		1
1		
2	PEBBLE PROJECT	
3	SCOPING MEETING	
4	ANCHORAGE, ALASKA	
5	Taken April 19, 2018 Commencing at 11:00 a.m.	
6	Volume I - Pages 1 - 58, inclusive	
7	volume 1 - Pages 1 - 56, inclusive	
8		
9	Taken at Tubughnenq'/Tyonek Room	
10	Anchorage, Alaska	
11		
12		
13		
14		
15		
16		
17		
18		
19		
20	Reported by: Mary A. Vavrik, RMR	
21	Reporter 1	
22		
23		
24		
25		

P-R-O-C-E-E-D-I-N-G-S

MR. CHARLES EDISON MCKEE: My name is Charles Edison McKee. And my testimony to the Corps of Engineers in reference to the Pebble Mine is if there is an opportunity to purchase, if approved, their mine from them to prevent them from extraction of the resources that they wish to draw out of the ground, I would like the opportunity to see what the offer would -- the settlement to pay the purchase price would be before they actually mine it, the reason being is the experience that Alaska had in Prudhoe Bay is when the leases were sold for 900 million, the legislature accepted only gold bullion in payment.

And upon receipt and delivered to the bank account Lloyds of London and the flight time it took to get there, they lost two-thirds' value of the gold bullion because they were -- the big boys were mad that we would accept a Federal Reserve debt instrument and which cannot pay a claim. So they dumped the gold they had on hand on the open market and dropped the value of the gold that we accepted in payment for the leases on Prudhoe Bay.

And that oil was not just oil; it was gas and it was dirty gas. It's got peptide ingredients, one of which is sulfur. Sulfur is used to make stainless steel, the ingredient needed for stainless steel production. So if

you are a hog farmer, the adage is you make money off of everything but the squeal. Well, in this case with the Prudhoe Bay discovery, you are making money out of even the squeal, vapor recovery. And they weren't being taxed for that. It was the vapor that peeled off the crude oil. And they made a whole lot of credit off of that and didn't pay any taxes for it.

In fact, they installed a vapor recovery down in Valdez at the tail end of the pipeline to separate, to pull it off and put it on the tanker. It went out with the same tankers, but that's how it was monetized. With the Prudhoe Bay, they are going to do the same thing. If the paychecks are paid out, revenue is going to be paid out in Federal Reserve debt instrument. It does not pay a claim. It has no value. It's not backed by gold or silver. It's backed by good faith and credit of the Federal Reserve. They don't have anything on it or in it.

In fact, they just have a printing agreement with the federal government to charge us a user fee, a rental fee, but we don't have anything to -- any control over it.

So the whole idea of mining this resource in Prudhoe
Bay and damaging the fishery that exists there today, you
are being subject to manipulation of the financial market,
the corporation, be it the individual corporation or the
banking financial system.

And so I suggest that you look at your -- your individual master file, your Social Security account and your association with your corporation and pull yourself from the corporate beneficiary status and regain your -- your whole person title.

And so I, in my testimony, am interested in purchasing the mining interest of this deposit they are talking about extracting and with my line of credit I have established. And supporting that would also be my copyright ownership of TXU 545.416, 1992. And you could also take a look at that on my website, www.new -- new-pi.com. And that's my website. And what you will see is the rendition -- my math and then the rendition of NASA's artistic rendition of the universe being created from the Big Bang or let be there be light occurrence in the universe that we now are projected into in physical form.

So with that, I would like to hear from the Corps of Engineers and their relationship to United States

Corporate 8 USC 1101(a)(22)a. And that's part of the written documentation I'm leaving, two pages. One is titled Applicable Laws and Definitions. The other one is a personal rejection of me giving credibility to a fiction or a legal fiction as a real living man.

Thank you.

MR. DANIEL J. MICHELS: Dan Michels. I own Crystal Creek Lodge near King Salmon, Alaska, been a guide in the Bristol Bay area since 1988 and have flown the entire Bristol Bay area from the Kuskokwim River to the end of the Alaska Peninsula, from the western capes to the eastern reaches of Lake Clark National Park. Very experienced in knowing the subsistence cultures and also the commercial fishing cultures.

I'm here to speak against this mine. I feel it is a catastrophe waiting to happen. I just observed the Pebble plan by video, and while it's their best effort to date, everything I've seen from this organization is constantly shifting, constantly deceitful, and basically a variation of spin.

And my awareness of this goes back 12 years of them attempting to lobby me and witnessing various stages of their development. And what they have here looks very good, but yet what is at stake here is one of the world's great ecosystems. And wild salmon is at the foundation of it. We already have in place a \$1.5 billion annual industry that supports what I do, as well as other guides, commercial fishermen, and supports thousands of persons who use the Bristol Bay region as a basis for subsistence.

There is numerous points of science, of how heavy minerals are toxic to salmonids. Every mine that's ever

been put into production anywhere in the world has environmental issues. And this is such a sensitive place with its water, its tectonic activity, its temperature variations, it's a disaster waiting to happen.

This is public land, and I'm here to speak on behalf of public interests. This is -- and what we are dealing with is a special interest looking to dominate public land for the profit of foreign corporations and foreign penny stock investors. I beseech those reviewing this to consider that it is not in the public best interest. And please allow this world-class ecosystem that is a treasure of the United States and a treasure of Alaska and a treasure of the world not to be put upon by this mine.

MR. RICKY DAVID DELKITTIE, SR.: My name's Rick Delkittie, Sr. I'm a tribal member from Nondalton.

And I lived there all my life. I live a subsistence lifestyle, along with getting food from Carrs and Costco.

I'd like to point out some of the -- some stuff out there that we are aware of that's in our area. We are on the Ring of Fire, and we also are on a fault line. I remember 1964, March 27th. We are 170 miles from the epicenter. That earthquake broke over six feet of ice. The ground was moving like waves.

We have a lot of water over there, wetlands. And we all understand that everything living over there needs to

have fresh water to survive. My people have been over there for over 10,000 years. Salmon has been coming over there for that long, too, along with all the other fish.

Some of the impacts that I saw when Cominco was over there over 30 years ago drilling test holes, and they had just let that mud go on the tundra. Right today you go to one of their drill sites over there, and that tundra still hasn't come back. The vegetation is dormant or just died. It's not -- there is nothing there. You could very distinctly tell where the spill occurred from the drill site.

There is seismic activity in that area with dynamite.

I'm a hunter, and I have to follow rules when I kill fish,

birds and animals. When they were doing their seismic

work with dynamite, they were killing ground squirrels,

parka squirrels, all the birds that nest in them bushes.

I don't think they had a permit for that.

I have some experience with dynamite. There has been a project that took place in the '80s up the Tazimina River across from Nondalton. There was a hydroelectric plant. There is an 80-foot waterfall up there, and they drilled a hole on one side of the waterfall, and they made a hole in that solid rock down and then back out and then back into the river. And they used dynamite.

We have lodges right adjacent to our village, and the

owner's son told me no more salmon is going up there where they used to go. There is a pool below the waterfall. No more king salmon, no more sockeye salmon go over there for the last over 20 years, ever since -- ever since they used that dynamite and it got into the watershed.

These are some of the things I believe that the Army Corps should look into and really find out the impacts it have on watershed. The dynamite use they had done in the Frying Pan area has the same impact as the Tazimina River project.

The impact that this project have on me personally, they took my trapping ground away. I no longer can go and trap for fur over toward the Frying Pan area.

The Army Corps, the EPA and all of the other organizations that work under the federal government, they all have mission statements. I believe that they need to revisit their mission statement every now and again to make sure that they are following the guidelines that they are charged to do. A part of Army Corps' mission is to protect and maintain the navigable capacity of the nation's waters. This is really important. There is only three percent water on this earth.

I have seen creeks and streams go away over there in the Lake Clark and Nondalton area. So the water is going away. We see it firsthand. It's been there for all our lives. And now we travel around with four-wheeler up in the mountains, and we notice creeks are not flowing anymore.

After all the organizations look at all this information about this proposal, I would like them to have no action alternative. The people of Alaska already spoke on this from every voting district. And the majority is against this proposal. And it's the Bristol Bay Forever initiative.

So I would really like everybody involved to look at this really close. We already have big industry over there that's working quite well. Are they going to take that away? Because that's a lot of money, not only for the people that work for it. They have to pay federal taxes and State taxes. Are they going to cut off that arm that's giving them money and accept mining that they don't get any money from?

No action alternative. Thank you.

Two more things. I would like to add more information. I have two books here, Where Water is Gold by Carl Johnson, and the other book is from the Hinterlands to Tidewater by John Branson.

MR. ROB ROSENFELD: So you are submitting those for the record, is that right, Rick?

MR. RICKY DAVID DELKITTIE, SR.: Uh-huh.

MR. GERALD PROTZMAN: Well, my name is Gerald Protzman. I was born in Seward, Alaska. I'm 69. My dad was born across the street from me. And his dad was born in British Columbia on their way to Alaska.

In the early '70s -- well, when I was 15 I started working in Prince William Sound, and in the early '70s they were discussing the tankers coming into Valdez and different alternatives for it. And there was a city meeting in Whittier, and I attended. And my concern was is Valdez was so far into Prince William Sound that sometime there would be an accident, you know. It -- and which, actually, it turned out there was. And one of the reasons it was so much on my mind is I personally had an accident. At Point Freemantle we hit an unchartered rock, which is right across the channel from Bligh Reef.

And Bristol Bay is, like, the most famous salmon in the world, maybe. And I've always known people from there, even though I've never worked there. And I just think that the chance of ruining that would be devastating. I mean, everybody in Alaska knows somebody that fishes or has family that fishes in Bristol Bay. And copper and gold are a mineral that will always be there and will always belong to Alaska.

50 years from now maybe the technology will be better and maybe some Alaskan company or American company can

mine it. And so I don't understand why there would be such a rush to get it out of the ground now. I mean, our -- our relatives are also going to need jobs, you know, 100 years from now.

And another concern I have is, like, who is going to be responsible for a cleanup 50 or 100 years from now?

And I don't think it's going to be a foreign company that's not here no more.

In Prince William Sound when the oil spill happened there -- and actually I worked on the oil spill. And the salmon did okay. They came back. But the salmon spawn up in the rivers. Prior to that, herring was a big -- a really big thing in Prince William Sound. I remember working to a couple years on the off-loading of it. I mean, it would be hundreds of tons of herring every year. The herring never did come back because they spawn in the ocean. And I think that is the difference with this is because where the mine is going to be is going to be where the salmon spawn, not the herring. So I think the salmon would be at risk.

I guess that's all I have.

MR. JASON BRUNE: For the record, my name is Jason Brune. I am testifying today in complete support of this project. I believe that all projects in the United States and specifically Alaska need to be afforded

the opportunity to have due process for their projects, and the American public obviously needs to have the confidence that projects will be evaluated fairly and our investment climate requires that to encourage responsible resource development in Alaska.

I believe that this project has done a significant amount of due diligence and work, spending hundreds of millions of dollars on environmental studies to understand the fish, the wildlife, the hydrology, the other environmental factors. And the companies have done a lot of work to incorporate that data into making sure that the project that is being proposed will be able to coexist with the salmon fishery and with the other subsistence users.

I think that the significant amount of jobs that will be created by this project will be incredibly beneficial for our state, and I don't think that it's a choice of one resource over the other. I absolutely want to reiterate that it is coexisting and that it can be done concurrently.

I would like to reiterate that sentiment by saying that Alaskans, Americans have a choice where they develop their natural resources. In areas like Alaska where we have an environmental ethic that is second to none, we have proven that, with projects from the Trans-Alaska

Pipeline system to other mining projects, that we will ensure that the environment is taken care of while this mine goes forward. We can choose to do that here or we can say no to projects like this and force that development to Third World jurisdictions where they don't have the environmental ethic that we have, where they don't have the concern for health of child labor laws, for benefits for the people that are working.

There is no question that we should think globally and develop locally in this case and choose to make those development opportunities in Alaska where we will care for the environment and provide jobs for our residents.

With that, that's all I have. And thanks for the opportunity to testify. I very much support this project.

MR. GEORGE EDWARDSON: My name is George Edwardson. I'm from Barrow, Alaska. Geologist, mining and petroleum technician. I've got three college degrees on the subject. And all these -- these past 20 years I have been, you know, protecting our Arctic Ocean from contaminations, whether it be from mining or from oil and gas or people pollution. And I have been with the tribe for over 25 years, Inupiat Community of the Arctic Slope. But I'm here to speak as myself. Okay.

And being a geologist, I understand what I've learned through these years of politicking is when you go to Point

Barrow 11 miles east, northeast of the town and go straight out 200 miles, and then you go west to 168 miles past Wrangell Island and go straight out 200 miles, it turns out this whole water in between is a nursery for the last third of the world's fish.

And the reason why I say the last third, there was an international gathering in Seward in the end of the '70s that was called the Bering Sea Synthesis. 13 nations in the Arctic. And they -- they explained this is the last third of the world's fish. And Pebble Mine is part of that fish that goes in the Arctic. Salmon fingerlings, when they get into the ocean, ride the currents that go from the Pacific Ocean to the Arctic Ocean. And once they mature, they swim back to the rivers to lay their eggs again. This is a cycle, the last third of the world's fish tank.

And I learned, you know, the first third that disappeared was the Pacific Ocean. Those people overharvested and ate all the fish. Basically the Pacific cannot sustain a people anymore.

Then you look at the planet and then you see another third of the world's fish in the North Sea. About five years ago I went to Norway and found a treaty between Russia and Norway. When one country fishes the North Sea, the other country does not have a single boat in the North

Sea because they both know it has been overharvested and they will kill it if they both go fishing.

That treaty is still going on between the two countries. And then you look at the rest of the world. The last third of the world's fish is the salmon in the --you know, between Siberia and Alaska. That is the last third of the world's commercial fish. And you disturb where that -- those fish are being laid, then you have put the last third of the world's fish in danger.

I have been saying this for years. And the information I use is what I learned from an international hearing. So you got no choice. You have to leave it alone if you don't want to destroy the world's last third of the fish.

Did I say it good enough? Okay. That's what I came to say.

MS. TARYN KIEKOW HEIMER: Good afternoon.

My name is Taryn Kiekow Heimer. I am the deputy director

of the Marine Mammal Protection Project at the Natural

Resources Defense Council, and I'm here in Anchorage today

on behalf of our more than three million members and

activists, many of whom live in Alaska. I am also here

today to support the communities and residents of Bristol

Bay, who overwhelmingly oppose the proposed Pebble Mine.

significance. The last time I publicly testified in Alaska about the Pebble Mine, I thanked EPA administrator Gina McCarthy for listening firsthand to the concerns of the people whose communities and livelihoods are threatened by the Pebble Mine and for responding to the requests of tribes and others who protect the Bristol Bay watershed.

Unfortunately, I'm not able to testify publicly before the Army Corps of Engineers because it has designed a process that precludes meaningful public participation. While the Army Corps is offering a hot microphone at six of its public hearings, it excluded public testimony in Dillingham, Homer and here in Anchorage. Further, it is not holding public hearings at potentially impacted communities downstream of the mine or fishery hubs in the Pacific Northwest.

As you know, the scoping process is the best time to identify issues and provide recommendations to agencies on what should be analyzed in the Environmental Impact Statement. However, a process developed for activities with controversial impacts like those at issue here that does not provide opportunity for certain members of the public to testify before or speak to a broader audience or to hear answers to questions raised by others and that does not engage potentially impacted communities

downstream of the mine ultimately is not designed to help citizens and organizations effectively participate.

Under these circumstances, I do not believe these scoping meetings have been designed to help our members effectively participate in this phase of the NEPA process. Had the Army Corps offered an open mic today, all of us would have heard about the importance of salmon and clean water, which is the lifeblood and economic lynchpin of Bristol Bay.

The overwhelming majority of the people do not want the Pebble Mine and are asking the Army Corps to say no to the Pebble Mine.

NRDC will be submitting detailed scoping comments to the Army Corps, so I will just make a handful of brief points here today.

First, the Army Corps should not permit the Pebble
Mine. Doing so would threaten a \$1.5 billion annual
commercial salmon fishery that supports 14,000 jobs and is
a subsistence culture that has lived there for millennia.

Second, the EIS should consider a range of alternatives, including the no action alternative, alternative power sources, alternative transportation corridors, and alternative port sites.

Third, the Army Corps must incorporate extensive up-to-date scientific information. In its permit

application, Pebble proposed several entirely new components to the project, including a 188-mile-long natural gas pipeline, a large port and 4.5-mile dredged channel in Cook Inlet waters, use of an icebreaking barge to make daily round trip crossings of Lake Iliamna, a 230-megawatt power plant, and the construction of more than 80 miles of private roads that will have more than 200 stream crossings and at least eight bridges.

Yet Pebble did not submit any baseline studies from which the agency can begin evaluating the impacts of the new components. The only baseline studies publicly available are more than a decade old with data collected from 2004 to 2008, and those focused solely on the mine site, failing entirely to include newly proposed project components, such as the transportation corridor, Iliamna Lake ferry, and the proposed port site.

These previously unanticipated components will require significant additional study before the Army Corps can move forward with an EIS.

Fourth, the EIS should analyze a full range of possible impacts from mining, the tailings dams, the transportation corridor, the pipeline and the port site, including failures and spills. The EIS should conduct this analysis based on the substantial body of information already available about mining and pipeline disasters.

Finally, the EIS must consider a range of mitigation options, although no amount of modern engineering or mitigation could sufficiently protect Bristol Bay from the inherent risk of large scale mining.

Building a mine of this size in this location will be destructive. The only certainty is that eventually mitigation will fail, contamination will occur, and salmon will be destroyed.

On behalf of NRDC and its members, I look forward to more substantive opportunities to participate in a manner that fulfills the purposes of NEPA.

Thank you for your consideration of these and future comments. Thank you.

MR. JOHN HOLMAN: So my first comment is in regards to whether or not the mine that the Corps is considering permitting is really the mine that is going to happen. And I feel that it's not. Looking at the plan, looking at the extent of roads, infrastructure, power, everything involved, there is no way that they are going to actually keep this mine at the level that the mine is currently shooting for in regards to permitting. So I believe that the Corps really needs to look at this mine as what it truly is, which is something that's probably double, three times the size of what they are permitting for.

so in my opinion, this whole process is based on something that's not even reality. They are looking at a mine years ago based on the price of ore at that time. The price of ore now is even less. They are considering building a smaller mine. It just doesn't pencil out. They really need to look at what's really going to happen there on a realistic basis. And some of that is going to be looking at the -- just, you know, sheer cost approach from the price of metals, but also looking at potential output over the next ten years. And then they have got to look at it, okay, if that doesn't pencil out, how many years before this pencils out.

So my next comment has to do with the new routing. The original proposal that they had put forth was a northern route along the north side of the lake. This new permit they are shooting for brings the ore across the lake and a new road that runs over Gibraltar Creek near Kokhanok, up over the hills out to the deepwater port in the bay.

My problem is that they -- they spent years and years studying that northern route. They looked at all of the stream crossings. They looked at all of the impact that they would have and all the different land issues and all of the environmental issues. And then they switched to this new route and, boom, they have got it all figured out

without any baseline. They haven't studied it for years. It was all within the last year they said, oh, yeah, this new route is going to work. We are going to cross 200 streams, but we have got it figured out, so give us a permit for it.

There is no way they can have any idea about river flows, how many of these creeks have fish, how many -- how many are nonexistent at times and flow at other times. I mean, there is just so many issues that they have no idea about without getting some serious baseline. And they don't have it.

My next point has to do with the overall picture.

Okay. They are talking about permitting something that in its very nature is going to change the entire landscape, and it's going to be destructive to current businesses. I own a business in Bristol Bay. I grew up out there. But at this point in my life, my livelihood relies on Bristol Bay as it is. I'm not opposed to development. And obviously the commercial fishing has managed to -- to use a renewable resource and turn that into businesses, as well.

But what this potentially does, it takes away the reason that I have a business. If my clients fly in and we get in a plane and we fly over dump trucks, roads, dust, potentially land and fish listening to explosive

blasting, which is exactly what will happen if this project moves forward where they want to do it, we are jeopardizing not only my business, but countless other businesses like mine.

