefits of an industry such as mining are unmistakable. Landowners are able to make money from the minerals found on their land. Communities nearby often see a growth in jobs which increases the livelihood employees can provide for their families. Local governments can see higher revenue through taxes. This allows them to provide greater services to their communities. A large industrial project often brings with it upgrades to local utilities and infrastructure, including ports and roads. These upgrades can benefit everyone. Lastly, industries such as mining often give back to the communities that are impacted by the environmental changes they bring about. This is done by donating to schools and communities and supporting local efforts to educate the public on environmental awareness.

The Concerns

Just as there are potential benefits to an industry, there are also potential concerns. In mining, the desired ore has to be extracted from the soil. This can be a messy process that often includes digging very large pits to extract the ore and using toxins, for example, cyanide, to separate the desired ore from the remaining soil. During the process, contaminated soil and naturally occurring mercury, another toxin found in the soil, must be kept from entering the ecosystem and polluting the environment. Mining companies can accomplish this through the use of holding ponds, land reclamation, and in some cases shipping toxins, such as mercury, to other facilities for storage or processing. In our area shipping takes place primarily along the river, but in other parts of the world, it is done by truck or train. In an attempt to protect the environment the government has in place numerous steps in the permitting process. This systematic review of the operation makes it less likely a safety step will be overlooked or an accident will happen.

In this passage, we used mining as an example of how humans can bring about changes to the environment, but each and every one of us affects the ecosystem in which we live. It is necessary to weigh the benefits and concerns anytime we are impacting the environment. We must make informed decisions about the risks and benefits of any project or activity. Whether you are mining for ore, building a home, or filling your snowmobile with gasoline on the tundra, you must consider how it will impact the ecosystem and consider ways you can lessen that impact. How do you impact your ecosystem? How can you keep that impact to a minimum?