

GREATER MOOSES TOOTH UNIT 1  
SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT  
PUBLIC PARTICIPATION/ ANILCA §810 Hearing  
Barrow, Alaska  
March 12, 2014

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**ATTENDEES**

Billy Adams, NSB  
John Adams, NSB Planning  
Bart Ahsogeak, NSB Planning  
Rosemary Ahtunangaruak  
Harry Baij, USACE  
John Boyle, NSB  
Thomas Brower, III, NSB  
Ralph Burke, NSB Planning  
Geoff Carroll, Alaska Department Fish & Game  
Erin Donmoyer  
Jon Dunham, Umiaq  
Matt Dunn, NSB Planning  
Stacey Fritz, BLM Subsistence Specialist  
John Hopson, Jr., ASRC  
Teresa Imm, ASRC  
Edward Itta  
Bernice Kaigelak, Kuukpik  
Nicole Kanayurak (sp)  
Lon Kelly, BLM Authorized Officer  
Ryan Klimstra  
Roy M. Nageak, BLM Barrow Office  
Forrest Olemann  
George Olemann  
Mary Olemann

Thomas Olemann, NVB  
Fred Parady, NSB  
Lisa Pekich, CPAI  
Laura Perry, CPAI  
Bridget Psarianos, GMT1 Planner  
Barrett Ristroph, The Wilderness Society  
Bob Shears, NSB  
Miranda Studstill, Accu-Type Depositions  
Kathy Unidentified, NSB  
Unidentified Speaker  
Jenna Wallis, SLR  
Waska Williams, Jr., NSB Planning  
Emily I. Wilson, Kuukpik Corporation  
Dawn Winalski, NSB Law  
Dave Yokel, BLM Wildlife Biologist, Fairbanks

## **CALL TO ORDER**

The meeting was called to order at 6:08 p.m.

MR. KELLY: Thanks a lot for coming to our public meeting and Alaska Native Claims Settlement Act -- no, wait a minute, Alaska National Interest Lands Conservation Act, Section 810 Subsistence hearing. I'll just say that we're glad to have you here -- what...

UNIDENTIFIED SPEAKER: Is that (indiscernible)?

MR. KELLY: It's high-tech here in action.

UNIDENTIFIED SPEAKER: Penguins, we've got penguins.

MR. KELLY: Yeah (affirmative), penguins and there is a polar bear in there, but there's also like Chinese tea fields and stuff. Thanks for coming. Thanks for having us to your village. We really appreciate you taking time out of your busy lives to come here and we'll start with an invocation, which Ben or when Roy gets out of his phone there, he can do.

MR. NAGEAK: Yeah (affirmative). Everybody turn their cell phones off.

## **INVOCATION**

MR. NAGEAK: Ever since I was young, we always had the tradition of elders saying prayers and it always showed how close we are to our land, the seas, any of our special places and when we get together at times like these, we always ask for the protection of our people, our land that we depend on, the ocean, and meetings like these are special because we want to do it right, amen. (Indiscernible - speaking Native language) Jesus Christ (indiscernible - speaking Native language) in Jesus' name, amen.

## **INTRODUCTIONS/ ROLL CALL**

MR. KELLY: Again, I'm really serious about thanking you for coming. Public comment is really important. We know that you all have things to do in an evening and thanks again. So we have exits at three corners of the -- or two walls, the back corner of the building or the room. These exits take you directly out and almost straight out. The bathroom is outside and to the right, both the men's and the ladies'.

My name is Lon Kelly. I'm the Field Manager for the National Petroleum Reserve in Alaska, actually the Arctic field office of BLM and so I make, with our team, I sign my name on most of the actual authorizations that allow people to use the land of the National Petroleum Reserve in Alaska for commercial purposes.

In this case, it's likely that the decisions will be made at quite a higher level than me, but still, we're the people out here gathering the information and it's our responsibility to hear what people say and convey it up the line to the decision-makers and I think that we will have quite a bit of say in the drafting of the document and the contents of the document that we're working on, which is an environmental impact statement to describe

the impacts of a proposal by ConocoPhillips to build a production pad that would support 30 wells, 16 of which, I think would -- 32 wells, 16 of which I think would be production wells that actually produce oil that would be conveyed by pipelines from a location about 12 miles west of Nuiqsut to the Alpine processing facility and on out to the Trans-Alaska Pipeline System.

It's a pretty big deal for us. It's the first -- it would be the first production from leases on federal land in an area.

MR. DUNN: Excuse me, what's your name (indiscernible - too far from microphone)?

MR. KELLY: Lon.

MR. DUNN: Lon, can you use one of those mics for those of us that are hard of hearing?

UNIDENTIFIED SPEAKER: They're not attached to the PA system.

MR. KELLY: I think it is. Is that better?

MR. DUNN: And there's -- that other mic should, if it's working, it

will come out (indiscernible - too far from microphone).

UNIDENTIFIED SPEAKER: I hear it. It's on all right.

MR. KELLY: One...