Now, you know, you might say, well, whatever. It's just some businesses. You guys will recover. But it's not just my business. It's not just the sportfishing. My business supports hundreds of other businesses in the state of Alaska. We purchase all of our goods right here in the state, primarily in Anchorage. We employ businesses to transport these goods out to Bristol Bay. My clients come through Anchorage. They utilize hotels, rental cars. I mean, everything. It's all intertwined. And they have got to look at the big picture of what they are really jeopardizing if they were to allow this to move forward.

And I can guarantee. I have clients that have straight up said, look, if I come out here and I see a gigantic open pit mine, which is what they're going to see, along with the roads and everything else, that will be the last time you see me come to your fishing lodge or anywhere in this part of the state, period. Maybe they will come back and go to Denali. But we're talking about ruining the livelihood of thousands and thousands of people out there, not to mention the damage to the

resource that is a renewable resource.

So I think they really need to look at that much, much closer and decide whether even a functional mine that doesn't have a big disaster, really, is this worth what we are going to give away in exchange for that.

I would like the Corps to really look at the effects, also, on aviation safety out there. I fly around every day, as do a lot of other people just getting around in the course of doing business, but this project is going to introduce a whole new level of air traffic into this area. I don't know if they have really studied it all or looked at the potential for incidences in that area. I don't know if it's really in their scope to do that, but I'd like them to at least consider the potential for this interaction with helicopters, float planes.

There is already -- there is literally hundreds of float planes flying around and wheel planes. So I'd like them to look at that.

Another thing that I'd like looked at is the multi-year or it could be decade change in water flows that happens. I have been out there for 30 years in the profession of fishing and in and out flying around all over different rivers, and I've seen water levels vary from no water to high water, of course, and that's going to happen regardless.

But one thing I don't know that they have really looked at is when they take discharge from this potential mine and put it back into, say, Upper Talarik Creek or Koktuli and start raising that water level -- obviously, they're going to raise the water level. But when you have a July flood, which happens pretty regularly, we have got the river at flood stage and then you pump in so much more water, what's that going to do to the surrounding river? What's it going to do to the salmon that are either egg form, alevin or fry that are trying to survive that? They are going to get flushed. They are going to possibly get washed out of the river.

I don't know if they really know from year to year what kind of variances they are going to see in any of these watersheds. They have looked at a couple of them, for sure, but I would like them to really look at that as a reality, high water versus low water and what the discharge is going to look like in those rivers as far as raising and lowering the levels.

And that's about it.

MR. MARK NEWMAN: My name is Mark Newman.

I moved to Alaska in 1975. My profession is wastewater
water treatment. I currently hold a Level III in
wastewater and a Level I in water treatment. I have three
years' experience in treatment in Alaska. Clean water is

essential for a healthy salmon habitat. My concern is the ability of the Pebble Mine project to return the water to the pristine conditions that they are in now once they are exposed to the industrial process of mining.

It is my understanding that dissolved copper greater than nine parts per billion is lethal to salmon. From my experience as an operator, maintaining that level of treatment would be very challenging, at best. Accidents or mechanical breakdowns happen, and this could cause irreparable harm to the habitat.

For those and many other reasons, I oppose the Pebble Mine project. Why trade a renewable resource for a nonrenewable resource? In the words of the late Ted Stevens, wrong mine, wrong place.

MS. NANCY PFEIFFER: This is just completely incompatible with life out there. It's incompatible with one of the largest fisheries in the world that feeds so many people. What they are talking about in that other room, it cannot be done without an impact. It's impossible. I don't know. I just -- okay. I don't know what to say. It -- you know, it can't be done. Like, you can't have that kind of development and not make a huge impact on a place.

Okay. Thanks.

MS. ROCHELLE HARRISON: Okay. I'm

Rochelle Harrison, and I'm representing myself, my husband and my family. We operate a hunting/fishing operation in the Bristol Bay area. We are very concerned about the proposed Pebble Mine. We have been following it from the very beginning. And we feel at this point that the permit application is not -- should not be submitted at this point because it is -- the application is based on missing or inadequate baseline data.

For instance, there isn't enough data to show that the fisheries in these vital areas can be protected. It's not just a catastrophic event such as mine waste leakage that concerns us, but also it concerns all of us that have viable -- making a viable -- I'm sorry. It concerns those of us who are already making a viable living in this area.

But it also is the day-to-day overuse and fouling of the area. Between noise pollution from blasting and 200-plus crossing streams daily by extremely heavy equipment, the application does need to address how the mine would protect and mitigate the effects of these things.

At this point, there isn't even current data for the streams, nor known local fish populations. Alaska

Department of Fish & Game doesn't even know what fish live in which drainages.

If the water is fouled, which is to be expected from

wastewater discharge, whether the water is overclean or foul, it won't meet the fish's needs, and the fishery could collapse. Also if the projected surface water is discharged into the creeks, especially during the spring, it could annihilate eggs and spawned fish. This is only one problem not effectively addressed or completely ignored in the application.

Other considerations include the actual economic feasibility plan such as who would build the road. It's doubtful that without a long-term investment, planning to expand and develop the mine over many years as they -- as Northern Dynasty has reassured its shareholders, it's doubtful that they could build and support the complex infrastructure that they are proposing.

There is also the historical and wilderness value of the area, and that would be incalculable to replace. Our business would personally be affected by many of these losses, but most specifically, since we are not in the immediate mine area, by -- because we take some of our clients up in this area because they request to visit and fish this famously world-renowned fishery, and once you are a fisher person, you can only imagine what it's like to visit and fish the Talarik and the Koktuli. They are truly the Taj Mahals of the fishing world.

Also, as the fish populations degrade and/or collapse

in this area, those in the fishing and hunting business
will have to leave and find other places to take their
clients, which means they will be putting increased
pressure on the adjacent area, which is where we are. And
this is a world where there is ever-increasing crowded use
of wilderness areas.

We as small business owners are concerned as Alaska citizens and ask you to reject the Pebble permit application because it lacks the necessary information for a complete evaluation, and we believe it could unacceptably alter our world-class tourist destination and our home.

Thank you.

MS. SYLVIA PANZARELLA: I'm Sylvia

Panzarella, and I'm here to say that I'm strongly against

Pebble Mine. We have been against this for many years. I

cannot see risking the fishing industry. It's the largest

red salmon run in the world, first or second largest.

Building an acid pit in an extreme earthquake zone is

crazy. We don't need to risk our fisheries. The world

doesn't need to risk the fisheries. It's not just Alaska.

It's the whole world.

So that's what I have to say.

MR. MARIUS PANZARELLA: I'm here today because this is a critical time in Alaska where we need to

protect the environment. And it's such a clear travesty to have this huge mine with a destruction very easily of a fishing industry with no long-term benefits for the people of this state and the possibility of an extremely serious environmental disaster.

And that's what I have to say.

MR. GLENN M. GUSTAFSON: Hello. I am

Glenn M. Gustafson. I first moved to Alaska from

Washington state in early 1981 to work as an accountant

for ARCO, Alaska, Inc. I am an investor and a proponent

of mineral development. Directly and indirectly, my son

and I own substantial holdings in Exxon/Mobile, Chevron,

and probably a lot of other resource extraction companies.

But the thing that is the most important to us is our commercial fishing business. I put myself through law school as a commercial fishing crew member between 1982 and 1985, and after that I have been a continuous drift permit holder and boat captain commercial fishing in Bristol Bay each summer.

My son, who is now 20 and attending the local University of Alaska here, has commercial fished since he was a toddler. He's also a drift permit holder and boat captain in Bristol Bay, and he has done that since age 13 every summer. This is an important part of our lifestyle and our income. It's afforded us to live comfortable

1 lives and to put our children, including my son Grant, who

2 is a student pursuing a B.A. degree in professional

3 piloting -- he wants to become a commercial airline

4 pilot -- and my daughter who is a Vagelos,

5 V-A-G-E-L-O-S -- it's after Roy Vagelos, former CEO of

Merck. She's a Vagelos scholar at University of

7 Pennsylvania in Philadelphia.

And both my kids have commercial fished. And I think that their values and their work ethic and their character have been very positively influenced by that opportunity. And we would like to do everything possible to see that that is sustained for future generations in our family.

And for that reason, I am opposed to the Pebble Mine development in the Bristol Bay area. I think that the history of some of the support engineering firms and contractors of at least some of the folks that were initially involved in the Pebble project have established, with the recent earthen dam failure in British Columbia causing damage to the Fraser River, which is also another large salmon spawning grounds, demonstrates that it's an industry that is fraught with potential and large great potential for adverse environmental impact. And given the relative values of this worldwide class commercial salmon fishery for sockeye salmon in Bristol Bay, the largest in the world, relative to the opportunity to mine for more

copper and a little bit of gold strikes heavily in favor of not allowing the mine to progress and to sustaining the viability of this commercial fishery.

You know, my pitch is that, you know, there is already a lot of copper out in the world that has been mined and refined and that it would be a lot more productive to try to see more effective recycling of copper and reuse of copper.

So you know, that's all I have to offer.

MR. TRAVIS RECTOR: So I am asking the Army Corps of Engineers to assess the impact that Pebble Mine would have on brown bears, the brown bear population in the region. I'm especially concerned about the fact that the road out of Pebble Mine will go within one mile of the McNeil River State Game Sanctuary.

I'll leave it at that.

MS. LUCY TERRY: Yes. About the Pebble Mine, I think it is not a good gamble because we have world class fish, trout, salmon, all the bears and birds that rely on them. And in this uncertain acidic earth, we should protect nonGMO as much as we can.

We are blessed with natural resources to feed our bodies. Please accept the gift of life and don't take it away from us.

Alaskan tourism from all over the world come to

Alaska for wild game. It's a multi-billion dollar industry.

MR. PETER ALWARD: I'm here to speak in support of the Pebble Mine being built, but being built in Toronto where the Canadian company can deal with its mess. In Alaska it's a very bad idea on the simplest levels -- on many levels. This makes poor economic sense. It causes a great deal of issues, both legal, cultural, political. They are all adverse, first and foremost.

Even if the mine is built and, let's say in its wildly optimistic state 5- to \$6 billion of revenue of operable income, that represents less than three years of the production of Bristol Bay fisheries. The if, for instance, which is highly likely that even a 10 percent decrease in the perception of the public of the pristine value of the fisheries of Bristol Bay were to occur, then the loss to the Alaska and the U.S. economy would be far exceeded within five years of the value of the mine. So at any level, it makes no sense to make this mine.

One is left to wonder, why would such a mine be made despite the opposition of all the local people. For many years it's been said no, no, no, no, and no.

Well, we know for a fact that this group of people, this mining company is world renowned for ignoring local groups, of using whatever techniques are necessary,

including short of bribery and coercion to get what they want. Recently what just happened in Panama with their latest mine shows you what will likely happen with us.

When the mine is done, who is going to clean up the mess?

We have seen this before. Alaskans have seen this over and over again. Our local politicians are easily bought and sold out very often. We have gotten very little money for oil. And the one area that we have actually had an income that's been fair and generative has been fishing.

Fishing is going to sustain us in the far future long after oil and mining is done.

So for this to even occur against the will of the people would say that there is something very wrong with the way things are being done. And in our government currently, there is a lot of concern with the current regime and its propensity towards cutting corners, becoming an oligarchic plutocracy benefitting just the few. And so this certainly smacks of that.

This renewed interest despite many years of being told no is probably the result of the regime change and just sensing an opportunity. But it's very badly planned. And for any true American and any military person who is supposed to uphold the Constitution, they would naturally not want -- I can't imagine anybody supporting this in any way, shape or form.

Politically it's going to cause a great deal of poison between the few haves and the rest of us. It's going to undermine our faith in our democracy and our democratic process. It's going to cause a great deal of contention and problems, which the stockholders could care less about, but nevertheless will have to deal with.

Culturally it will cause dislocations of many people who have already been dislocated repeatedly. Perfect example -- and I'm sure we are going to see the same thing that happened in South Dakota with the oil pipelines.

We're going to see something very similar happening here with the people when they try to resist the power of the corporate groups that are going to come in. I'm sure they'll do the same things they did there, and that will cause, again, cultural and political damage.

I work in mental health. I have to deal with all these people already that have already been dislocated, damaged by the dominant cultures and have felt the effects of our genocidal policies for generations. These people are devastated as it is. This is one of the last few things that's theirs. It's one of the last few that's Alaskans'.

It makes no sense for anyone to build this mine for any reason except for a small group of people, to benefit a small group of people at the expense of all other

Americans and it should be roundly and totally opposed.

Ecologically it makes no sense whatsoever. The Arctic is fragile. It takes many, many, many times longer for anything to heal. There are still signs of damage to the tundra and the land masses that are -- 100 years ago that still haven't healed. This is not equatorial Africa. This is not the midwest of the United States where the energy matrix is so much higher that the land can heal so much quicker. Here in the cold it takes much longer. And of course, the lower energy gradient makes it very easy for biotoxins to accumulate. So this will cause many generations of health issues for many people for a long period of time, long after this company has come and gone.

So again, on an ecological level and biological level it makes no makes. So it makes no sense. It's a bad plan politically, economically. It's a bad plan culturally. It's a bad plan biologically. It's a bad plan environmentally. It only benefits a small group of people. And they are not even mostly American. So this is a sellout. It's unAmerican to do this. So on every level it should be opposed. Every level it should not allowed for. On every level it should simply be told no.

And to waste our government money to begin to do this process just shows you how corrupted our system has become where a small group of people can ignore the processes

1 that have been put in place by the rest of us. But rest

2 assured -- and this is just a warning -- people won't put

3 up with it. There will be political backlash.

4 Governments will fall saying we will build the mine, and

5 then we will close it.

6

7

8

9

14

18

20

24

Thank you for your time.

MR. BRANDON WELSH: I am a

fifth-generation commercial fisherman in Egegik, Alaska,

which is in Bristol Bay. We have been fighting against

10 the Pebble Mine for quite a few years now. And I just

11 wanted to say that it will ruin the fisheries there. The

12 gold mine will ruin the fisheries. And without the

13 fisheries there -- it's the number one fisheries -- red

salmon run in the world. Without the fisheries there,

then we cannot supply fish to the entire world.

16 Subsequently, we would have to have Atlantic salmon,

17 et cetera, which is extremely awful. We are a wild run

fishery, and I'm just standing here to say no, we will not

19 accept the Pebble Mine.

That's all I had to say.

MR. JEREMY TOMPKINS: I've fished Bristol

22 Bay for five seasons, and fishing is a renewable resource

and mining is also a very viable resource, but not when it

destroys the fishery. So I am pro fishery and pro mining,

but not in the case that destroys a fishery. So I'm for

Bristol Bay and against Pebble Mine.

That's what I've got.

MS. ELIZABETH WELSH: I am the wife of a commercial fisherman, and my father-in-law is a commercial fisherman in Bristol Bay, so my family depends on the salmon for not just our income, but our livelihood year after year. Salmon is a renewable resource, and I think it's dangerous and risky to potentially sacrifice that fishery for the sake of some unrenewable resource. So I would just ask that the research is done thoroughly into how this mine could affect the salmon. I'm not against all mining, but I don't think it's wise to put a mine and a fishery in the same place.

So that's all.

MS. LISA ALEXIA: I'm here because this is -- I can't imagine a more important place to come and say I want the fish and the land to be there for my grandchildren. I want it to be there for my children. Living in Alaska the last 18 years and being aware of the risks of Pebble Mine and mines like it to my children's ability to continue to live off the land, it weighs on me every day, every night. I do not understand how this mine can be compatible with the future of salmon.

The history of salmon throughout the Pacific

Northwest has been one of loss of habitat and loss of

ability to survive. If we can't get it right in Alaska, where will we get it right? This is our last opportunity to have a healthy place to live from the land.

I was there in Nondalton last summer. I was at a fish camp. I heard the helicopters flying over. I was there with people who are from the land, and I felt with them that concern and fear that there is no way that this mine is compatible because all it takes is one failure to put at risk the future of salmon and all of the life that sustains the region and the culture.

There needs to be in place some kind of permanent bond, permanent funding for the eventual failure of tailings, which will occur. There needs to be some permanent structures in place in terms of financial accountability for what will eventually occur. And I don't know that money is ever going be to the solution, but the assumption has to be made going in, not if the mine tailings dams fail, but when.

Go ahead.

MR. MISKA ALEXIA: I went to fish camp last summer in Nondalton, and I got to see the Pebble survey helicopters flying over on a regular basis. And I personally do not support Pebble Mine. I believe that it is too -- there is too many things that could go wrong for it to logically exist.

I don't have very much to say. That's it.

MR. MICHAEL ALEXIA: My ancestors lived off the land there and brought me up. Now I'm 50, and I hope my kids can live as old as I am off that land without the mine ruining it. Money isn't everything, you know. Living off the land is -- it's a lot of fun living on the land. If it's ruined, we wouldn't be able to have fun on it. I guess that's all I have to say.

MR. RICHARD LYTLE: Okay. I used to practice law in this town a long time ago, and I dealt with the mining community. And basically I did a lot of bankruptcy. I did bankruptcies. But the normal thing is, after a certain length of time, they run out of money. They go broke. Before they go broke, in Nome and stuff they would bring bundles of money down to these people, and eventually they would go broke. And if they think that there is going to be any clean up or restoration, forget it. There is none. I mean, once you run out, no matter how bad you want to clean up, if you do, first there is no money in it and, second, there is no money to do it. So Alaskans are going to have to clean up whatever dirt they make, mess.

And that's it.

One other comment I'd like to make is that if you think you can sell salmon that comes from a polluted

stream or polluted sources above it, nobody is going to buy it. So I think it would -- just the idea of putting it in is going to ruin our salmon industry.

It is pretty devastating. When we first came here, for three dollars you got a whole carton of crab on the airplane with you. And they had warehouses full. They overfished it or they ruined it, and the crab now is \$20 a pound, and it's now just come back. So if they do destroy the salmon, they would probably run into a like situation.

That's it.

MR. THOMAS TILDEN: For the record, my name is Thomas Tilden, and I'm a fisherman. I fish commercially. I fish for subsistence. And I grew up along the Nushagak River in the village called Portage Creek which is south of Ekwok and the first village on the Nushagak River.

There is a number of things that I'd like to cover.

First, as a subsistence fisherman, I'm very concerned about the process that has taken place, the scoping process of the Army Corps of Engineers in Dillingham.

Despite the requests -- numerous requests both by the Bristol Bay Native Association, the local Curyung Tribe to have an open mic, they came in with a closed mic. And I believe that there is advantages and disadvantages to that.

Where it disadvantages us, where it worked against us was that we were not able to fully cover -- or be assured that all aspects of the mine was covered in people's testimony. For instance, I noticed that the pro mines -- the pro mines villages had open mics, so they had an advantage. They could -- those folks that were pro mine, they could make sure that everything was covered. And that's just the way how the ballgame works. So -- so in Dillingham, they took advantage of us, and they ignored our request to have an open mic.

The second -- there is basically one thing that I'm really concerned about the mine is the -- what I call the inadequate studies that were done to permit this mine to get it where it is today.

First off is that when you look at the seismic maps of the earth, they -- the Pebble Mine shows that the seismic activity quits 20 miles north of the proposed mine. But at the same time, they also brag about the Pebble East, which is a high density, very good quality of copper, molybdenum and gold at the Pebble East versus the Pebble West. And in -- when you talk to a geologist about -- why is the east more richer than the west, and basically they will tell you that at one time there was a collapse of some of the subterrain there and molten came in and covered that empty space, and that's where the gold

and molybdenum and copper came in.

So that tells me that the -- that the fault, the earthquake fault, they said it ended north -- it actually didn't end there. There is cracks all along that whole area since it's all part of the Ring of Fire. And of course, the Ring of Fire, there is earthquakes in the Ring of Fire. There is volcanic action in the Ring of Fire. So that's basically what happened to their -- to their Pebble East is that the earthquake fault did not stop where they say it stopped. How convenient for them to have it end 20 miles north of the mine.

So I really think that you really need to be able to look at all of the reports that were done in that area to find out exactly where all the fault lines are. And so I think that they need to do more studies on that.

The other thing I wanted to talk about was the water supply or the water hydrology in the area. The hydrology in the area is -- the whole area is basically a high land wetland. There is a tremendous amount of water coming in -- into that area. And when you look at their reports and you take a look at the North Koktuli and the South Koktuli -- in the South Koktuli River, just southwest of the Frying Pan Lake -- the Frying Pan Lake is kind of a marker for everybody. Everybody, when you fly over the area, there is a lake that's shaped like a frying pan.

And so -- but southwest of that Frying Pan Lake there is a mountain, and the South Koktuli comes up. And there is water pouring out of this mountain. And they measured it into the hundreds of thousands or even millions of gallons per minute coming out of this mountain. And it basically comes and saturates the ground and flows into the South Koktuli and brings it down. But that water source is coming from somewhere.

When they first met with us, they -- Pebble used to meet with all of the villages and share their information. They shared that information with us. And there was two things that we firmly requested at every meeting the first few meetings was that we wanted the hydrology report and we wanted the geology report. We thought those two reports would tell us the story of the area.

And so finally -- I believe it was after a year and a half of requesting them to give us hydrology reports, they finally had a hydrologist come and talk with us that did the study. And he basically said that -- at that time I believe there was only 1,000 holes drilled. There wasn't 1,200. I think there was only 1,000 holes drilled. And they had dropped dye into the hot areas where they thought that the mining pit would be. And in that process, the dye showed up in the Talarik, it showed up in the North Koktuli, and it showed up in the South Koktuli, as well.

So basically that dye went everywhere.

So the underground water that is going to be affected is just a huge amount. It's like that spring that comes out of that mountain. That water is coming from somewhere. That's a spring. And we know that it's huge and it generates heavily to the ecosystem farther on down into the Mulchatna River, as well as the Nushagak, and Nushagak Bay and Bristol Bay. So that needs further study. We really need the hydrology report.

And when you read the studies that Pebble had done, their first proposed dam that they proposed was over in the Talarik Creek area. They were going to dam the hill there off of the Talarik Creek, and that's where they were going to put their proposed dam. And in a public meeting they told us that, heaven forbid, if anything happens we didn't want the Talarik Creek to be poisoned. Well, for crying out loud, if you just move it over to the North Koktuli, that means that you are willing to sacrifice the North Koktuli. And that doesn't make any sense to me that they are admitting that there is a possibility of a -- of a failure.

And then the final thing I want to talk about was that the -- about the local Native culture. The local Native culture, there has been a lot of studies done on salmon, but in those river systems, there are other fish.

There is the whitefish. There is the pike. There is the grayling. There is the suckers that are in the river system that the local natives depend on and catch through the ice in the winter time, as well as in the -- in the -- when there is open water, they use nets.

But in the wintertime we go up there and we catch these fish through -- with hook and line to sustain us through the winter because eventually our salmon does run out, the salmon that we put away. And so that -- that needs to -- there needs to be an accurate count and impact to the freshwater fish.

The other thing that really concerns me is the wind. The wind in that area, their studies show that they had clocked winds 120-miles-an-hour-plus in the area. And I used to teach in the village of Newhalen, and in the village of Newhalen I could remember sitting in a home one time and all of a sudden out of nowhere these high winds would come and it would just howl. And it wouldn't last very long, and then the wind would move on.

And I talked to some of the locals up there about that, and they said, oh, yeah, that happens quite frequently. In fact, they even had a windmill up above the -- up on the hill above the village, and during the night one evening, the wind -- that wind came through and broke the blades off of that windmill. And fortunately

the blades flew over the village and landed on the lake and in the river and away from the village and didn't harm anyone. But that -- that -- that illustrates the power of the winds in that area.

So there is going to be dust in the -- in the pit. There is going to be dust in the waste pile rock. There is going to be dust along the roads. And some of that dust is going to be toxic. And when you -- when you blow that toxic dust around, it's going to affect the berries that the local Native people depend on. It's going to affect the greens local Native people depend on.

It's going to affect all the lichen. And the lichen is basically the food for the caribou. And the caribou need that lichen and, of course, the Native people eat that caribou, and so the -- there is going to be a chain reaction of just that dust and how it affects -- because the humans are going to be the last one to eat the berries and the caribou and other things that are in that area. So the -- so taking a look at the wind and water, geology is really important that we have a very clear and assuring picture that nothing will be harmed.

And I think that they have pointed out that -- that they were talking about using a liner. And we -- when you look at the proposed liner that they have and what they are illustrating, it's not too much thicker than a grocery

bag. And if you ever carried a grocery bag home with goodies, if you use one bag, nine out of ten something is going to penetrate and break it and it's going to leak out all your goodies.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

And basically, that's what's going to happen with that liner because they are going to be putting tons and tons of rock on that and very sharp rock because it has gone through the breaker system. And so that liner, nine out of ten is probably going to be penetrated just like the grocery shopping bags, and it will not do anything. And then gravity will take hold of the rest of it and take all the toxic material down into the water system, and it will slowly spread out just like in other places where they have contaminated water. And it's going to contaminate not just a year, not just a couple years, but thousands of years because you are not going to be able to stop the spread of that water once it gets into the underground water system. And when you look at the geology studies, you see that there is a very -- very deep and heavy water system under that whole area.

So basically you don't -- I want them to consider the Native culture, consider the Native way of life. All of our freezers are filled with birds from the sky and berries from the ground and moose and caribou and the fish from the rivers. And 100 percent -- 100 percent of the

proposed mines all say that they will not pollute. And ten years later in studies, they have found out that 70 percent of them polluted. So there is a 70 percent chance that they are going to pollute. And I as an Eskimo and I as a person that have lived off the land don't want to see that risk, that we need to make sure that water, land, air is protected.

Basically that's all I have to say. Thank you.

MS. KAREN GONNE-HARRELL: Well, okay.

First and foremost, I oppose any development in the headwaters of Bristol Bay, period, of any kind, whether it's mining or other development. But I just wanted to pose a question basically to those that are pushing for it, particularly the ones that will earn a lot of money off of it. I suspect they don't live in the region, don't have Alaskan roots. And would challenge them to consider living there, a subsistence lifestyle with no access to other resources should there be a mine disaster. Would they put their families there downstream and guarantee the safety of the area for themselves, their parents, their grandparents, their children, great, great grandchildren? Would they live there relying solely on that area and still put in that mine?

And do they live next to something like that where they do live? Is their -- is their entire livelihood,

food and water source, have the least amount of -- have any threat that they are posing to people living in that region and to all of Alaska? As a lifelong Alaskan who lives on salmon, and particularly salmon out of that area, I can't oppose it enough.

And they can call me if they like. 301-4566.

MR. GEOFFREY PARKER: Thank you. My name is Geoff Parker. These are my oral comments for -- I'm an attorney for Bristol Bay Fishermen's Association, which is the largest association of commercial fishers in Bristol Bay, or membership-based organization of commercial fishers in Bristol Bay and Ekwok Village Council, which is the federally recognized tribal entity for Ekwok Village.

First of all, I'll focus on legal issues related to scoping. One is that I've seen no effort yet to identify cooperating agencies, and the Corps needs to identify cooperating agencies no later than the scoping process.

That includes tribes, potential cooperating agencies.

In 2010, six tribes, including Ekwok Village Council, sent a letter to the Corps and EPA to initiate discussions about the tribes being cooperating agencies. You should pursue such relationships with Ekwok Village Council and other tribes in the area.

Second, you need to integrate State and local land use plans under the NEPA regulations. That is, the

regulations require the Corps to integrate State and local land use plans. In this case that includes the Bristol Bay Area Plan and the Nushagak/Mulchatna Rivers Recreation Management Plan. To do so, the Corps -- the NEPA process has to be consistent with the area plan land use classifications and guidelines in the Bristol Bay area plan. The NEPA process also needs to integrate and be consistent with Mineral Closing Order 393 adopted in 1984 and made part of the 1984, 2005 and current 2013 Bristol Bay Area Plans.

Also, the NEPA process needs to integrate State planning regulations, including particularly at 11 AAC 55.040(c). It states that a classification of State land identifies the primary use or uses for which the land will be managed subject to valid existing rights and multiple use.

Based on that regulation, the 2013 Bristol Bay Area
Plan states that if a use conflict exists and the proposed
land use is incompatible with the primary use, the
proposed use shall not be authorized or shall be modified
so that the incompatibility no longer exists. In other
words, a primary use for which land is classified trumps a
nonprimary use because primary use cannot -- but a primary
use cannot trump a co-primary use.

In this instance, you need to look at the land use

classifications in the Pebble area that will be affected by development of the proposed mine.

Third, you need to integrate the State law requirement at Alaska State statute 38.05.142. It states that no State permits shall be issued unless the legislature finds no danger to the fisheries from metallic sulfide mines in the Bristol Bay drainages or the Bristol Bay fisheries reserve -- the drainage of the Bristol Bay fisheries reserve. That includes Pebble Mine. That statute establishes the standard that the EIS must meet in order to integrate State law into the NEPA process. In other words, the no dangers to the fisheries requirement should be reflected in the NEPA process.

My second group of comments concerns making more information available to the public for scoping. I'll make four points.

First, the Corps should post EPA's Watershed

Assessment on its website so that the public and agencies can use it during the scoping process. Second, it should post the EPA's proposed 404(c) determination for exactly the same reason. Third, it should post the Bristol Bay Area Plan, the Nushagak/Mulchatna Recreation Management Plan, the Nushagak Watershed Plan on its web pages also so that the public can use them in interacting with the Corps and other agencies. Fourth, the Corps should post NEPA

regulations on the website for this project.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

My third group of comments goes to identifying factual issues for scoping.

First, the Corps should use the EPA Watershed
Assessment to identify factual issues for scoping and
address them in the EIS. It should use the proposed
404(c) determination similarly. But it was narrower than
the assessment and focused only on 404(c).

Second, the Corps should integrate EPA's Watershed Assessment. It addresses many and innumerable factual It examined impacts at five levels of geographic issues. scale: One, the Bristol Bay watershed. Two, the Nushagak and Kvichak River watersheds. Three, the mine scenario watersheds, including cumulative drainages of the North and South Fork of Koktuli Rivers and their conjunction with Upper Talarik Creek to its junction with Iliamna Lake. Fourth, the mine scenario footprints, including the footprints of the major mine components. That is, the mine pit, the waste rock piles, tailings storage facilities, et cetera, the groundwater draw-down zone, and plant and ancillary facilities. And fifth, the transportation corridor. The EIS needs to do likewise using similar geographic scales for examining impacts.

For example, cumulative impacts of multiple mines should be addressed in at least two levels or scales of

geographic effect. First -- the first is the scale of the disposal area defined by EPA in its proposed 404(c) determination. That was basically the upper portions of the Koktuli and Upper Talarik Creek drainages. The second area is the scale of the Nushagak/Kvichak drainages.

Regarding the first level of scale, the EIS needs to address the impacts of multiple mines using the disposal site identified by EPA's proposed determination. The EPA assessment in Chapter 13 found that it is reasonably foreseeable the permits for Pebble would lead to development of mines and other porphyry copper deposits and that mines at five deposits -- Pebble, Pebble South/PEB, Big Chunk North, Big Chunk South and Groundhog -- could use the same tailings storage facility sites, TSF1, TSF2 and TSF3 that are within the disposal site identified by EPA's proposed 404(c) determination.

That is very important because two of those sites,
TSF1 and TSF2, would each account for a loss of 3.8 miles
of anadramous water, or 76 percent of the maximum allowed
under EPA's proposed determination. And that is not yet
counting the loss of anadramous waters due to the mine pit
or dewatering or waste rock piles.

Moreover, any mine or group of mines that use TSF1 and TSF2 would surpass EPA's proposed standards, for the amount of anadramous water that would be lost; that is,

the mileage of anadramous water that would be lost.

Moreover, because five potential mines could use the same tailings storage facility sites, the standards should be no more than one-fifth of what EPA proposed for one mine, Pebble Mine. In other words, they should be one-fifth of what EPA proposed, five times as strict.

Regarding the second level of scale, which is the Nushagak and Kvichak drainages, the EIS needs to address impacts of Pebble, multiple mines and other reasonably foreseeable development on the scale of those drainages and in the Bristol Bay drainages in general.

Third -- this is third in the factual issues. All issues identified in the tribes' 404(c) request sent to the Corps in May of 2010, as well as to the EPA at that time, should be addressed in the EIS.

Fourth, Amakdedori Creek, which is at the site of the port site, is one of two undocumented -- probably the last of two undocumented steelhead streams in North America. There has long been rumors of west side Cook Inlet steeled, but they have never been documented. I have caught steelhead in Amakdedori Creek. I believe they also exist in Bruin Creek. And I have had guide clients for Rainbow River Lodge that have caught steelhead in Amakdedori Creek. And Chad Hewitt, the owner of Rainbow River Lodge, I think will corroborate that the lodge

catches steelhead in Amakdedori Creek.

As I said, that's one of two undocumented steelhead streams, the last two probably in North America. I recommend that the National Marine Fisheries Service needs to assess whether or not those fish are genetically distinct, including for purposes of an Endangered Species Act determination. It's a very small population, but we would catch steelhead routinely in Amakdedori Creek when I was guiding for Rainbow River Lodge in the 1980s and the 1990s. The fish would probably have to be captured in the fall, or perhaps on a spring outmigration. It's a fall run.

Fifth, the EIS needs to quantify the cones of depression around the pit and the tailings storage sites. The permit application does say that the pit will be ringed with water extraction wells to pull out and extract contaminated groundwater. That will mean that there will be dewatering of the surface water of Upper Talarik Creek and the -- and portion -- and the Upper Koktuli River drainage.

The permit application, however, does not calculate or even acknowledge that these cones of depression would exist and the dewatering of the surface water would occur; that would occur including in Upper Talarik Creek, which is in the upper portion of Upper Talarik Creek drainage

which is classified by the Bristol Bay Area Plan as habitat, and the drainage and the corridor of Upper Talarik Creek is also classified as habitat.

Sixth, the EIS needs to examine the effects of the Pebble Mine project on Cook Inlet gas supply.

Seventh, the permit application acknowledges that it has not yet submitted an ultimate -- an "ultimate design," and that creates a problem, a legal and factual problem. In the permit application, attachment D is the project description. It states at page 58 that "the ultimate project design will incorporate a detailed analysis of water collection and management, including quantity and quality estimates, water treatment options, water management facility design and strategic discharge of water."

Absent a detailed analysis of water collection and management, including water quantity and quality estimates, water treatment options, water management facility design and strategic discharge of treated water, it is impossible for the Corps or other agencies or the public to assess impacts. That is a serious legal problem.

(Proceedings adjourned at 9:00 p.m.)

REPORTER'S CERTIFICATE 1 I, MARY A. VAVRIK, RMR, Notary Public in and for 2 the State of Alaska do hereby certify: 3 That the foregoing proceedings were taken before 4 5 me at the time and place herein set forth; that the proceedings were reported stenographically by me and later 6 7 transcribed under my direction by computer transcription; 8 that the foregoing is a true record of the proceedings 9 taken at that time; and that I am not a party to nor have I any interest in the outcome of the action herein 10 11 contained. 12 IN WITNESS WHEREOF, I have hereunto subscribed my hand and affixed my seal this _____ day of April 2018. 13 14 15 MARY A. VAVRIK, Registered Merit Reporter 16 Notary Public for Alaska 17 18 My Commission Expires: November 5, 2020 19 20

21

22

23

24

25

\$ (1.5 (2) 6:20;18:17	activity (3) - 7:3;8:12;42:17	8:5;15:23;21:3;	36:19	9:6,14,19;17:9,11
1.5 (2) 6:20;18:17		26.5.40.10	. (2)	
6:20;18:17		36:5;40:10	Americans (2)	18:6,11,14,16,24
6:20;18:17	actual (1)	agreement (1)	13:22;36:1	19:18;32:11;41:2
	28:8	4:18	amount (7)	around (7)
Ω (1)	actually (6)	ahead (1)	13:7,15;20:2;43:19;	10:1;24:7,8,17,22
20 (1)	3:9;11:12;12:10;	39:19	45:3;50:1;54:25	47:9;56:14
41:7	20:20;34:8;43:3	air (2)	anadramous (4)	artistic (1)
5 (1)				
33:11	adage (1)	24:10;49:6	54:19,21,25;55:1	5:14
	4:1	airline (1)	analysis (3)	aspects (1)
\mathbf{A}	add (1)	31:3	19:24;57:11,16	42:3
	10:19	airplane (1)	analyze (1)	assess (3)
AC (1)	additional (1)	41:6	19:20	32:11;56:5;57:21
51:12	19:18	Alaska (35)	analyzed (1)	Assessment (5)
oility (3)	address (4)	3:10;6:2,5;7:12;	17:19	52:18;53:5,8,10;
	27:18;53:6;54:7;	10:6;11:2,4,20,23;	ancestors (1)	54:9
26:2;38:21;39:1	55:8	12:25;13:5,23;14:11,		association (4)
ole (6)	addressed (3)	16;16:6,22;17:2;23:9;		5:3;41:22;50:9,10
13:12;17:8;40:7;	28:6;53:25;55:15			
42:2;43:12;48:16		25:22,25;27:22;29:7,	16:20;17:13;23:10,	assumption (1)
oove (3)	addresses (1)	21,25;30:8,10,21;	12	39:17
41:1;46:22,23	53:10	33:1,6,17;37:8;38:19;		assured (2)
bsent (1)	adjacent (2)	39:1;50:3;52:4	53:21	37:2;42:2
57:16	8:25;29:4	Alaskan (4)	and/or (1)	assuring (1)
bsolutely (1)	adjourned (1)	11:25;32:25;49:16;	28:25	47:20
13:18	57:23	50:3	animals (1)	ate (1)
	administrator (1)	Alaskans (3)	8:14	15:19
ccept (4)	17:2	13:22;34:5;40:21	annihilate (1)	Atlantic (1)
3:17;10:16;32:23;	admitting (1)	Alaskans' (1)	28:5	37:16
37:19	0 , ,			l .
ccepted (2)	45:20	35:22	annual (2)	attachment (1)
3:12,21	adopted (1)	alevin (1)	6:20;18:17	57:9
ccess (1)	51:8	25:10	anymore (2)	attempting (1)
49:17	advantage (2)	ALEXIA (3)	10:3;15:20	6:16
ccident (2)	42:6,9	38:15;39:20;40:2	Applicable (1)	attended (1)
11:11,14	advantages (1)	allow (2)	5:22	11:9
	41:24	7:11;23:15	application (10)	attending (1)
ccidents (1)	adverse (2)	allowed (2)	19:1;27:6,7,18;	30:20
26:8	31:22;33:9	36:22;54:19	28:7;29:9;56:15,21;	attorney (1)
ccount (3)	affect (4)	allowing (1)	57:6,9	50:9
3:14;5:2;54:18				
ccountability (1)	38:11;47:9,11,12	32:2	approach (1)	audience (1)
39:15	affected (3)	alone (1)	21:8	17:23
ccountant (1)	28:17;45:2;52:1	16:13	approved (1)	authorized (1)
30:9	affects (1)	along (7)	3:5	51:20
ccumulate (1)	47:16	7:17;8:3;21:15;	ARCO (1)	available (3)
36:11	afforded (2)	23:20;41:14;43:4;	30:10	19:12,25;52:15
	12:25;30:25	47:7	Arctic (6)	aviation (1)
ecurate (1)	Africa (1)	alter (1)	14:19,22;15:9,11,	24:7
46:10	36:6	29:11	13:36:3	aware (2)
eid (1)	afternoon (1)	alternative (6)	area (47)	7:19;38:19
29:19				
cidic (1)	16:17	10:6,18;18:21,22,	6:3,4;7:19;8:12;9:9,	awareness (1)
32:20	again (5)	22,23	13,24;24:10,12;27:3,	6:15
cknowledge (1)	9:17;15:15;34:6;	alternatives (2)	14,16;28:16,19,20;	away (9)
56:22	35:15;36:14	11:8;18:21	29:1,4;31:14;34:8;	9:12,23,25;10:13
cknowledges (1)	against (9)	although (1)	43:5,13,17,18,18,20,	22:22;24:5;32:24
	6:9;10:8;29:15,16;	20:2	25;44:15;45:12;	46:9;47:2
57:6	34:12;37:9;38:1,11;	ALWARD (1)	46:13,14;47:4,18;	awful (1)
cross (4)	42:1	33:3	48:20;49:20,22;50:4,	37:17
8:20;11:3,15;21:16	age (1)	always (3)	23;51:3,5,6,10,17;	31.11
ct (1)				В
56:7	30:23	11:17,22,23	52:1,22;54:2,5;57:1	В
ction (4)	agencies (8)	Amakdedori (5)	areas (4)	
10:6,18;18:21;43:7	17:18;50:16,17,18,	55:16,21,24;56:1,8	13:23;27:10;29:6;	BA (1)
etivists (1)	21;52:18,25;57:20	America (2)	44:22	31:2
16:22	agency (1)	55:18;56:3	arm (1)	back (10)
10.44	19:10	American (4)	10:15	6:15;8:8,23,24;