MR. DUNN: There you go, thank you.

UNIDENTIFIED SPEAKER: Yeah (affirmative).

MR. KELLY: Okay, so I'll -- we'll introduce our staff and if people want -- there's a small enough number of people here that we'll just go and introduce the audience and then we'll have a little presentation on the document as it stands now, where we are in the process and then we'll have -- take public comments.

We're actually going to run the microphone and conduct a hearing throughout the presentation on the document so that if you make a comment or ask a question, that will be on the record and we'll consider that part of the public comment that we'll incorporate in the final environmental impact statement. So I've introduced myself.

*Participants introduced themselves and stated their affiliation, if any.*

**PUBLIC PARTICIPATION / ANILCA 810 Hearing**

MR. KELLY: So now, we'll open the formal subsistence hearing.

MS. WALLIS: I'd now like to open this BLM public meeting and ANILCA Section 810 hearing. This meeting is to support a supplemental environmental impact statement for ConocoPhillips proposed Greater Mooses Tooth 1 Project in the NPRA.

You will have the opportunity to ask questions and provide public comment. If you wish to speak, please get the microphone. All of your comments will be recorded by Miranda here. The entire meeting will also be recorded and for the record.

UNIDENTIFIED SPEAKER: Lon, please (indiscernible - too far from microphone) to state their name for the record.

MR. KELLY: I know most people do this as a matter of course, but if you could just say your name for the record if you're making a comment or asking a question, so that the Court Reporter can keep track of that, that would be great.

So we'll start off with the presentation kind of describing the action,

what the alternatives are, how it fits in with the Environmental Policy Act and Bridget Psarianos is going to do that.

MS. PSARIANOS: I'll use this one. Hi, everyone, my name is Bridget and again, I'm the Project Manager for BLM. So my job is to oversee the preparation of this document, answer any questions that people in the public might have and coordinate with all of our cooperating agencies while we go through the NEPA process.

Here's a little outline of the presentation. I'll tell you a little bit about the proposed project, briefly cover what the National Environmental Policy Act process is and what that requires of us, talk about the alternatives to the proposed project, go over kind of what's in the document.

Dave Yokel will give us a summary of the caribou sections and we'll talk about how best to give public comment on this EIS and Stacey Fritz will discuss subsistence issues and then at the end, if you have any formal public comments that you'd like to read out loud, those will all be captured on record. As I'm talking, if you have questions, please just stop me and ask.

So just to give you an idea, as Lon said, this EIS or this environmental impact statement is evaluating a proposal by ConocoPhillips to build an oil development pad in the National Petroleum Reserve in Alaska.

The purple spot on the map labeled GMT1, as you can see, is very close to the village of Nuiqsut. It's about 12 miles from Nuiqsut and it's also about 145 miles from Barrow. This map shows you the project vicinity. The proposed project would develop oil and gas resources at the Greater Mooses Tooth 1 pad and it would carry any sales quality crude that's produced through the pipeline at Kuparuk and then eventually tie into the Trans-Alaska Pipeline at Prudhoe Bay and Deadhorse.

The project's generally called GMT1, which is Greater Mooses Tooth 1, and what we're going to talk about today are the preferred -- the preliminary findings from the draft and seek public input.

A little overview of the NEPA process, I realize a lot of you here probably deal with NEPA a lot for work, so I'll keep this brief. NEPA applies to most projects with federal involvement like funding or permits

that affect the environment and the people that live in it and it requires us as decision-makers in the federal government to analyze the impacts of the proposed action and identify reasonable alternatives to the action and it requires us to make an informed decision and it also requires us to get public information and seek public involvement.

So this current project was analyzed in 2004, and we did have a lot of questions about that during the open house. So back in 2004, BLM completed an environmental impact statement that was about three volumes long that analyzed, not only this proposed pad, but the entire Alpine field and then more recently, we were in Barrow for BLM's integrated activity plan for the entire National Petroleum Reserve in Alaska and that was more of kind of master development, master leasing plan and so this draft document that we're here to talk about today incorporates information from the 2004 document and the more recent 2012 document, and the reason BLM chose to prepare a supplemental environmental impact statement was to evaluate new circumstances that have arisen since this project was analyzed in 2004, and we wanted to address some of the minor changes to

the project that have arisen since 2004.

There's a shorter road and the pad has been moved about three miles from where it was originally proposed and we also wanted to provide an opportunity for public input since this would be the first oil development on federal lands within the NPRA. So we realize there's a lot of public interest in this project.

As I might have mentioned earlier, we have a lot of cooperating agencies in this project, which has been great. It's been really helpful. Hank Baij is here from the Army Corps of Engineers. They're a cooperating agency and they'll be issuing a 404 permit for fill of wetlands that would be required for this project.

The Environmental Protection Agency is also a cooperating agency, so is Fish and Wildlife Service, the Bureau of Ocean Energy Management, the state of Alaska, Native Village of Nuiqsut and the North Slope Borough.