10.11.16.15.14.	24.17	22.22	20.10.10	10.21
12:11,16;15:14; 23:23;25:3;41:8	34:17 begin (2)	32:23 body (1)	32:12,12 Bruin (1)	10:21 carried (1)
backed (2)	19:10;36:23	19:24	55:22	48:1
4:15,16	beginning (1)	bond (1)	BRUNE (2)	Carrs (1)
backlash (1)	27:5	39:12	12:22,23	7:17
37:3	behalf (3)	book (1)	build (4)	cars (1)
bad (6)	7:5;16:21;20:9	10:21	28:9,13;35:23;37:4	23:13
33:6;36:15,16,17,	belong (1)	books (1)	Building (3)	carton (1)
17;40:19	11:23	10:20	20:5;21:5;29:19	41:5
badly (1)	below (1)	boom (1)	built (3)	case (4)
34:21	9:2	21:25	33:4,4,10	4:2;14:10;37:25;
bag (3)	beneficial (1)	born (3)	bullion (2)	51:2
48:1,1,2	13:16	11:2,3,4	3:12,16	catastrophe (1)
bags (1)	beneficiary (1)	both (5)	bundles (1)	6:10
48:10	5:4	16:1,2;31:8;33:8;	40:15	catastrophic (1)
ballgame (1)	benefit (1)	41:21	bushes (1)	27:11
42:8	35:24	bought (1)	8:16	catch (3)
Bang (1)	benefits (3)	34:6	business (10)	46:3,6;56:8
5:15 bank (1)	14:8;30:3;36:18	boys (1) 3:17	22:16,23;23:3,7,8;	catches (1) 56:1
3:14	benefitting (1) 34:17	brag (1)	24:9;28:17;29:1,7; 30:15	caught (2)
banking (1)	Bering (1)	42:18	businesses (6)	55:21,23
4:25	15:8	BRANDON (1)	22:15,20;23:4,6,8,	cause (6)
bankruptcies (1)	berries (3)	37:7	11	26:9;35:1,4,7,15;
40:12	47:9,17;48:24	Branson (1)	buy (1)	36:11
bankruptcy (1)	beseech (1)	10:22	41:2	causes (1)
40:12	7:9	break (1)		33:8
barge (1)	best (4)	48:3	C	causing (1)
19:4	6:11;7:10;17:17;	breakdowns (1)		31:19
Barrow (2)	26:8	26:9	calculate (1)	CEO (1)
14:16;15:1	better (1)	breaker (1)	56:21	31:5
based (5)	11:24	48:8	call (2)	certain (2)
19:24;21:1,3;27:7;	big (9)	bribery (1)	42:12;50:6	17:22;40:13
51:17	3:17;5:15;10:11;	34:1	called (2)	certainly (1)
baseline (5)	12:12,13;23:14;24:4;	bridges (1)	15:8;41:14	34:18
19:9,11;22:1,10;	54:13,13	19:8	came (7)	certainty (1)
27:8	billion (4)	brief (1)	12:11;16:15;41:4,	20:6
basically (16) 6:13;15:19;40:11;	6:20;18:17;26:6; 33:11	18:14 bring (1)	23;42:24;43:1;46:24	cetera (2) 37:17;53:20
42:11,23;43:8,18;	biological (1)	40:15	camp (2) 39:5,20	Chad (1)
44:6,19;45:1;47:13;	36:14	brings (2)	can (21)	55:24
48:5,21;49:8,13;54:3	biologically (1)	21:16;44:7	9:12;11:25;13:19;	chain (1)
basis (3)	36:17	Bristol (42)	14:3,4;19:10,19;22:6;	47:15
6:23;21:7;39:22	biotoxins (1)	6:3,4,23;10:8;	23:17;27:10;28:22;	challenge (1)
Bay (49)	36:11	11:16,21;16:23,25;	32:21;33:5;36:8,25;	49:16
3:11,21;4:3,12,22;	birds (4)	17:6;18:9;20:3;22:16,	38:23;40:4,25;50:6;	challenging (1)
6:3,4,23;10:8;11:16,	8:14,16;32:19;	17;23:11;27:3;30:19,	52:19,24	26:8
21;16:24,25;17:6;	48:23	23;31:14,24;33:13,	Canadian (1)	chance (2)
18:9;20:3;21:19;	bit (1)	16;37:9,21;38:1,5;	33:5	11:19;49:3
22:16,18;23:11;27:3;	32:1	41:22;45:8;49:11;	capacity (1)	change (3)
30:19,23;31:14,24;	blades (2)	50:9,10,12;51:2,6,9,	9:20	22:14;24:20;34:20
33:13,16;37:9,22;	46:25;47:1	17;52:7,7,8,21;53:12;	capes (1)	channel (2)
38:1,5;41:22;45:8,8;	blasting (2)	55:11;57:1	6:5	11:15;19:4
49:11;50:9,11,12;	23:1;27:16	British (2)	captain (2)	Chapter (1)
51:3,6,10,17;52:7,8,8, 21;53:12;55:11;57:1	blessed (1) 32:22	11:4;31:18 broader (1)	30:18,23 captured (1)	54:9 character (1)
bear (1)	Bligh (1)	17:23	56:10	31:9
32:12	11:15	broke (5)	care (3)	charge (1)
bears (2)	blow (1)	7:22;40:14,14,16;	14:2,11;35:5	4:19
32:12,19	47:8	46:25	caribou (5)	charged (1)
become (2)	boat (3)	brought (1)	47:13,13,15,18;	9:19
31:3;36:24	15:25;30:18,22	40:3	48:24	CHARLES (2)
becoming (1)	bodies (1)	brown (2)	Carl (1)	3:2,3
	. *	. *		
NE TIG : 48	3.5	1	4	(2) bested CHARLES

Cheyron (1) 30:12 child (1) 19:12 ch					April 19, 2010
Solid child (1)	Chevron (1)	28.3 25.42.24	cones (2)	4.24.24.5.3	41:15:45:12 13 16:
child (1) 14:7 children (3) 31:1381849/21 children's (1) 38:20 choice (3) 11:4:3118 38:20 choice (3) 11:4:3118 13:17,22216:12 choose (2) 14:3,10 Chunk (2) 54:13,13 circumstances (1) 18:3 45:5845.4 comment (3) 82:21:17:4319; 18:3 45:5845.4 comment (3) 82:21:17:4319; 18:3 18:229.8 20:14:45:13 11:3 18:229.8 20:14:45:2 20:16:21:18 18:229.8 20:14:45:2 20:16:21:18 18:229.8 20:14:45:2 20:16:21:18 18:229.8 20:14:45:2 20:16:21:18 18:22:33:21:19 18:22:33:21:17 18:22:33:21:19 18:22:33:21:17 18:22:33:21:17 18:23:33:23:23:23 18:23:33:23:23:23 18:23:33:23:23:23:23 18:23:33:23:23:23:23:23:23:23:23:23:23:23:					
consider (1) 38120					
children (a) 57:12.16 conflict (1) 33:5:18.97.14; creaks (4) 31:138.18.39.21 choice (3) 114:17 55:18 16,241.918.20.15; 28:4 38:20 choice (3) 114:43.118 consider (7) 50:16.20.511.41 30:16 13:17.22.16:12 choice (3) 114:33.18 confortable (1) 7:10.18.20.20:1; 22:17.42.57.53.04, critical (1) 54:13.13 coming (6) consider (7) 55:14.57.23.04, crorifor (4) 29:25 citizens (2) 8:2:11.74.31.9; 28.8 19:15.22.53.22; 27:17 27:17 citizens (2) comment (5) 20:44.53.12 20:12 corridor (4) 29:5 crossider (7) 27:17 crossing (1)					
Silis Silis Columbia (2) Silis Colu					,
children's (1)		,			
Sa:20					
13:17.22;16:12 comfortable (1) choose (2) 14:3,10 coming (6) consideration (1) consideration (1) 29:19 corridor (4) 29:19 corridor (5) 29:19 corridor (4) 29:19 corridor (4) 29:19 corridor (5) 29:19 corridor (6) 29:19 corridor (7) 29:19 corridor (8) 29:19 corridor (9) 29:19 corridor (9) 29:19 corridor (9) 29:19 corridor (9) 29:5 crossing (1) 29:5 crossing (1)		Columbia (2)			crew (1)
choose (2) 14:3,10 Chunk (2) 8.4 Coming (6) S4:13,13 Circumstances (1) 8.4 S4:54 Coming (6) S4:13,13 Circumstances (1) 18:3 Citizens (2) S2:14/3,12 Comment (3) Citizens (2) S2:14/3,12 Comment (3) S1:13/4,12 Comment (8) S1:13/4,13 Comment (1) S1:14/3,12 Comment (1) S1:14/3,12 Comment (2) S1:14/3,12 Comment (3) S1:14/3,12 Comment (3) S1:14/3,12 Comment (1) Considerations (1) S1:14/3,12 Comment (3) Considerations (1) S1:14/3,12 Comment (1) Considerations (1) S1:14/3,12 Comment (1) Considerations (1) S1:14/3,12 Considerations (1) S1:14/3,12 Consideration (1) S1:13 Consideration (1) S1:14/3, S1:14 Consideration (1) S1:14/3, S1:14 Consideration (1) S1:14/3, S1:14 Consideration (1) S1:14 Considerat	choice (3)	11:4;31:18	consider (7)	50:16,20;51:1,4;	30:16
14:3.10 Comine (1) consideration (1) 9:19 consideration (1) 54:13.13 coming (6) considerations (1) 29:19 considerations (1) 19:15.22:53:22: considerations (1) 29:5 considerations (1) 19:15.22:53:22: considerations (1) 19:15.22:53:22: considerations (1) 29:5 considerations (1) 19:15.22:53:22: considerations (1) 29:5 con	13:17,22;16:12	comfortable (1)	7:10;18:20;20:1;	52:17,24,25;53:4,9;	critical (1)
Chunk (2) 54:13.13 circumstances (1) 8:24 17:43:19; 44:58:45:4 considerations (1) 28:8 19:15.22:53:22; crossing (1) 27:17 crossing (3) 19:5.8:21:22 crowded (1) 29:5 crode (1)				55:14;57:20	
54:13,13 coming (6) considerations (1) 19:15,22:53:22; crossing (1) 19:15,23:33; constantly (2) constantly (2) constantly (2) constantly (2) constantlia (2) const					
28.3 1915.2253:22; crossings (3)					
18:3					
citizens (2) 18:2;29:8 city (1) 11:8 18:13;20;13;50:8; claim (2) 3:19;4:15 class (2) 6:69;24 class (2) 3:13,23;32:19 classification (1) classifications (2) 51:13:3 classifications (2) 51:25;71;3 clean (6) 18:7;25;25;34;4; 40:17;19:21 clean (6) 18:7;25;25;34;4; 40:17;19:21 clean (6) 18:7;25;25;34;4; 40:17;19:21 clean (6) 18:7;25;25;34;4; 40:17;19:21 clean (7) clean (8) 18:7;25;25;34;4; 40:17;19:21 clean (9) 18:7;25;25;34;4; 40:17;19:21 clean (1) 18:18;20:13;50:8; 20:31;8,23;32;78; 38:4,4;50:10,11 commercially (1) 20:7 contaminate (1) 20:7 contaminate (1) 20:7 contamination (1) 20:7 continue (1) 20:20:20:20:20:20:20:20:20:20:20:20:20:2					
18:229:8 comments (5) 11:8 comments (5) 11:8 comments (2) 18:13:20:13:50:8; constantly (2) 55:25 corroborate (1) 29:5 crude (1) 29:5 crud					
city (1) 11:8 11:8 13:13:20:13:50:8; 13:18:13:20:13:50:8; 13:19:4:15 commercial (18) 45:17 contaminate (1) 51:13 classification (1) 51:13 classification (2) 51:25:21 16:23:17:4.15:25 classified (3) 18:7:52:53:34:4; 40:17.19.21 clean (6) 18:7:52:52:53:44; 40:17.19.21 clean (7) 12:6 clear (2) 30:1;47:20 30:1;47:20 30:1;47:20 30:1;47:20 climate (1) 13:4 clocked (1) 22:23:23:12.17; 28:20:29:3:35:5:2 climate (1) 13:4 clocked (1) 28:13 13:13 clocked (1) 28:13 13:12 convertion (1) 20:7 contaminate (1) 20:7 contamination (1) 20:3 33:3 35:15 countries (1) 20:40:10 20:10:10:10 20:23:3 33:10:3 20:10:10:10 20:23:3 33:10:3 20:10:10:10:10:10:10:10:10:10:10:10:10:10					
11:8	*				
claim (2) 3:19:4:15 commercial (18) 6:8.22:16:7:18:18; 6:69:24 22:19:30:15.16;18.21; class (2) 31:3.8.23:32:33:78; 31:23:32:19 classification (1) 41:13 classifications (2) 41:15 communities (4) 41:15 classified (3) classified (3) classified (3) 16:23:17:41;15.25 classified (3) 17:22:57:1,3 14:22:40:11 companies (2) 18:7:25:25;34:4; 40:17,19.21 clean (6) 22:23:23:12,17; 23:20:29:33:52:2 clean (9) 22:23:23:12,17; 28:20:29:33:55:2 climate (1) 28:20:29:33:55:2 climate (1) 26:16:28:6 complete (2) climate (1) 24:17;42:2 climate (1) 26:16:28:6 closed (1) 24:13 components (5) 11:91:25:14:7; 10:11:37:5 closed (1) 24:33 closer (1) 24:33 closer (1) 24:33:13:2 concerns (6) 11:91:25:14:7; concerns (6)					
Silp:4:15 Clark (2)					
Clark (2)					
Class (2)					
class (2) 31:38,23;32:37:8; 19:6 Cost (0) 6:2 cultural (2) div.2 div.2 <td></td> <td></td> <td></td> <td></td> <td></td>					
Salidication (1) Commercially (1) Commanianate (1) Commanianat					
classification (1) 51:13 41:13					
Sitist Classifications (2) Sitistifications (2) Sitistifications (3) Sitistifications (4) Sitistifications (3) Sitistifications (4) Sitistifications (3) Sitistifications (4) Sitistificat					
classifications (2) 51:6;52:1 16:23;17:4,15,25 Community (2) 14:22;40:11 Contaminations (1) 20:7 contaminations (1) 14:20 contaminations (1) 20:7 contaminations (1) 14:21 contaminations (1) 14:20 continue (1) continue (1					
Si1:6:52:1					
classified (3) Community (2) 20:7 counting (1) 18:19:39:10:45:23, 2:448:23 14:22:40:11 contaminations (1) 54:21 24:48:22 24:48:22 24:48:22 24:48:23 24:48:23 24:48:23 24:48:23 24:48:23 24:48:23 24:48:22 countries (1) 23:3 67.78:35:18<					
Column C					
18:7;25:25;34:4;			contaminations (1)		
18:7;25:25;34:4;				countless (1)	
cleanup (1) 11:25,25:12:7;33:5, 24;36:13 continue (1) 16:4 country (2) country (2) 53:14,24 country (2) clear (2) compatible (2) 38:23,39:8 30:17 couple (3) 22:15;27:21;34:15; clients (6) complete (2) contractors (1) 12:14;25:15;48:15 course (5) currently (3) 22:23;23:12,17; 12:23;29:10 31:16 course (5) course (5) 20:21;25:23;34:15 28:20;29:3;55:22 climate (1) 26:16;28:6 4:20 47:14 51:12 13:4 clocked (1) 28:13 17:21 41:17;42:2 Currents (1) 46:14 close (2) 19:2,11,15,17; distriction 43:10 42:37,25 Cut (1) close (2) 19:2,11,15,17; distriction 43:10 42:37,25 10:15 10:11;37:5 53:18 Cook (3) 19:4;55:19;57:5 41:5,7 34:16 closed (1) 26:1;34:15;39:7 cooperating (4) cracks (1) cycle (1) closer (1) 27:3;29:7;32:13; 41:12;226:5;32:1,5, cooper (9) 29:20 D Coexist (1) 46:12;52:14 concurrently (1) 5:10	18:7;25:25;34:4;	13:10;30:13	contention (1)		
12:6 clear (2) compatible (2) 38:23;39:8 30:17 couple (3) 15:24,25 couple (3) 12:14;25:15;48:15 course (5) course (5) course (5) course (5) course (1) 15:12 course (5) course (5) course (1) 15:12 course (5) course (1) 15:12 course (5) course (5) course (6) course (1) course (1) course (1) course (1) course (1) course (2) course (1) course (1) course (3) course (5) course (5) course (5) course (5) course (6) course (1) course (1) course (1) course (2) course (1) course (3) course (3) course (4) course (1) course (3) course (4) course (5) course (6) course (1) course (1) course (3) course (4) course (6) course (1) course (40:17,19,21	company (6)	35:5	countries (1)	cumulative (2)
clear (2) compatible (2) continuous (1) 15:24,25 22:15;27:21;34:15; 30:1;47:20 38:23;39:8 contractors (1) 30:17 couple (3) 51:9 clients (6) complete (2) contractors (1) 12:14;25:15;48:15 currently (3) 22:23;23:12,17; 12:23;29:10 31:16 course (5) 20:21;25:23;34:15 28:20;29:3;55:22 completely (2) control (1) 24:9,24;36:10;43:6; currents (1) 13:4 complex (1) controversial (1) cover (2) Curyung (1) 46:14 components (5) controversial (1) 41:17;42:2 41:122 close (2) 19:2;11,15,17; 43:10 42:3,7,25 10:15 close (1) concern (6) 19:4;55:19;57:5 cab (2) cutting (1) 41:23 11:9;12:5;14:7; cooperating (4) cracks (1) cycle (1) 24:3 concern (6) 17:3;29:7;32:13; 8;42:20;43:1;54:11 29:20 D Closing (1) 27:3;29:7;32:13; 8;42:20;43:1;54:11 created (2) 5:14;13:16 dad (2) </td <td></td> <td></td> <td></td> <td>16:4</td> <td>53:14,24</td>				16:4	53:14,24
30:1;47:20 38:23;39:8 complete (2) contractors (1) 12:23;29:10 31:16 course (5) 22:23;23:12,17; 26:16;28:6 4:20 47:14 15:12 cover (2) control (1) 13:4 complex (1) 28:13 17:21 4:17;42:2 41:22 cover (3) cover (4) cover (3) cover (4) cover (3) cover (4) cover (4) cover (4) cover (5) cover (6) c					
clients (6) complete (2) contractors (1) 12:14;25:15;48:15 currently (3) 22:23;23:12,17; 28:20;29:3;55:22 completely (2) control (1) 24:9,24;36:10;43:6; 20:21;25:23;34:15 climate (1) 26:16;28:6 4:20 47:14 15:12 currents (1) clocked (1) 28:13 17:21 41:17;42:2 41:22 46:14 components (5) convenient (1) covered (3) cut (1) close (2) 19:2,11,15,17; 43:10 42:3,7,25 10:15 closed (1) concern (6) 19:4;55:19;57:5 41:5,7 34:16 closer (1) 26:1;34:15;39:7 50:16,17,18,21 cracks (1) cycle (1) 24:3 concerned (5) copper (9) crazy (1) 15:15 Closing (1) 27:3;29:7;32:13; 8,8;42:20;43:1;54:11 29:20 D coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) coexist (1) 13:20 conditions (1) 5:23 Dakota (1) 13:19 condid (1) 2					
22:23;23:12,17; 28:20;29:3;55:22 completely (2) 26:16;28:6 4:20 control (1) 15:12 (20) (2					
28:20;29:3;55:22 climate (1) completely (2) control (1) 24:9,24;36:10;43:6; 47:14 currents (1) 13:4 clocked (1) 28:13 17:21 41:17;42:2 41:22 46:14 close (2) 19:2,11,15,17; 43:10 42:3,7,25 10:15 10:11;37:5 53:18 closed (1) 43:10 42:3,7,25 10:15 10:11;37:5 53:18 closed (1) concern (6) 19:4;55:19;57:5 41:5,7 34:16 41:23 closer (1) 26:1;34:15;39:7 50:16,17,18,21 43:4 15:15 24:3 concerned (5) copper (9) cracks (1) cycle (1) 24:3 correction (1) 27:3;29:7;32:13; 41:18;42:12 8,8;42:20;43:1;54:11 crazy (1) 20sing (1) 27:3;29:7;32:13; 51:24 51:24 created (2) coercion (1) concerns (6) copprimary (1) 5:14;13:16 dad (2) 34:1 17:3;27:12,12,13; 5:10 5:10 creates (1) 11:3,3 coexist (1) 13:20 concurrently (1) 5:10 5:23 Dakota (1) 13:19 conditions (1) 26:3 corporate					
climate (1) 26:16;28:6 4:20 47:14 15:12 13:4 complex (1) 28:13 17:21 41:17;42:2 Curyung (1) 46:14 components (5) convenient (1) covered (3) cut (1) close (2) 19:2,11,15,17; 43:10 42:37,25 cut (1) 10:11;37:5 53:18 Cook (3) crab (2) cutting (1) closed (1) concern (6) 19:4;55:19;57:5 41:5,7 34:16 closer (1) 26:1;34:15;39:7 cooperating (4) cracks (1) cycle (1) 24:3 concerned (5) copper (9) crazy (1) Closing (1) 27:3;29:7;32:13; 8,842:20;43:1;54:11 29:20 D coercion (1) concerns (6) co-primary (1) 5:14;13:16 dad (2) coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) 13:19 conditions (1) 34:16 credibility (1) 19:5;27:17 coexisting (1) 26:3 corporate (3) 4:6,16;5:8 dam (4)					
13:4				, , , , , ,	
clocked (1) 28:13 17:21 41:17;42:2 41:22 46:14 components (5) convenient (1) covered (3) cut (1) close (2) 19:2,11,15,17; 43:10 42:3,7,25 10:15 closed (1) concern (6) 19:4;55:19;57:5 crab (2) cutting (1) 41:23 11:9;12:5;14:7; cooperating (4) cracks (1) cycle (1) 24:3 concerned (5) copper (9) crazy (1) 24:3 concerned (5) copper (9) crazy (1) 51:8 41:18;42:12 8,8;42:20;43:1;54:11 created (2) coercion (1) concerns (6) co-primary (1) 5:14;13:16 dad (2) 34:1 17:3;27:12,12,13; copyright (1) 57:8 daily (2) coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 crediti (3) 35:10 cold (1) 26:3 corporate (3)					
46:14 components (5) convenient (1) covered (3) cut (1) close (2) 19:2,11,15,17; 43:10 42:3,7,25 10:15 10:11;37:5 53:18 Cook (3) crab (2) cutting (1) closed (1) concern (6) 19:4;55:19;57:5 41:5,7 34:16 closer (1) 26:1;34:15;39:7 cooperating (4) cracks (1) cycle (1) 24:3 concerned (5) copper (9) crazy (1) 15:15 24:3 concerns (6) copper (9) crazy (1) 29:20 D 51:8 41:18;42:12 8,8;42:20;43:1;54:11 created (2) created (2) coercion (1) concerns (6) coppright (1) 51:24 creates (1) 11:3,3 34:1 17:3;27:12,12,13; copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3)					
close (2) 19:2,11,15,17; 43:10 42:3,7,25 10:15 closed (1) concern (6) 19:4;55:19;57:5 41:5,7 34:16 41:23 11:9;12:5;14:7; cooperating (4) cracks (1) cycle (1) closer (1) 26:1;34:15;39:7 cooperating (4) cracks (1) cycle (1) 24:3 concerned (5) copper (9) crazy (1) Closing (1) 27:3;29:7;32:13; 41:18;42:12 8,8;42:20;43:1;54:11 created (2) coercion (1) concerns (6) 8,8;42:20;43:1;54:11 created (2) D 34:1 17:3;27:12,12,13; 51:24 creates (1) 11:3,3 coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 4:6,16;5:8 dam (4) cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) </td <td>, ,</td> <td></td> <td></td> <td></td> <td></td>	, ,				
10:11;37:5					
closed (1) concern (6) 19:4;55:19;57:5 41:5,7 34:16 41:23 11:9;12:5;14:7; cooperating (4) cracks (1) cycle (1) closer (1) 26:1;34:15;39:7 50:16,17,18,21 43:4 15:15 24:3 concerned (5) copper (9) crazy (1) Closing (1) 27:3;29:7;32:13; 11:22;26:5;32:1,5, 29:20 D 51:8 41:18;42:12 8,8;42:20;43:1;54:11 created (2) coercion (1) concerns (6) co-primary (1) 5:14;13:16 dad (2) 34:1 17:3;27:12,12,13; 51:24 creates (1) 11:3,3 coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1)					
41:23 11:9;12:5;14:7; cooperating (4) cracks (1) cycle (1) closer (1) 26:1;34:15;39:7 50:16,17,18,21 43:4 15:15 24:3 concerned (5) copper (9) crazy (1) Closing (1) 27:3;29:7;32:13; 11:22;26:5;32:1,5, 29:20 D 51:8 41:18;42:12 8,8;42:20;43:1;54:11 created (2) coercion (1) concerns (6) 51:24 creates (1) 11:3,3 coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14					
closer (1) 26:1;34:15;39:7 50:16,17,18,21 43:4 15:15 24:3 concerned (5) copper (9) crazy (1) Closing (1) 27:3;29:7;32:13; 11:22;26:5;32:1,5, 29:20 D 51:8 41:18;42:12 8,8;42:20;43:1;54:11 created (2) coercion (1) concerns (6) co-primary (1) 5:14;13:16 dad (2) 34:1 17:3;27:12,12,13; copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14					
24:3 concerned (5) copper (9) crazy (1) Closing (1) 27:3;29:7;32:13; 41:18;42:12 8,8;42:20;43:1;54:11 29:20 D 51:8 41:18;42:12 8,8;42:20;43:1;54:11 created (2) coercion (1) concerns (6) co-primary (1) 5:14;13:16 dad (2) 34:1 17:3;27:12,12,13; 51:24 creates (1) 11:3,3 daily (2) coexist (1) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14				` /	
Closing (1) 27:3;29:7;32:13; 11:22;26:5;32:1,5, 29:20 D 51:8 41:18;42:12 8,8;42:20;43:1;54:11 created (2) coercion (1) concerns (6) 5:14;13:16 dad (2) 34:1 17:3;27:12,12,13; 51:24 creates (1) 11:3,3 coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14					
51:8 41:18;42:12 8,8;42:20;43:1;54:11 created (2) coercion (1) concerns (6) 5:14;13:16 dad (2) 34:1 17:3;27:12,12,13; 51:24 creates (1) 11:3,3 coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14					D
coercion (1) concerns (6) co-primary (1) 5:14;13:16 dad (2) 34:1 17:3;27:12,12,13; 51:24 creates (1) 11:3,3 coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14					
34:1 17:3;27:12,12,13; 51:24 creates (1) 11:3,3 coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14					dad (2)
coexist (1) 46:12;52:14 copyright (1) 57:8 daily (2) 13:12 concurrently (1) 5:10 credibility (1) 19:5;27:17 coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14	34:1				
coexisting (1) 13:20 corners (1) 5:23 Dakota (1) 13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14	coexist (1)				
13:19 conditions (1) 34:16 credit (3) 35:10 cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14					19:5;27:17
cold (1) 26:3 corporate (3) 4:6,16;5:8 dam (4) 36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14					
36:9 conduct (1) 5:4,20;35:13 Creek (19) 31:18;45:11,12,14					
collapse (3) 19:23 corporation (3) 6:2;21:17;25:3; damage (4)					
	collapse (3)	19:23	corporation (3)	6:2;21:17;25:3;	damage (4)

23:25;31:19;35:15;	delivered (1)	22:18;26:22;30:11;	dollar (1)	
36:4	3:14	31:14;49:10,12;52:2;	33:1	\mathbf{E}
lamaged (1)	DELKITTIE (3)	54:11;55:10	dollars (2)	
35:18	7:14,15;10:25	dewatering (3)	13:8;41:5	early (3)
lamaging (1)	democracy (1)	54:22;56:18,23	dominant (1)	11:5,6;30:9
4:22	35:3	died (1)	35:18	earn (1)
lams (2)	democratic (1)	8:8	dominate (1)	49:14
19:21;39:18	35:4	difference (1)	7:7	earth (3)
Oan (1)	demonstrates (1)	12:17	done (15)	9:22;32:20;42:16
6:1	31:20	different (3)	9:8;13:6,10,19;	
langer (2)	Denali (1)	11:8;21:23;24:23	26:19,22;30:23;34:4,	earthen (1)
16:9;52:6	23:23	diligence (1)	11,14;38:10;42:13;	31:18
,				earthquake (4)
langerous (1)	density (1)	13:7	43:13;45:10,24	7:22;29:19;43:3,9
38:8	42:19	Dillingham (3)	dormant (1)	earthquakes (1)
langers (1)	Department (1)	17:13;41:20;42:9	8:8	43:6
52:12	27:23	Directly (1)	double (1)	easily (2)
DANIEL (1)	depend (3)	30:11	20:24	30:2;34:6
6:1	46:3;47:10,11	director (1)	doubtful (2)	east (5)
lata (5)	depends (1)	16:18	28:10,13	
13:11;19:12;27:8,9,	38:5	dirt (1)	down (6)	15:1;42:19,20,22
21	deposit (1)	40:22	4:8;8:23;40:15;	43:9
				eastern (1)
late (1)	5:7	dirty (1)	44:7;45:6;48:12	6:6
6:11	deposits (2)	3:23	downstream (3)	easy (1)
laughter (1)	54:11,12	disadvantages (2)	17:15;18:1;49:19	36:10
31:4	depression (2)	41:24;42:1	drainage (4)	eat (2)
DAVID (2)	56:14,22	disappeared (1)	52:8;56:20,25;57:2	47:14,17
7:14;10:25	deputy (1)	15:18	drainages (8)	ecological (1)
lay (2)	16:18	disaster (4)	27:24;52:7;53:14;	36:14
24:8;38:22	description (1)	7:4;24:4;30:5;	54:4,5;55:8,10,11	
lay-to-day (1)	57:10	49:18	draw (1)	Ecologically (1)
			3:7	36:2
27:15	design (4)	disasters (1)		economic (3)
leal (6)	57:7,11,14,19	19:25	draw-down (1)	18:8;28:8;33:7
33:5,8;35:1,4,6,16	designed (3)	discharge (5)	53:20	economically (1)
lealing (1)	17:9;18:1,4	25:2,18;28:1;57:14,	dredged (1)	36:16
7:6	despite (3)	19	19:3	economy (1)
lealt (1)	33:21;34:19;41:21	discharged (1)	drift (2)	33:17
40:10	destination (1)	28:4	30:17,22	
lebt (2)	29:11	discovery (1)	drill (2)	ecosystem (2)
3:18;4:14	destroy (2)	4:3	8:7,10	7:11;45:6
				ecosystems (1)
lecade (2)	16:13;41:8	discussing (1)	drilled (3)	6:19
19:12;24:20	destroyed (1)	11:7	8:22;44:20,21	EDISON (2)
leceitful (1)	20:8	discussions (1)	drilling (1)	3:2,3
6:13	destroys (2)	50:20	8:5	EDWARDSON (2)
lecide (1)	37:24,25	dislocated (2)	dropped (2)	14:15,16
24:3	destruction (1)	35:8,17	3:20;44:22	effect (1)
lecrease (1)	30:2	dislocations (1)	due (3)	54:1
33:15	destructive (2)	35:7	13:1,7;54:21	
leep (1)	20:6;22:15	disposal (3)	dump (1)	effective (1)
48:19	detailed (3)	54:2,7,15	22:24	32:7
		* *		effectively (3)
leepwater (1)	18:13;57:11,16	dissolved (1)	dumped (1)	18:2,5;28:6
21:18	determination (7)	26:5	3:19	effects (4)
Defense (1)	52:20;53:7;54:3,8,	distinct (1)	during (3)	24:6;27:19;35:18
16:20	16,20;56:7	56:6	28:4;46:23;52:19	57:4
lefined (1)	devastated (1)	distinctly (1)	dust (7)	effort (2)
54:2	35:20	8:10	22:25;47:5,6,7,8,9,	
Definitions (1)	devastating (2)	district (1)	16	6:11;50:15
* *	<u> </u>	` '		Egegik (1)
5:22	11:20;41:4	10:7	dye (3)	37:8
legrade (1)	develop (3)	disturb (1)	44:22,24;45:1	egg (1)
28:25	13:22;14:10;28:11	16:7	dynamite (6)	25:9
legree (1)	developed (1)	documentation (1)	8:12,15,18,24;9:5,8	eggs (2)
31:2	17:20	5:21	Dynasty (1)	15:14;28:5
legrees (1)	development (13)	documented (1)	28:12	*
14:17	6:17;13:5;14:5,11;	55:20		eight (1)
1 T. 1 /	0.11,13.3,14.3,11,	JJ.4U	1	19:8

	T	T		<u> </u>
EIS (13)	equatorial (1)	excluded (1)	45:21	fifth-generation (1)
18:20;19:19,20,23;	36:6	17:12	failures (1)	37:8
20:1;52:10;53:6,22;	equipment (1)	exist (3)	19:23	fighting (1)
54:6;55:8,15;56:13;	27:18	39:25;55:22;56:23	fair (1)	37:9
57:4	Eskimo (1)	existing (1)	34:9	figured (2)
either (1)	49:4	51:15	fairly (1)	21:25;22:4
25:9	especially (2)	exists (3)	13:3	file (1)
Ekwok (5)	28:4;32:13	4:22;51:18,21	faith (2)	5:2
41:15;50:12,13,19,				
	essential (1)	expand (1)	4:16;35:3	filled (1)
22	26:1	28:11	fall (3)	48:23
ELIZABETH (1)	established (2)	expected (1)	37:4;56:11,11	final (1)
38:3	5:9;31:17	27:25	families (1)	45:22
else (1)	establishes (1)	expense (1)	49:19	Finally (3)
23:20	52:10	35:25	family (4)	20:1;44:16,18
employ (1)	estimates (2)	experience (4)	11:21;27:2;31:12;	financial (3)
23:10	57:13,18	3:10;8:18;25:25;	38:5	4:23,25;39:14
empty (1)	et (2)	26:7	famous (1)	find (3)
42:25	37:17;53:20	experienced (1)	11:16	9:7;29:2;43:14
encourage (1)	ethic (3)	6:7	famously (1)	finds (1)
13:4	13:24;14:6;31:9	explained (1)	28:21	52:6
end (5)	evaluated (1)	15:9	far (4)	fingerlings (1)
4:9;6:5;15:7;43:4,	13:3	explosive (1)	11:10;25:18;33:17;	15:11
11	evaluating (1)	22:25	34:10	Fire (5)
Endangered (1)	19:10	exposed (1)	farmer (1)	7:20;43:5,6,7,7
56:6	evaluation (1)	26:4	4:1	firmly (1)
ended (1)	29:10	extensive (1)	farther (1)	44:12
43:3	even (14)	18:24	45:6	firms (1)
energy (2)	4:3;11:18;21:2,4;	extent (1)	father-in-law (1)	31:15
36:8,10	24:3;27:21,23;33:10,	20:18	38:4	first (21)
engage (1)	14;34:12;36:19;44:4;	extract (1)	fault (5)	15:17;18:16;20:14;
17:25	46:22;56:22	56:16	7:20;43:2,3,9,14	29:18;30:8;33:9;
engineering (2)	evening (1)	extracting (1)	favor (1)	40:19;41:4,15,18;
20:2;31:15	46:24	5:8	32:1	42:15;44:9,12;45:11;
Engineers (5)	event (1)	extraction (3)	fear (1)	49:10;50:14;52:17;
3:4;5:19;17:9;	27:11	3:6;30:13;56:16	39:7	53:4;54:1,1,6
32:11;41:20	eventual (1)	extreme (1)	feasibility (1)	firsthand (2)
enough (3)	39:12	29:19	28:9	9:25;17:3
16:15;27:9;50:5	eventually (4)	extremely (3)	Federal (6)	fish (36)
ensure (1)	20:6;39:15;40:16;	27:17;30:4;37:17	3:18;4:14,17,19;	8:3,13;13:9;15:5,
14:2	46:8	Exxon/Mobile (1)	9:15;10:14	10,11,16,19,22;16:5,
entire (4)		30:12		
	ever-increasing (1)	30:12	federally (1)	7,8,9,14;22:7,25;
6:4;22:14;37:15;	29:5	173	50:13	27:22,23,23;28:5,21,
49:25	everybody (4)	\mathbf{F}	fee (2)	23,25;32:19;37:15;
entirely (2)	10:10;11:20;43:24,		4:19,19	38:17;39:5,20;41:12,
19:1,14	24	facilities (2)	feed (1)	13;45:25;46:7,11;
entity (1)	everywhere (1)	53:20,21	32:22	48:24;56:5,10
50:13	45:1	facility (4)	feeds (1)	fished (3)
environment (3)	exactly (3)	54:14;55:3;57:14,	26:18	30:21;31:8;37:21
14:2,12;30:1	23:1;43:14;52:20	19	feel (3)	fisher (1)
environmental (9)	examine (1)	fact (5)	6:9;20:17;27:5	28:22
7:2;13:8,10,24;	57:4	4:8,18;32:13;33:23;	feet (1)	fisheries (16)
14:6;17:19;21:24;			7:22	` ′
	examined (1)	46:22		26:17;27:10;29:20,
30:5;31:22	53:11	factors (1)	felt (2)	21;33:13,16;37:11,12,
environmentally (1)	examining (1)	13:10	35:18;39:6	13,13,14;52:6,8,9,12;
36:18	53:23	factual (5)	ferry (1)	56:4
EPA (9)	example (2)	53:3,5,10;55:12;	19:16	fisherman (5)
9:14;17:2;50:20;	35:9;53:24	57:8	few (6)	37:8;38:4,5;41:12,
53:4;54:2,8;55:4,6,14	exceeded (1)	fail (2)	34:18;35:2,20,21;	18
	33:18	20:7;39:18	37:10;44:13	fishermen (1)
EPA's (7)				
EPA's (7) 52:17 20:53:9:54:8		failing (1)	fiction (2)	h'/./.
52:17,20;53:9;54:8,	except (1)	failing (1)	fiction (2) 5:23 24	6:22 Fishermen's (1)
52:17,20;53:9;54:8, 16,20,24	except (1) 35:24	19:14	5:23,24	Fishermen's (1)
52:17,20;53:9;54:8,	except (1)			

	T		1	11p111 1>, 2010
50:10,12	foreseeable (2)	fun (2)	given (1)	group (8)
fishery (14)	54:10;55:10	40:6,7	31:22	33:23;35:24,25;
4:22;13:13;17:15;	Forever (1)	functional (1)	giving (2)	36:18,25;52:14;53:2;
18:18;28:2,21;31:24;	10:8	24:3	5:23;10:16	54:23
32:3;37:18,24,24,25;	forget (1)	funding (1)	GLENN (2)	groups (2)
38:9,13	40:18	39:12	30:7,8	33:25;35:13
fishes (3)	Fork (1)	fur (1)	global (1)	guarantee (2)
11:21,21;15:24	53:15	9:13	16:25	23:17;49:19
fishing (15)	form (3)	Further (2)	globally (1)	guess (2)
6:8;16:2;22:19;	5:17;25:10;34:25	17:13;45:8	14:9	12:21;40:8
23:21;24:22;28:24;	former (1)	future (5)	goes (4)	guide (2)
29:1,17;30:3,15,16,	31:5	20:12;31:12;34:10;	6:15;14:3;15:11;	6:3;55:22
18;34:9,10;37:22	forth (1)	38:23;39:9	53:2	guidelines (2)
fish's (1)	21:14		gold (11)	9:18;51:6
28:2	fortunately (1)	G	3:12,16,19,20;4:15;	guides (1)
five (7)	46:25		10:20;11:22;32:1;	6:21
15:22;33:18;37:22;	forward (5)	gallons (1)	37:12;42:20,25	guiding (1)
53:11;54:12;55:2,6	14:3;19:19;20:9;	44:5	GONNE-HARRELL (1)	56:9
flew (1)	23:2,16	gamble (1)	49:9	GUSTAFSON (2)
47:1	foul (1)	32:18	good (6)	30:7,8
flight (1)	28:2	Game (3)	4:16;6:18;16:15,17;	guys (1)
3:15	fouled (1)	27:23;32:15;33:1	32:18;42:19	23:6
float (2)	27:25	gas (5)	goodies (2)	
24:15,17	fouling (1)	3:22,23;14:21;19:3;	48:2,4	\mathbf{H}
flood (2)	27:15	57:5	goods (2)	
25:6,7	found (3)	gathering (1)	23:9,11	habitat (5)
flow (1)	15:23;49:2;54:9	15:7	government (4)	26:1,10;38:25;57:2,
22:8	foundation (1)	general (1)	4:19;9:15;34:14;	3
flowing (1)	6:19	55:11	36:23	half (1)
10:2	four (1)	generates (1)	Governments (1)	44:17
flown (1)	52:16	45:6	37:4	hand (1)
6:3	Fourth (4)	generations (3)	gradient (1)	3:19
flows (3)	19:20;52:25;53:17;	31:12;35:19;36:12	36:10	handful (1)
22:7;24:20;44:6	55:16	generative (1)	grandchildren (2)	18:14
flushed (1)	four-wheeler (1)	34:9	38:18;49:21	happen (9)
25:11	10:1	genetically (1)	grandparents (1)	6:10;7:4;20:17;
fly (4)	fragile (1)	56:5	49:21	21:6;23:1;24:25;26:9;
22:23,24;24:7;	36:3	genocidal (1)	Grant (1)	34:3;48:5
43:24	Fraser (1)	35:19	31:1	happened (4)
flying (4)	31:19	Geoff (1)	gravity (1)	12:9;34:2;35:10;
24:17,22;39:5,22	fraught (1)	50:8	48:11	43:8
focus (1)	31:21	GEOFFREY (1)	grayling (1)	happening (1)
50:14	Freemantle (1)	50:7	46:2	35:11
focused (2)	11:14	geographic (3)	great (7)	happens (4)
19:13;53:8	freezers (1)	53:11,23;54:1	6:19;31:21;33:8;	24:21;25:6;45:15;
folks (2)	48:23	Geologist (3)	35:1,4;49:21,21	46:21
31:16;42:6	frequently (1)	14:16,24;42:21	greater (1)	harm (2)
follow (1)	46:22	geology (3)	26:5	26:10;47:2
8:13	fresh (1)	44:14;47:19;48:19	greens (1)	harmed (1)
	11 C311 (1)			47:21
	` /	CEORCE (2)	$\Delta T \cdot \Pi$	
following (2)	8:1	GEORGE (2)	47:11 gray (2)	
following (2) 9:18;27:4	8:1 freshwater (1)	14:15,15	grew (2)	HARRISON (2)
following (2) 9:18;27:4 food (3)	8:1 freshwater (1) 46:11	14:15,15 GERALD (2)	grew (2) 22:16;41:13	HARRISON (2) 26:25;27:1
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1	8:1 freshwater (1) 46:11 fry (1)	14:15,15 GERALD (2) 11:1,2	grew (2) 22:16;41:13 grocery (3)	HARRISON (2) 26:25;27:1 haves (1)
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1 footprints (2)	8:1 freshwater (1) 46:11 fry (1) 25:10	14:15,15 GERALD (2) 11:1,2 gets (1)	grew (2) 22:16;41:13 grocery (3) 47:25;48:1,10	HARRISON (2) 26:25;27:1 haves (1) 35:2
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1 footprints (2) 53:17,18	8:1 freshwater (1) 46:11 fry (1) 25:10 Frying (6)	14:15,15 GERALD (2) 11:1,2 gets (1) 48:17	grew (2) 22:16;41:13 grocery (3) 47:25;48:1,10 ground (7)	HARRISON (2) 26:25;27:1 haves (1) 35:2 headwaters (1)
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1 footprints (2) 53:17,18 forbid (1)	8:1 freshwater (1) 46:11 fry (1) 25:10 Frying (6) 9:9,13;43:23,23,25;	14:15,15 GERALD (2) 11:1,2 gets (1) 48:17 Gibraltar (1)	grew (2) 22:16;41:13 grocery (3) 47:25;48:1,10 ground (7) 3:7;7:23;8:15;9:12;	HARRISON (2) 26:25;27:1 haves (1) 35:2 headwaters (1) 49:11
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1 footprints (2) 53:17,18 forbid (1) 45:15	8:1 freshwater (1) 46:11 fry (1) 25:10 Frying (6) 9:9,13;43:23,23,25; 44:1	14:15,15 GERALD (2) 11:1,2 gets (1) 48:17 Gibraltar (1) 21:17	grew (2) 22:16;41:13 grocery (3) 47:25;48:1,10 ground (7) 3:7;7:23;8:15;9:12; 12:2;44:6;48:24	HARRISON (2) 26:25;27:1 haves (1) 35:2 headwaters (1) 49:11 heal (2)
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1 footprints (2) 53:17,18 forbid (1) 45:15 force (1)	8:1 freshwater (1) 46:11 fry (1) 25:10 Frying (6) 9:9,13;43:23,23,25; 44:1 fulfills (1)	14:15,15 GERALD (2) 11:1,2 gets (1) 48:17 Gibraltar (1) 21:17 gift (1)	grew (2) 22:16;41:13 grocery (3) 47:25;48:1,10 ground (7) 3:7;7:23;8:15;9:12; 12:2;44:6;48:24 Groundhog (1)	HARRISON (2) 26:25;27:1 haves (1) 35:2 headwaters (1) 49:11 heal (2) 36:4,8
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1 footprints (2) 53:17,18 forbid (1) 45:15 force (1) 14:4	8:1 freshwater (1) 46:11 fry (1) 25:10 Frying (6) 9:9,13;43:23,23,25; 44:1 fulfills (1) 20:11	14:15,15 GERALD (2) 11:1,2 gets (1) 48:17 Gibraltar (1) 21:17 gift (1) 32:23	grew (2) 22:16;41:13 grocery (3) 47:25;48:1,10 ground (7) 3:7;7:23;8:15;9:12; 12:2;44:6;48:24 Groundhog (1) 54:14	HARRISON (2) 26:25;27:1 haves (1) 35:2 headwaters (1) 49:11 heal (2) 36:4,8 healed (1)
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1 footprints (2) 53:17,18 forbid (1) 45:15 force (1) 14:4 foreign (3)	8:1 freshwater (1) 46:11 fry (1) 25:10 Frying (6) 9:9,13;43:23,23,25; 44:1 fulfills (1) 20:11 full (2)	14:15,15 GERALD (2) 11:1,2 gets (1) 48:17 Gibraltar (1) 21:17 gift (1) 32:23 gigantic (1)	grew (2) 22:16;41:13 grocery (3) 47:25;48:1,10 ground (7) 3:7;7:23;8:15;9:12; 12:2;44:6;48:24 Groundhog (1) 54:14 grounds (1)	HARRISON (2) 26:25;27:1 haves (1) 35:2 headwaters (1) 49:11 heal (2) 36:4,8 healed (1) 36:6
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1 footprints (2) 53:17,18 forbid (1) 45:15 force (1) 14:4 foreign (3) 7:8,8;12:7	8:1 freshwater (1) 46:11 fry (1) 25:10 Frying (6) 9:9,13;43:23,23,25; 44:1 fulfills (1) 20:11 full (2) 19:20;41:6	14:15,15 GERALD (2) 11:1,2 gets (1) 48:17 Gibraltar (1) 21:17 gift (1) 32:23 gigantic (1) 23:19	grew (2) 22:16;41:13 grocery (3) 47:25;48:1,10 ground (7) 3:7;7:23;8:15;9:12; 12:2;44:6;48:24 Groundhog (1) 54:14 grounds (1) 31:20	HARRISON (2) 26:25;27:1 haves (1) 35:2 headwaters (1) 49:11 heal (2) 36:4,8 healed (1) 36:6 health (3)
following (2) 9:18;27:4 food (3) 7:17;47:13;50:1 footprints (2) 53:17,18 forbid (1) 45:15 force (1) 14:4 foreign (3)	8:1 freshwater (1) 46:11 fry (1) 25:10 Frying (6) 9:9,13;43:23,23,25; 44:1 fulfills (1) 20:11 full (2)	14:15,15 GERALD (2) 11:1,2 gets (1) 48:17 Gibraltar (1) 21:17 gift (1) 32:23 gigantic (1)	grew (2) 22:16;41:13 grocery (3) 47:25;48:1,10 ground (7) 3:7;7:23;8:15;9:12; 12:2;44:6;48:24 Groundhog (1) 54:14 grounds (1)	HARRISON (2) 26:25;27:1 haves (1) 35:2 headwaters (1) 49:11 heal (2) 36:4,8 healed (1) 36:6

				11p111 15, 2010
26:1;39:3	29:12;46:16;48:1	25:23	26:4	investment (2)
hear (2)	Homer (1)	Iliamna (3)	industry (7)	13:4;28:10
5:18;17:24	17:13	19:5,15;53:16	6:21;10:11;29:17;	investor (1)
heard (2)	hook (1)	illustrates (1)	30:3;31:21;33:2;41:3	30:10
18:7;39:5	46:7	47:3	influenced (1)	investors (1)
hearing (1)	hope (1)	illustrating (1)	31:10	7:9
16:12	40:4	47:25	information (9)	involved (3)
hearings (2)	hot (2)	imagine (3)	10:5,20;16:11;	10:10;20:19;31:17
17:12,14	17:11;44:22	28:22;34:24;38:16	18:25;19:24;29:9;	irreparable (1)
heaven (1)	hotels (1)	immediate (1)	44:10,11;52:15	26:10
45:15	23:12	28:19	infrastructure (2)	Island (1)
heavily (2)	howl (1)	impact (9)	20:18;28:14	15:3
32:1;45:6	46:18	9:9,11;17:19;21:22;	ingredient (1)	issue (1)
heavy (3)	hubs (1)	26:20,23;31:22;	3:25	17:21
6:24;27:17;48:20	17:15	32:11;46:10	ingredients (1)	issued (1)
HEIMER (2)	huge (4)	impacted (2)	3:23	52:5
16:17,18	26:23;30:2;45:3,5	17:14,25	inherent (1)	issues (13)
helicopters (3)	humans (1)	impacts (11)	20:4	7:2;17:18;21:23,24;
24:15;39:5,22	47:17	8:4;9:7;17:21;	initially (1)	22:9;33:8;36:12;
Hello (1)	hundreds (5)	19:10,21;53:11,23,24;	31:17	50:14;53:3,5,11;
30:7	12:15;13:7;23:8;	54:7;55:9;57:21	initiate (1)	55:12,13
help (2)	24:16;44:4	importance (1)	50:20	_
18:1,4	hunter (1)	18:7	initiative (1)	J
herring (4)	8:13	important (6)	10:9	TAGON (A)
12:12,15,16,19	hunting (1)	9:21;30:14,24;	Inlet (3)	JASON (2)
Hewitt (1)	29:1	38:16;47:20;54:17	19:4;55:19;57:5	12:22,23
55:24	hunting/fishing (1)	impossible (2)	innumerable (1)	jeopardizing (2)
high (5)	27:2	26:20;57:20	53:10	23:3,15
24:24;25:17;42:19;	husband (1)	inadequate (2)	installed (1)	JEREMY (1) 37:21
43:18;46:17	27:1 hydroelectric (1)	27:8;42:13	4:8 instance (4)	
higher (1) 36:8	8:20	Inc (1) 30:10		jobs (4)
highly (1)	hydrologist (1)	incalculable (1)	27:9;33:14;42:4; 51:25	12:3;13:15;14:12; 18:18
33:14	44:18	28:16	instrument (2)	John (2)
55.14 hill (2)	hydrology (6)	incidences (1)	3:18;4:14	10:22;20:14
45:12;46:23	13:9;43:17,17;	24:12	integrate (7)	Johnson (1)
43.12,40.23 hills (1)	44:13,17;45:9	include (2)	50:24;51:1,7,11;	10:21
21:18	44.13,17,43.9	19:14;28:8	52:3,11;53:9	July (1)
Hinterlands (1)	I	includes (3)	interacting (1)	25:6
10:22	-	50:18;51:2;52:9	52:24	junction (1)
historical (1)	ice (2)	including (13)	interaction (1)	53:16
28:15	7:22;46:4	18:21;19:2,23;31:1;	24:15	jurisdictions (1)
nistory (2)	icebreaking (1)	34:1;50:19;51:12;	interest (4)	14:5
31:15;38:24	19:4	53:14,17;56:6,24;	5:7;7:7,10;34:19	11.0
hit (1)	idea (5)	57:12,17	interested (1)	K
11:14	4:21;22:6,9;33:6;	income (4)	5:6	
nog (1)	41:2	30:25;33:12;34:9;	interests (1)	KAREN (1)
4:1	identified (3)	38:6	7:6	49:9
hold (2)	54:8,16;55:13	incompatibility (1)	international (2)	keep (1)
25:23;48:11	identifies (1)	51:21	15:7;16:11	20:20
nolder (2)	51:14	incompatible (3)	intertwined (1)	kids (2)
30:18,22	identify (4)	26:16,17;51:19	23:13	31:8;40:4
holding (1)	17:18;50:15,16;	incorporate (3)	into (23)	KIEKOW (2)
17:14	53:5	13:11;18:24;57:11	5:16;7:1;8:24;9:5,	16:17,18
noldings (1)	identifying (1)	increased (1)	7;11:7,10;13:11;	kill (2)
30:12	53:2	29:3	15:12;22:20;24:10;	8:13;16:2
nole (2)	ignore (1)	incredibly (1)	25:3;28:4;38:10;41:9;	killing (1)
8:22,23	36:25	13:16	43:20;44:4,6,22;45:7;	8:15
holes (3)	ignored (2)	indirectly (1)	48:12,17;52:11	kind (5)
	28:7;42:9	30:11	introduce (1)	25:14;26:22;39:11;
8:5;44:20,21	20.7.42.9		\ /	· · · · · · · · · · · · · · · · · · ·
8:5;44:20,21 HOLMAN (1)		individual (2)	24:10	43:23;49:11
HOLMAN (1)	ignoring (1) 33:24			
8:5;44:20,21 HOLMAN (1) 20:14 home (3)	ignoring (1)	individual (2) 4:24;5:2 industrial (1)	24:10 Inupiat (1) 14:22	43:23;49:11 King (2) 6:2;9:3

			T	
knowing (1)	lay (1)	lines (1)	24:2,6,18;25:16,18;	22:19;51:15
6:7	15:14	43:14	42:15;43:13,20,21;	Management (6)
known (2)	lead (1)	LISA (1)	47:19,24;48:18;51:25	51:4;52:22;57:12,
11:17;27:22	54:10	38:15	looked (6)	14,17,18
knows (1)	leak (1)	listening (2)	21:21,22;24:11,19;	manipulation (1)
11:20	48:3	17:3;22:25	25:2,15	4:23
Kokhanok (1)	leakage (1)	literally (1)	looking (6)	manner (1)
21:18	27:11	24:16	7:7;20:17,18;21:2,	20:10
Koktuli (14)	learned (3)	little (2)	8,9	many (22)
25:4;28:23;43:21,	14:24;15:17;16:11	32:1;34:7	looks (1)	16:22;21:11;22:7,7,
22,22;44:2,7,25,25;	leases (2)	live (11)	6:17	8,9;26:11,18;28:11,
45:18,19;53:15;54:4;	3:11,21	7:16;16:22;27:23;	loss (5)	17;29:16;33:7,21;
56:19	least (5)	30:25;38:21;39:3;	33:17;38:25,25;	34:19;35:7;36:3,3,3,
Kuskokwim (1)	19:8;24:14;31:16;	40:4;49:15,22,24,25	54:18,21	11,12;39:24;53:10
6:4	50:1;53:25	lived (4)	losses (1)	maps (1)
Kvichak (2)	leave (3)	7:16;18:19;40:2;	28:18	42:15
53:13;55:8	16:12;29:2;32:16	49:5	lost (3)	March (1)
	leaving (1)	livelihood (4)	3:16;54:25;55:1	7:21
${f L}$	5:21	22:17;23:24;38:6;	lot (13)	Marine (2)
	left (1)	49:25	4:6;7:24;10:13;	16:19;56:4
labor (1)	33:20	livelihoods (1)	13:10;24:8;30:13;	MARIUS (1)
14:7	legal (5)	17:4	32:5,6;34:15;40:6,11;	29:24
lacks (1)	5:24;33:8;50:14;	lives (3)	45:24;49:14	MARK (2)
29:9	57:8,21	10:1;31:1;50:4	loud (1)	25:21,21
laid (1)	legislature (2)	living (8)	45:17	marker (1)
16:8	3:12;52:6	5:24;7:25;27:14;	low (1)	43:24
Lake (12)	length (1)	38:19;40:6,6;49:17;	25:17	market (2)
6:6;9:24;19:5,16;	40:13	50:2	lower (1)	3:20;4:23
21:15,17;43:23,23,25;	less (3)	Lloyds (1)	36:10	masses (1)
44:1;47:1;53:17	21:4;33:12;35:6	3:15	lowering (1)	36:5
land (25)	lethal (1)	lobby (1)	25:19	master (1)
7:5,7;21:23;22:25;	26:6	6:16	LUCY (1)	5:2
36:5,8;38:17,21;39:3,	letter (1)	local (13)	32:17	material (1)
6;40:3,4,6,7;43:18;	50:20	27:22;30:20;33:21,	lynchpin (1)	48:12
49:5,6;50:24;51:2,5,	level (15)	24;34:6;41:22;45:23,	18:8	math (1)
13,14,19,22,25	20:20;24:10;25:4,5,	23;46:3;47:10,11;	LYTLE (1)	5:13
landed (1)	23,24;26:7;33:19;	50:24;51:1	40:9	matrix (1)
47:1	36:14,14,21,21,22;	locally (1)		36:8
landscape (1)	54:6;55:7	14:10	M	matter (1)
22:14	levels (6)	locals (1)		40:19
large (4)	24:23;25:19;33:6,7;	46:20	mad (1)	mature (1)
19:3;20:4;31:20,21	53:11,25	location (1)	3:17	15:14
largest (5)	lichen (3)	20:5	Mahals (1)	maximum (1)
26:17;29:17,18;	47:12,12,14	Lodge (6)	28:24	54:19
31:24;50:10	life (6)	6:2;23:21;55:23,25,	maintain (1)	May (1)
last (22)	7:16;22:17;26:16;	25;56:9	9:20	55:14
9:4;15:5,6,9,15;	32:23;39:9;48:22	lodges (1)	maintaining (1)	maybe (4)
16:5,6,9,13;17:1;	lifeblood (1)	8:25	26:7	11:17,24,25;23:22
22:2;23:21;35:20,21;	18:8	logically (1)	major (1)	McCarthy (1)
38:19;39:2,4,21;	lifelong (1)	39:25	53:18	17:3
46:18;47:17;55:17;	50:3	London (1)	majority (2)	MCKEE (2)
56:3	lifestyle (3)	3:15	10:7;18:10	3:2,3
late (1)	7:17;30:24;49:17	long (7)	makes (8)	McNeil (1)
26:13	light (1)	8:3;34:10;36:12,13;	33:7,19;35:23;36:2,	32:15
later (2)	5:15	40:10;46:19;55:19	10,15,15,15	mean (7)
49:2;50:17	likely (2)	longer (4)	making (5)	11:20;12:2,15;22:9;
latest (1)	33:14;34:3	9:12;36:3,9;51:21	4:3;13:11;27:13,14;	23:13;40:18;56:17
34:3	likewise (1)	long-term (2)	52:14	meaningful (1)
law (4)	53:22	28:10;30:3	Mammal (1)	17:10
30:15;40:10;52:3,	line (3)	look (26)	16:19	means (2)
11	5:8;7:20;46:7	5:1,11;9:7;10:4,10;	man (1)	29:3;45:18
Laws (2)	liner (4)	15:21;16:4;20:9,22;	5:24	measured (1)
5:22;14:7	47:23,24;48:6,8	21:6,11;23:14,18;	managed (2)	44:3

-				1 /
mechanical (1)	3:4,5,10;6:9,25;	48:24	15:8	41:1
26:9	7:13;12:1,18;14:3;	more (20)	nation's (1)	noise (1)
meet (3)	15:10;16:24;17:2,5,	9:1,3,3;10:19,19;	9:21	27:16
28:2;44:10;52:10	15;18:1,11,12,17;	12:8;16:21;19:6,7,12;	Native (8)	Nome (1)
meeting (3)	19:13;20:5,15,16,20,	20:10;25:7;31:25;	41:22;45:23,24;	40:14
11:9;44:12;45:14	20,22;21:3,5;23:4,19;	32:6,7;38:16;42:22;	47:10,11,14;48:22,22	Nondalton (5)
meetings (2)	24:3;25:3;26:2,12,14;	43:15;52:14;55:4	natives (1)	7:15;8:20;9:24;
18:4;44:13	27:4,11,19;28:11,19;	Moreover (2)	46:3	39:4,21
member (2)	29:16;30:2;31:13,25;	54:23;55:2	natural (4)	none (2)
7:15;30:16	32:2,12,14,18;33:4,	most (3)	13:23;16:19;19:3;	13:24;40:18
members (4)	10,18,19,20;34:3,4;	11:16;28:18;30:14	32:22	nonexistent (1)
16:21;17:22;18:4;	35:23;37:4,10,12,19;	mostly (1)	naturally (1)	22:8
20:9	38:1,11,12,20,22;	36:19	34:23	nonGMO (1)
membership-based (1)	39:8,18,23;40:5;42:3,	mountain (4)	nature (1)	32:21
50:11	6,12,13,16,18;43:11;	44:2,3,5;45:4	22:14	nonprimary (1)
mental (1)	49:18,23;52:2,9;	mountains (1)	navigable (1)	51:23
35:16	53:13,17,18,19;54:21,	10:2	9:20	nonrenewable (1)
mention (1)	23;55:5,5;57:5	move (4)	near (2)	26:13
23:25	mined (1)	19:19;23:15;45:17;	6:2;21:17	nor (1)
Merck (1)	32:6	46:19	necessary (2)	27:22
31:6	mineral (3)	moved (2)	29:9;33:25	normal (1)
mess (3)	11:22;30:11;51:8	25:22;30:8	need (17)	40:12
33:5;34:4;40:22	minerals (1)	25:22;30:8 moves (1)	9:16;12:3,25;21:6;	North (15)
met (1) 44:9	6:25	23:2	24:2;27:18;29:20,21,	15:22,24,25;21:15;
	mines (12)	moving (1)	25;43:12,15;45:9;	42:17;43:3,11,21;
metallic (1)	38:20;42:4,5;49:1;	7:23	47:14;49:6;50:24;	44:24;45:17,19;
52:6	52:7;53:24;54:7,11,	much (11)	51:25;52:3	53:14;54:13;55:18;
metals (1)	12,23;55:2,9	11:13;14:14;24:2,3;	needed (1)	56:3
21:9	mining (18)	25:7;32:21;36:8,9,9;	3:25	northeast (1)
mic (4)	4:21;5:7;10:16;	40:1;47:25	needs (18)	15:1
18:6;41:23,23;	14:1,16,20;19:21,25;	mud (1)	7:25;13:2;20:22;	northern (3)
42:10	20:4;26:4;33:24;	8:6	28:2;39:11,13;45:8;	21:15,21;28:12
MICHAEL (1)	34:11;37:23,24;	Mulchatna (1)	46:10,10;50:16;51:7,	Northwest (2)
40:2	38:12;40:11;44:23;	45:7	11;53:22;54:6;55:8;	17:16;38:25
MICHELS (2)	49:12	multi-billion (1)	56:4,13;57:4	Norway (2)
6:1,1	minute (1)	33:1	NEPA (9)	15:23,24
microphone (1)	44:5	multiple (4)	18:5;20:11;50:25;	notice (1)
17:11	MISKA (1)	51:15;53:24;54:7;	51:4,7,11;52:11,13,25	10:2
mics (1)	39:20	55:9	nest (1)	noticed (1)
42:5	missing (1)	multi-year (1)	8:16	42:4
midwest (1)	27:7	24:20	nets (1)	nowhere (1)
36:7	mission (3)	must (3)	46:5	46:17
might (1)	9:16,17,19	18:24;20:1;52:10	nevertheless (1)	NRDC (2)
23:5	mitigate (1)	myself (3)	35:6	18:13;20:9
mile (1)	27:19	14:23;27:1;30:15	new (8)	number (2)
32:14	mitigation (3)	17.43,41.1,30.13	19:1,11;21:13,15,	37:13;41:17
	20:1,3,7	N	17,25;22:3;24:10	numerous (2)
mileage (1) 55:1	20:1,3,7 modern (1)	14	Newhalen (2)	6:24;41:21
	, ,	mama (8)	` '	*
miles (9)	20:2	name (8)	46:15,16	nursery (1)
7:21;15:1,2,2,3;	modified (1)	3:2;11:1;12:22;	newly (1)	15:4
19:7;42:17;43:11;	51:20	14:15;16:18;25:21;	19:14	Nushagak (7)
54:18	molten (1)	41:12;50:7	Newman (2)	41:14,16;45:7,8;
military (1)	42:24	name's (1)	25:21,21	52:23;53:12;55:8
34:22	molybdenum (2)	7:14	new-picom (1)	Nushagak/Kvichak (1)
millennia (1)	42:20;43:1	NANCY (1)	5:12	54:5
18:19	monetized (1)	26:15	next (4)	Nushagak/Mulchatna (2)
million (2)	4:11	narrower (1)	21:10,13;22:12;	51:3;52:22
3:12;16:21	money (14)	53:7	49:24	
millions (2)	4:1,3;10:13,16,17;	NASA's (1)	night (2)	0
13:8;44:4	34:7;36:23;39:16;	5:14	38:22;46:24	
mind (1)	40:5,13,15,20,20;	National (3)	nine (3)	observed (1)
11:13	49:14	6:6;16:25;56:4	26:6;48:2,8	6:10
			nobody (1)	obviously (3)
Mine (88)	moose (1)	nations (1)	nonogy (1)	ODVIOUSIV (3)

13:2;22:19;25:4	27:2	overclean (1)	pay (5)	8:17;18:16,25;
occur (7)	operator (1)	28:1	3:9,18;4:7,14;10:14	21:16;22:5;27:5;29:8
20:7;33:16;34:12;	26:7	overfished (1)	paychecks (1)	30:18,22;42:13;
39:13,15;56:23,24	opinion (1)	41:7	4:13	56:15,21;57:6,9
occurred (1)	21:1	overharvested (2)	payment (2)	permits (2)
8:10	opportunities (2)	15:19;16:1	3:13,21	52:5;54:10
occurrence (1)	14:11;20:10	overuse (1)	Pebble (43)	permitting (4)
5:15	opportunity (9)	27:15	3:4;6:10;15:10;	20:16,21,24;22:13
ocean (6)	3:5,8;13:1;14:14;	overwhelming (1)	16:24;17:2,5;18:11,	person (4)
12:17;14:19;15:12,	17:22;31:10,25;	18:10	12,16;19:1,9;26:2,11;	5:5;28:22;34:22;
13,13,18	34:21;39:2	overwhelmingly (1)	27:4;29:8,16;31:13,	49:5
off (14)	oppose (4)	16:24	17;32:11,14,17;33:4;	personal (1)
4:1,5,6,10;10:15;	16:24;26:11;49:10;	own (3)	37:10,19;38:1,20;	5:23
38:21;40:3,4,6;42:15;	50:5	6:2;22:16;30:12	39:21,23;42:16,19,20,	personally (4)
45:13;46:25;49:5,15	opposed (4)	owner (1)	21;43:9;44:9;45:10;	9:11;11:13;28:17;
offer (2)	22:18;31:13;36:1,	55:24	52:1,9;54:10,12,12;	39:23
3:8;32:9	21	owners (1)	55:5,9;57:5	persons (1)
offered (1)	opposition (1)	29:7	peeled (1)	6:22
18:6	33:21	owner's (1)	4:5	PETER (1)
offering (1)	optimistic (1) 33:11	9:1	pencil (2)	33:3
17:11		ownership (1)	21:5,11	petroleum (1)
off-loading (1) 12:14	options (3) 20:2;57:13,18	5:10	pencils (1) 21:12	14:17 PFEIFFER (1)
often (1)	oral (1)	P	penetrate (1)	26:15
34:7	50:8	1	48:3	phase (1)
oil (9)	Order (2)	Pacific (5)	penetrated (1)	18:5
3:22,22;4:5;12:9,	51:8;52:11	15:13,18,19;17:16;	48:9	Philadelphia (1)
10;14:20;34:8,11;	ore (3)	38:24	Peninsula (1)	31:7
35:10	21:3,4,16	page (1)	6:5	physical (1)
old (2)	organization (2)	57:10	Pennsylvania (1)	5:16
19:12;40:4	6:12;50:11	pages (2)	31:7	picture (3)
oligarchic (1)	organizations (3)	5:21;52:23	penny (1)	22:12;23:14;47:21
34:17	9:15;10:4;18:2	paid (2)	7:8	pike (1)
once (5)	original (1)	4:13,13	people (33)	46:1
15:13;26:3;28:21;	21:14	Pan (6)	8:1;10:6,14;11:17;	pile (1)
40:18;48:17	others (2)	9:9,13;43:23,23,25;	14:8,21;15:18,20;	47:6
one (32)	17:6,24	44:1	17:4;18:10;23:25;	piles (2)
3:23;5:21,22;6:18;	out (49)	Panama (1)	24:8;26:18;30:3;	53:19;54:22
8:7,22;11:12;13:17;	3:7;4:3,10,13,14;	34:2	33:21,23;34:13;35:7,	pilot (1)
15:24;25:1;26:17;	7:18,18;8:23;9:7;	PANZARELLA (3)	12,17,19,24,25;36:12,	31:4
28:6;32:14;33:20;	11:12;12:2;15:2,3,4;	29:14,15,24	19,25;37:2;39:6;	piloting (1)
34:8;35:20,21;37:13;	21:5,11,12,18,25;	parents (1)	40:15;47:10,11,14;	31:3
38:25;39:8;40:24;	22:4,16;23:11,18,25;	49:20 D (1)	50:2	pipeline (5)
42:11,23;46:16,24;	24:7,21,22;25:12;	Park (1)	people's (1)	4:9;14:1;19:3,22,25
47:17;48:2;50:15; 53:12;55:4,17;56:2	26:16;32:5,14;34:7; 40:13,18;43:14;44:3,	6:6 parka (1)	42:3 peptide (1)	pipelines (1) 35:10
one-fifth (2)	5;45:4,17;46:9,17;	8:16	3:23	pit (8)
55:4,6	47:22;48:2,3,9,13;	PARKER (2)	per (2)	23:19;29:19;44:23;
ones (1)	49:2;50:4;56:16	50:7,8	26:6;44:5	47:5;53:19;54:21;
49:14	outmigration (1)	part (7)	percent (7)	56:14,15
only (12)	56:11	5:20;9:19;15:10;	9:22;33:14;48:25,	pitch (1)
3:12;9:21;10:13;	output (1)	23:22;30:24;43:5;	25;49:3,3;54:19	32:4
19:11;20:6;23:3;28:5,	21:10	51:9	perception (1)	place (12)
22;36:18;44:20,21;	over (32)	participate (3)	33:15	6:20;7:2;8:19;
53:8	4:20;7:22,24,25;	18:2,5;20:10	Perfect (1)	26:14,23;37:1;38:13,
open (7)	8:1,2,2,4,5,7;9:3,4,13,	participation (1)	35:8	16;39:3,11,14;41:19
3:20;18:6;23:19;	23;10:11;13:18;	17:10	perhaps (1)	places (2)
41:23;42:5,10;46:5	14:22;21:10,17,18;	particularly (3)	56:11	29:2;48:13
operable (1)	22:24;24:23;28:11;	49:14;50:4;51:12	period (3)	plan (16)
33:12	32:25;34:5,6;39:5,22;	parts (1)	23:22;36:13;49:11	6:11;20:17;28:9;
operate (1)	43:24;45:11,17;47:1	26:6	permanent (3)	36:15,16,17,17;51:3,
27:2	overall (1)	past (2)	39:11,12,14	4,5,7,18;52:22,23,23;
operation (1)	22:12	14:18;15:3	permit (14)	57:1

		I	1	119111 15, 2010
plane (1)	56:19,25	10	Protection (1)	raised (1)
22:24	portions (1)	problem (5)	16:19	17:24
planes (3)	54:3	21:20;28:6;57:8,8,	PROTZMAN (2)	raising (2)
24:15,17,17	pose (1)	22	11:1,2	25:4,19
planet (1)	49:13	problems (1)	proven (1)	range (3)
15:21	posing (1)	35:5	13:25	18:20;19:20;20:1
planned (1)	50:2	Proceedings (1)	provide (3)	reaches (1)
34:21	positively (1)	57:23	14:12;17:18,22	6:6
planning (2)	31:10	P-R-O-C-E-E-D-I-N-G-S (1)	Prudhoe (5)	reaction (1)
28:10;51:12	possibility (2)	3:1	3:11,21;4:3,12,21	47:16
plans (3)	30:4;45:20	process (19)	public (16)	read (1)
50:25;51:2,10	possible (2)	13:1;17:10,17,20;	7:5,6,7,10;13:2;	45:10
plant (3)	19:21;31:11	18:5;21:1;26:4;35:4;	17:10,12,12,14,23;	real (1)
8:21;19:6;53:21	possibly (1)	36:24;41:19,20;	33:15;45:14;52:15,	5:24
please (2)	25:11	44:23;50:17;51:4,7,	18,24;57:21	realistic (1)
7:11;32:23	post (4)	11;52:11,13,19	publicly (3)	21:7
plutocracy (1)	52:17,20,21,25	processes (1)	17:1,8;19:11	reality (2)
34:17	potential (8)	36:25	pull (3)	21:2;25:17
pm (1)	21:9;24:12,14;25:2;	production (3)	4:10;5:3;56:16	really (24)
57:23	31:21,22;50:18;55:2	3:25;7:1;33:13	pump (1)	9:7,21;10:10,11;
point (8)	potentially (5)	productive (1)	25:7	12:13;20:16,22;21:6,
7:18;11:14;14:25;	17:14,25;22:22,25;	32:7	purchase (3)	6;23:15;24:2,4,6,11,
22:12,17;27:5,7,21	38:8	profession (2)	3:5,9;23:9	13;25:1,13,16;42:12;
pointed (1)	pound (1)	24:22;25:22	purchasing (1)	43:12,12;45:9;46:12;
47:22	41:8	professional (1)	5:7	47:20
points (3)	pouring (1)	31:2	purposes (2)	reason (6)
6:24;18:15;52:16	44:3	profit (1)	20:11;56:6	3:10;15:6;22:23;
poison (1)	power (5)	7:8	pursue (1)	31:13;35:24;52:21
35:2	18:22;19:6;20:18;	progress (1)	50:22	reasonably (2)
poisoned (1)	35:12;47:3	32:2	pursuing (1)	54:9;55:9
45:16	practice (1)	project (20)	31:2	reasons (2)
policies (1)	40:10	8:19;9:10,11;12:24;	pushing (1)	11:13;26:11
35:19	precludes (1) 17:10	13:6,12,16;14:14;	49:13	reassured (1) 28:12
political (3) 33:9;35:15;37:3	pressure (1)	16:19;19:2,14;23:2; 24:9;26:2,12;31:17;	put (16) 4:10;7:1,13;16:8;	receipt (1)
Politically (2)	29:4	53:1;57:5,9,11		3:14
35:1;36:16	pretty (2)	projected (2)	21:14;25:3;30:15; 31:1;37:1,2;38:12;	recent (1)
politicians (1)	25:6;41:4	5:16;28:3	39:9;45:14;46:9;	31:18
34:6	prevent (1)	projects (6)	49:19,23	Recently (1)
politicking (1)	3:6	12:24;13:1,3,25;	putting (3)	34:2
14:25	previously (1)	14:1,4	29:3;41:2;48:6	recognized (1)
pollute (2)	19:17	propensity (1)	27.3,41.2,40.0	50:13
49:1,4	price (4)	34:16	Q	recommend (1)
polluted (3)	3:9;21:3,4,9	proponent (1)	¥	56:4
40:25;41:1;49:3	primarily (1)	30:10	quality (3)	recommendations (1)
pollution (2)	23:10	proposal (3)	42:19:57:13,17	17:18
14:21;27:16	primary (5)	10:5,8;21:14	quantify (1)	record (3)
pool (1)	51:14,19,22,23,23	proposed (24)	56:13	10:24;12:22;41:11
9:2	Prince (4)	13:12;16:24;19:1,	quantity (2)	recover (1)
poor (1)	11:6,10;12:9,13	14,16;27:4;42:17;	57:12,17	23:6
33:7	printing (1)	45:11,11,14;47:24;	quicker (1)	recovery (2)
population (2)	4:18	49:1;51:18,20;52:2,	36:9	4:4,8
32:12;56:7	Prior (1)	20;53:6;54:2,8,16,20,	quite (3)	Recreation (2)
populations (2)	12:12	24;55:4,6	10:12;37:10;46:21	51:3;52:22
27:22;28:25	pristine (2)	proposing (1)	quits (1)	RECTOR (1)
porphyry (1)	26:3;33:15	28:14	42:17	32:10
54:11	private (1)	protect (6)		recycling (1)
port (6)	19:7	9:20;17:6;20:3;	R	32:7
18:23;19:3,16,22;	pro (5)	27:19;30:1;32:21		red (2)
21:18;55:17	•	protected (2)	Rainbow (3)	29:18;37:13
	37:24,24;42:4,5,6	protected (2)	Kaimbon (5)	27.10,57.15
Portage (1)	37:24,24;42:4,5,6 probably (8)	27:10;49:7	55:23,24;56:9	Reef (1)
Portage (1) 41:14		•		*
	probably (8)	27:10;49:7	55:23,24;56:9	Reef (1)

				1
3:4	replace (1)	richer (1)	routing (1)	53:13,17
refined (1)	28:16	42:22	21:13	scholar (1)
32:6	report (3)	Rick (2)	Roy (1)	31:6
reflected (1)	44:13,14;45:9	7:15;10:24	31:5	school (1)
52:13	reports (4)	RICKY (2)	ruin (3)	30:16
regain (1)	43:13,20;44:15,17	7:14;10:25	37:11,12;41:3	science (1)
5:4	representing (1)	ride (1)	ruined (2)	6:24
Regarding (2)	27:1	15:12	40:7;41:7	scientific (1)
54:6;55:7		Right (7)	ruining (3)	18:25
	represents (1) 33:12			
regardless (1)		8:6,25;10:24;11:15;	11:19;23:24;40:5	scope (1)
24:25	request (3)	23:9;39:1,2	rules (1)	24:13
regards (2)	28:20;42:10;55:13	rights (1)	8:13	scoping (10)
20:15,21	requested (1)	51:15	rumors (1)	17:17;18:4,13;
regime (2)	44:12	Ring (5)	55:19	41:19;50:15,17;
34:16,20	requesting (1)	7:20;43:5,6,6,7	run (8)	52:15,19;53:3,5
region (5)	44:17	ringed (1)	29:18;37:14,17;	Sea (4)
6:23;32:13;39:10;	requests (3)	56:16	40:13,18;41:9;46:8;	15:8,22,24;16:1
49:15;50:3	17:6;41:21,21	risk (6)	56:12	seasons (1)
regular (1)	require (2)	12:20;20:4;29:20,	runs (1)	37:22
39:22	19:18;51:1	21;39:9;49:6	21:17	second (11)
regularly (1)	requirement (2)	risking (1)	rush (1)	13:24;18:20;29:18;
25:6	52:4,12	29:17	12:2	40:20;42:11;50:24;
regulation (1)	requires (1)	risks (1)	Russia (1)	52:14,19;53:9;54:4;
51:17	13:4	38:20	15:24	55:7
regulations (4)	research (1)	risky (1)		Security (1)
50:25;51:1,12;53:1	38:10	38:8	\mathbf{S}	5:2
reiterate (2)	Reserve (5)	River (22)		seismic (4)
13:18,21	3:18;4:14,17;52:8,9	6:4;8:20,24;9:9;	sacrifice (2)	8:12,14;42:15,17
reject (1)	residents (2)	22:6;25:7,8,12;31:19;	38:8;45:18	sell (1)
29:8	14:12;16:23	32:15;41:14,16;	safety (2)	40:25
rejection (1)	resist (1)	43:22;45:7,25;46:2;	24:7;49:20	sellout (1)
5:23	35:12	47:2;53:13;55:23,25;	sake (1)	36:20
related (1)	resource (14)	56:9,19	38:9	sense (6)
50:14	4:21;13:5,18;16:25;	rivers (7)	Salmon (41)	33:7,19;35:23;36:2,
relationship (1)	22:20;24:1,1;26:12,	12:12;15:14;24:23;		15;45:19
5:19			6:2,19;8:2;9:1,3,3;	
	13;30:13;37:22,23; 38:7,9	25:18;48:25;51:3;	11:16;12:11,11,19,19;	sensing (1)
relationships (1)	*	53:15	13:13;15:11;16:5;	34:21
50:22	resources (5)	road (3)	18:7,18;20:7;25:9;	sensitive (1)
relative (2)	3:6;13:23;16:20;	21:17;28:9;32:14	26:1,6;29:18;31:20,	7:2
31:23,25	32:22;49:18	roads (5)	23,24;32:19;37:14,	sent (2)
relatives (1)	responding (1)	19:7;20:18;22:24;	16;38:6,7,11,23,24;	50:20;55:13
12:3	17:5	23:20;47:7	39:9;40:25;41:3,9;	sentiment (1)
relies (1)	responsible (2)	ROB (1)	45:25;46:8,9;50:4,4	13:21
22:17	12:6;13:4	10:23	salmonids (1)	separate (1)
rely (1)	rest (5)	ROCHELLE (2)	6:25	4:9
32:20	16:4;35:2;37:1,1;	26:25;27:1	same (10)	serious (3)
relying (1)	48:11	rock (7)	4:11,12;9:9;35:9,	22:10;30:4;57:21
49:22	restoration (1)	8:23;11:14;47:6;	14;38:13;42:18;	Service (1)
remember (3)	40:17	48:7,7;53:19;54:22	52:21;54:14;55:3	56:4
7:21;12:13;46:16	result (1)	room (1)	Sanctuary (1)	settlement (1)
rendition (3)	34:20	26:19	32:15	3:8
5:13,13,14	return (1)	roots (1)	saturates (1)	Seventh (1)
renewable (5)	26:2	49:16	44:6	57:6
22:20;24:1;26:12;	reuse (1)	ROSENFELD (1)	saw (1)	several (1)
37:22;38:7	32:8	10:23	8:4	19:1
renewed (1)	revenue (2)	round (1)	saying (3)	Seward (2)
34:19	4:13;33:11	19:5	13:21;16:10;37:4	11:2;15:7
renowned (1)	reviewing (1)	roundly (1)	scale (7)	shall (3)
33:24	7:9	36:1	20:4;53:12;54:1,5,	51:20,20;52:5
	revisit (1)			
rental (2)	, ,	route (4)	6;55:7,10	shape (1)
4:19;23:13	9:17 DICHARD (1)	21:15,21,25;22:3	scales (2)	34:25
repeatedly (1)	RICHARD (1)	routinely (1)	53:23,25	shaped (1)
35:8	40:9	56:8	scenario (2)	43:25
				1

				<u> </u>
share (1)	48:23	specifically (2)	steeled (1)	10:23;18:13
44:10	Slope (1)	12:25;28:18	55:20	Subsequently (1)
shared (1)	14:22	spending (1)	steelhead (6)	37:16
44:11	slowly (1)	13:7	55:18,21,23;56:1,2,	subsistence (8)
shareholders (1)	48:13	spent (1)	8	6:7,23;7:16;13:13;
28:12	smacks (1)	21:20	Stevens (1)	18:19;41:13,18;49:17
sharp (1)	34:18	spill (3)	26:14	substantial (2)
48:7	small (6)	8:10;12:9,10	still (5)	19:24;30:12
sheer (1)	29:7;35:24,25;	spills (1)	8:7;16:3;36:4,6;	substantive (1)
21:8	36:18,25;56:7	19:23	49:23	20:10
shifting (1)	smaller (1)	spin (1)	stock (1)	subterrain (1)
6:13	21:5	6:14	7:9	42:24
	Social (1)	spoke (1)	stockholders (1)	
shooting (2)	` /		` '	suckers (1)
20:21;21:16	5:2	10:6	35:5	46:2
shopping (1)	sockeye (2)	sportfishing (1)	stop (2)	sudden (1)
48:10	9:3;31:24	23:7	43:9;48:17	46:17
short (1)	sold (2)	spread (2)	stopped (1)	sufficiently (1)
34:1	3:11;34:7	48:13,17	43:10	20:3
show (2)	solely (2)	spring (4)	storage (4)	suggest (1)
27:9;46:13	19:13;49:22	28:4;45:3,5;56:11	53:19;54:14;55:3;	5:1
showed (3)	solid (1)	squeal (2)	56:14	sulfide (1)
44:24,24,25	8:23	4:2,4	story (1)	52:7
shows (3)	solution (1)	squirrels (2)	44:15	sulfur (2)
34:3;36:24;42:16	39:16	8:15,16	straight (3)	3:24,24
Siberia (1)	somebody (1)	SR (3)	15:2,3;23:18	summer (4)
16:6	11:20	7:14,15;10:25	strategic (2)	30:19,24;39:4,21
side (3)	sometime (1)	stage (1)	57:14,19	supply (3)
8:22;21:15;55:19	11:11	25:7	stream (3)	37:15;43:17;57:5
significance (1)	somewhere (2)	stages (1)	19:8;21:22;41:1	support (7)
17:1	44:8;45:5	6:16	streams (6)	12:23;14:14;16:23;
significant (3)	son (4)	stainless (2)	9:23;22:4;27:17,22;	28:13;31:15;33:4;
13:6,15;19:18	9:1;30:11,20;31:1	3:24,25	55:18;56:3	39:23
signs (1)	sorry (1)	stake (1)	street (1)	supporting (2)
36:4	27:13	6:18	11:3	5:9;34:24
silver (1)	Sound (4)	standard (1)	strict (1)	supports (4)
4:16	11:6,10;12:9,13	52:10	55:6	6:21,22;18:18;23:8
similar (2)	source (2)	standards (2)	strikes (1)	supposed (1)
35:11;53:23	44:8;50:1	54:24;55:3	32:1	34:23
similarly (1)	sources (2)	standing (1)	strongly (1)	sure (7)
53:7	18:22;41:1	37:18	29:15	9:18;13:11;25:16;
simplest (1)	South (9)	start (1)	structures (1)	35:9,13;42:7;49:6
33:6	35:10;41:15;43:21,	25:4	39:14	surface (3)
simply (1)	22;44:2,7,25;53:15;	started (1)	student (1)	28:3;56:18,23
36:22	54:13	11:5	31:2	surpass (1)
single (1)	South/PEB (1)	State (17)	studied (2)	54:24
15:25	54:13	10:15;13:17;23:9,	22:1;24:11	surrounding (1)
site (8)	southwest (2)	10,22;30:4,9;32:15;	studies (10)	25:8
8:11;19:14,16,22;	43:22;44:1	33:11;50:24;51:1,11,	13:8;19:9,11;42:13;	survey (1)
54:8,16;55:16,17	space (1)	13;52:3,4,5,11	43:15;45:10,24;	39:22
sites (6)	42:25	statement (2)	46:13;48:19;49:2	survive (3)
8:7;18:23;54:15,17;	spawn (3)	9:17;17:20	study (3)	8:1;25:10;39:1
55:3;56:14	12:11,16,19	statements (1)	19:18;44:19;45:9	suspect (1)
sitting (1)	spawned (1)	9:16	studying (1)	49:15
46:16	28:5	States (8)	21:21	sustain (3)
situation (1)	spawning (1)	5:19;7:12;12:25;	stuff (2)	15:20;34:10;46:7
41:9	31:20	36:7;51:13,18;52:4;	7:18;40:14	sustained (1)
six (3)	speak (5)	57:10	subject (3)	31:12
7:22;17:11;50:19	6:9;7:5;14:23;	status (1)	4:23;14:18;51:15	sustaining (1)
Sixth (1)	17:23;33:3	5:4	submit (1)	32:2
57:4	special (1)	statute (2)	19:9	sustains (1)
size (2)	7:7	52:4,10	submitted (2)	39:10
20:5,24	Species (1)	steel (2)	27:6;57:7	swim (1)
sky (1)	56:6	3:24,25	submitting (2)	15:14
onj (1)	50.0	3.27,23	Savintung (2)	13.17
-				

switched (1)	temperature (1)	titled (1)	15:23;16:3	36:20
21:24	7:3	5:22	tremendous (1)	unanticipated (1)
SYLVIA (2)	ten (4)	today (9)	43:19	19:17
29:14,14	21:10;48:2,9;49:2	4:22;8:6;12:23;	tribal (2)	uncertain (1)
Synthesis (1)	terms (1)	16:20,23;18:6,15;	7:15;50:13	32:20
15:8	39:14	29:24;42:14	tribe (2)	unchartered (1)
system (8)	TERRY (1)	toddler (1)	14:21;41:22	11:14
4:25;14:1;36:24;	32:17	30:22	tribes (5)	under (5)
	test (1)	told (4)	17:6;50:18,19,21,	9:15;18:3;48:20;
46:3;48:8,12,18,20				
systems (1)	8:5	9:1;34:20;36:22;	23	50:25;54:20
45:25	testified (1)	45:15	tribes' (1)	underground (2)
T	17:1	TOMPKINS (1)	55:13	45:2;48:18
T	testify (3)	37:21	trip (1)	undermine (1)
	14:14;17:8,23	tons (3)	19:5	35:3
tail (1)	testifying (1)	12:15;48:6,7	trout (1)	undocumented (3)
4:9	12:23	took (4)	32:19	55:17,18;56:2
tailings (7)	testimony (4)	3:15;8:19;9:12;	trucks (1)	Unfortunately (1)
19:21;39:13,18;	3:3;5:6;17:12;42:4	42:9	22:24	17:8
53:19;54:14;55:3;	thanked (1)	Toronto (1)	true (1)	United (4)
56:14	17:2	33:5	34:22	5:19;7:12;12:25;
Taj (1)	thanks (2)	totally (1)	truly (2)	36:7
28:24	14:13;26:24	36:1	20:23;28:24	universe (2)
Talarik (12)	theirs (1)	tourism (1)	trump (1)	5:14,16
25:3;28:23;44:24;	35:21	32:25	51:24	University (2)
45:12,13,16;53:16;	thicker (1)	tourist (1)	trumps (1)	30:21;31:6
54:4;56:18,24,25;	47:25	29:11	51:22	unless (1)
57:3	Third (17)	toward (1)	try (2)	52:5
talk (4)	14:5;15:5,6,10,15,	9:13	32:7;35:12	unrenewable (1)
42:21;43:16;44:18;	17,22;16:5,7,9,13;	towards (1)	trying (1)	38:9
45:22	18:24;52:3,21;53:2;	34:16	25:10	up (24)
talked (1)	55:12,12	town (2)	TSF1 (3)	8:19,21;9:1;10:1;
46:20	THOMAS (2)	15:1;40:10	54:15,18,23	12:11;21:18;22:16;
talking (5)	41:11,12	toxic (4)	TSF2 (3)	23:18;28:20;34:4;
5:8;22:13;23:23;	thoroughly (1)	6:25;47:8,9;48:12	54:15,18,24	37:3;40:3,17,19,21;
26:18;47:23	38:10	trade (1)	TSF3 (1)	41:13;44:2,24,24,25;
tank (1)	though (1)	26:12	54:15	46:6,20,22,23
15:16	11:18	traffic (1)	tundra (3)	uphold (1)
tanker (1)	thought (2)	24:10	8:6,7;36:5	34:23
4:10	44:14,22	Trans-Alaska (1)	turn (1)	upon (2)
tankers (2)	thousands (5)	13:25	22:20	3:14;7:13
4:11;11:7	6:22;23:24,24;44:4;	transport (1)	turned (1)	Upper (10)
TARYN (2)	48:16	23:11	11:12	25:3;53:16;54:3,4;
16:17,18	threat (1)	transportation (4)	turns (1)	56:18,19,24,25,25;
taxed (1)	50:2	18:22;19:15,22;	15:4	57:2
4:4	threaten (1)	53:22	two (13)	up-to-date (1)
taxes (3)	18:17	trap (1)	5:21;10:19,20;16:3;	18:25
4:7;10:15,15	threatened (1)	9:13	44:11,14;53:12,25;	USC (1)
				5:20
Tazimina (2)	17:5	trapping (1)	54:17;55:17,18;56:2,	
8:19;9:9	three (8)	9:12	3	use (30)
teach (1)	9:22;14:17;16:21;	travel (1)	two-thirds' (1)	6:23;9:8;16:11;
46:15	20:24;25:24;33:12;	10:1	3:16	19:4;22:19;29:5;46:5
technician (1)	41:5;53:13	travesty (1)	TXU (1)	48:2;50:25;51:2,5,14,
14:17	throughout (1)	30:1	5:10	16,18,19,19,20,22,23,
techniques (1)	38:24	TRAVIS (1)		23,24,24,25;52:19,24;
33:25	Tidewater (1)	32:10	\mathbf{U}	53:4,6;54:14,23;55:2
technology (1)	10:22	treasure (3)		used (7)
11:24	TILDEN (2)	7:11,12,13	ultimate (3)	3:24;8:24;9:2,4;
tectonic (1)	41:11,12	treated (1)	57:7,7,10	40:9;44:9;46:15
7:3	times (5)	57:19	ultimately (1)	user (1)
Ted (1)	20:24;22:8,8;36:3;	treatment (6)	18:1	4:19
26:13	55:6	25:23,24,25;26:8;	unacceptably (1)	users (1)
tells (1)	title (1)	57:13,18	29:11	13:14
	5:5	treaty (2)	unAmerican (1)	uses (1)
43:2	2.2			

	T	T		April 19, 201
51:14	wants (1)	7:24	worked (3)	10 (1)
using (4)	31:3	what's (4)	11:18;12:10;42:1	33:14
33:25;47:23;53:23;	warehouses (1)	21:6;25:8,9;48:5	working (4)	10,000 (1)
54:7	41:6	whatsoever (1)	10:12;11:6;12:14;	8:2
utilize (1)	warning (1)	36:2	14:8	100 (5)
23:12	37:2	wheel (1)	works (1)	12:4,6;36:5;48:25,
	washed (1)	24:17	42:8	25
${f V}$	25:12	whitefish (1)	world (18)	11 (2)
· · · · · · · · · · · · · · · · · · ·	Washington (1)	46:1	7:1,13;11:17;14:5;	15:1;51:12
Vagelos (3)	30:9	Whittier (1)	16:4;26:18;28:24;	1101a22a (1)
31:4,5,6	waste (5)	11:9	29:5,18,20,22;31:25;	5:20
V-A-G-E-L-O-S (1)	27:11;36:23;47:6;	whole (11)	32:5,19,25;33:24;	12 (1)
31:5	53:19;54:22	4:6,21;5:5;15:4;	37:14,15	6:15
Valdez (3)	wastewater (3)	21:1;24:10;29:22;	world-class (2)	120-miles-an-hour-plus (1
4:9;11:7,10	25:22,24;28:1	41:5;43:4,18;48:20	7:11;29:11	46:14
valid (1)	water (55)	whose (1)	world-renowned (1)	13 (3)
51:15	7:3,24;8:1;9:22,24;	17:4	28:21	15:8;30:23;54:9
value (6)	10:20;15:4;18:8;	wife (1)	world's (9)	14,000 (1)
3:16,20;4:15;28:15;	24:20,23,24,24;25:4,	38:3	6:18;15:5,10,15,22;	18:18
33:16,18	5,8,17,17,23,24,25;	wild (3)	16:5,7,9,13	15 (1)
values (2)	26:2;27:25;28:1,3;	6:19;33:1;37:17	worldwide (1)	11:5
31:9,23	43:16,17,19;44:3,7;	wilderness (2)	31:23	168 (1)
vapor (3)	45:2,4;46:5;47:19;	28:15;29:6	worth (1)	15:2
4:4,5,8	48:12,14,17,18,20;	wildlife (1)	24:4	170 (1)
variances (1)	49:6;50:1;54:19,25;	13:9	Wrangell (1)	7:21
25:14	55:1;56:16,18,23;	wildly (1)	15:3	18 (1)
variation (1)	57:12,13,13,15,16,17,	33:11	written (1)	38:19
6:13	18,18,19	William (4)	5:21	188-mile-long (1)
variations (1)	waterfall (3)	11:6,10;12:9,13	wrong (4)	19:2
7:4	8:21,22;9:2	willing (1)	26:14,14;34:13;	1964 (1)
various (1)	waters (3)	45:18	39:24	7:21
6:16	9:21;19:4;54:21	wind (6)	wwwnew (1)	1975 (1)
vary (1)	watershed (8)	46:12,13,19,24,24;	5:11	25:22
24:23	9:5,8;17:7;52:17,	47:19		1980s (1)
vegetation (1)	23;53:4,9,12	windmill (2)	\mathbf{Y}	56:9
8:8	watersheds (3)	46:22,25		1981 (1)
versus (2)	25:15;53:13,14	winds (3)	year (8)	30:9
25:17;42:20	waves (1)	46:14,17;47:4	12:15;22:2;25:13,	1982 (1)
viability (1)	7:23	winter (2)	13;38:6,7;44:16;	30:16
32:3	way (8)	46:4,8	48:15	1984 (2)
viable (4)	11:4;20:19;22:6;	wintertime (1)	years (32)	51:8,9
27:13,13,14;37:23	34:14,25;39:7;42:8;	46:6	6:15;8:2,5;9:4;	1985 (1)
video (1)	48:22	wise (1)	11:24;12:4,6,14;	30:17
6:11	web (1)	38:12	14:18,22,25;15:23;	1988 (1)
village (12)	52:23	wish (1)	16:10;21:3,10,12,20,	6:3
8:25;41:14,15;	website (4)	3:7	20;22:1;24:21;28:11;	1990s (1)
46:15,16,23;47:1,2;	5:11,12;52:18;53:1	within (4)	29:16;33:12,18,22;	56:10
50:12,13,19,22	weighs (1)	22:2;32:14;33:18;	34:19;36:5;37:10;	1992 (1)
villages (2)	38:21	54:15	38:19;48:15,16;49:2	5:10
42:5;44:10	wells (1)	without (7)	years' (1)	
visit (2)	56:16	22:1,10;26:19;	25:25	2
28:20,23	WELSH (2)	28:10;37:12,14;40:4		
vital (1)	37:7;38:3	witnessing (1)	${f Z}$	20 (5)
27:10	weren't (1)	6:16		9:4;14:18;30:20;
volcanic (1)	4:4	wonder (1)	zone (2)	42:17;43:11
43:7	west (4)	33:20	29:19;53:20	200 (4)
voting (1)	15:2;42:21,22;	words (4)		15:2,3;19:8;22:3
10:7	55:19	26:13;51:22;52:12;	1	2004 (1)
	western (1)	55:5		19:13
${f W}$	6:5	work (9)	1,000 (2)	2005 (1)
	wetland (1)	8:15;9:15;10:14;	44:20,21	51:9
	43:19	13:7,11;22:3;30:9;	1,200 (1)	2008 (1)
waiting (2)	wetlands (1)	13.7,11,22.3,30.7,	1,200 (1)	2000 (1)

<u> </u>			April 19, 2018
200 plug (1)	8 (1)		
200-plus (1)	5:20		
27:17 2010 (2)	80 (1)		
50:19;55:14	19:7		
2013 (2)	80-foot (1)		
51:9,17	8:21		
230-megawatt (1)	80s (1)		
19:6	8:19		
25 (1)	0.17	-	
14:22	9		
27th (1)			
7:21	9:00 (1)		
	57:23		
3	900 (1)		
	3:11		
3.8 (1)			
54:18			
30 (2)			
8:5;24:21 301-4566 (1)			
50:-4500 (1) 50:6			
38.05.142 (1)			
52:4			
393 (1)			
51:8			
-	-		
4			
	-		
4.5-mile (1)			
19:3			
404c (6)			
52:20;53:7,8;54:2,			
16;55:13			
5			
5- (1)			
33:11			
50 (3)			
11:24;12:6;40:3			
545.416 (1)			
5:10			
55.040c (1)			
51:13			
58 (1)			
57:10			
6			
	_		
69 (1)			
11:2			
7			
	-		
70 (2)			
49:2,3			
70s (3)			
11:5,6;15:7			
76 (1) 54:19			
J4.17	_		
8			
	-		