As I said earlier, the production pad is located on BLM-managed surface within the NPRA. It's located very close to Kuukpik-owned

surface and ASRC subsurface. This map shows some of the lease blocks and the unit, the field unit and it kind of gives you a better idea of where the production would take place.

This is the existing Alpine field and here is the Native Village of Nuiqsut and a lot of the subsurface minerals are located on ASRC land. ConocoPhillips is going to directionally drill from that pad and reach a lot of ASRC minerals.

MR. NAGEAK: Kuukpik lands.

MS. PSARIANOS: Sorry, Kuukpik lands.

MR. NAGEAK: ASRC subsurface.

MS. PSARIANOS: ASRC subsurface, thank you, Roy, and again, if you guys have any questions or comments as I talk, please feel free to stop me. So I thought first I'd talk about what the no action alternative is. The National Environmental Policy Act requires that BLM look at what would happen if we took no action, which in this case would be denying ConocoPhillips' allocation for a permit to drill and their application for a right-of-way.

So this map shows the existing Alpine field. CD1 is the Alpine central processing facility and this also shows the existing ASRC mine site and the Native Village of Nuiqsut. These dotted lines are the road and pipeline to CD5, which is currently permitted under construction and it also shows a dotted line, which is the proposed and I think it has most, but not all permits, for the Nuiqsut Spur Road, which connects the native -- or the Village of Nuiqsut to the Alpine field.

This slide shows ConocoPhillips' proposed action. Conoco is proposing to put an 11.8-acre drill pad right here at the Greater Mooses Tooth 1 production pad. They are proposing a 7.8-mile long gravel road, which is shown at this black and white line.

We also have maps that are hand-out size at the door in case anybody wants to hold a map and look at it, and this yellow road shows or this yellow line shows the pipeline, which would, for the most part, parallel the road.

The pipeline would tie in at CD5. The three-phase oil and gas would be brought to CD5 and then eventually, be brought via CD5 to the Alpine

processing facility and that's where any sales quality crude oil would eventually be taken to the Trans-Alaska Pipeline.

Also, these blue lines show setbacks that BLM has established in some of its planning documents like the IAP, the integrated activity plan, that I mentioned earlier. That requires a three-mile setback from Fish Creek, which is an important waterway for subsistence use.

This other blue line shows the Ublutuoch River setback. So if BLM approves Conoco's project as proposed, then Conoco would be seeking a waiver or an exception from this Fish Creek setback.

MR. BROWER, III: Are you going to talk about (indiscernible - too far from microphone)?

MS. PSARIANOS: Thank you.

MS. STUDSTILL: Could you state your name for the record, please?

MR. BROWER, III: Thomas Brower, III.

MS. STUDSTILL: Thank you.

MS. PSARIANOS: Thank you. So this map also shows the

proposed Clover mine site that is also located on BLM surface and Conoco has proposed to take gravel from the Clover site via ice road to use in building the Greater Mooses Tooth 1 pad and the road.

This map also shows the existing ASRC mine site and our document analyzed Conoco taking gravel from both, although we expect Conoco will take the majority of the gravel from the Clover site because it's not really clear that there would be a sufficient amount of gravel for both CD5 and the Nuiqsut Spur Road and then GMT1.

So if there are no questions about the proposed action, in developing the alternatives for this EIS, BLM looked back to the 2004 document, and we did this along with our cooperating agencies to brainstorm what viable alternatives to the proposed action would be.

So the second alternative, Alternative B tries to avoid that Fish Creek setback, which I was referencing earlier that BLM established in some of its earlier planning documents as an important waterway for subsistence.

So this alternative has the drill site in the same location and it would do essentially the same thing, as far as tying in at CD5 and eventually to

Alpine, but the road and pipeline would take a more southern route and it would have a longer road. It would be 8.6 miles, instead of 7.8 miles under the proposed action.

There would be one fewer bridge and one fewer culvert under this alternative. Although, this route does go through some thaw basin, so it could be technically challenging.

So if there are no questions on that, we also analyzed an alternative that used the village of Nuiqsut as an industrial hub. This was an alternative in the 2004 environmental impact statement. We carried it forward specifically at the request of the Native Village of Nuiqsut and a couple of our other cooperating agencies.

Nuiqsut was interested in seeing what some of the environmental benefits would be if their village was used as the hub. So this alternative analyzes the industrialization of the Nuiqsut Spur Road. That road would get widened significantly.

The airport at Nuiqsut would also have to be expanded to make a longer airstrip. That would also require an additional bridge to be built

over a waterway. This alternative, actually, is the most gravel fill of any alternative and we've also heard pretty strongly from Kuukpik Corporation that they would not authorize this widening of the proposed spur road.

I'm sorry, I should have pointed this out earlier, this map shows some of the land status and this road, the Nuiqsut Spur Road, is on Kuukpik land and Kuukpik's the one that's building this road.

So it doesn't seem that BLM can really select this as its preferred alternative due to the opposition of the land owner and so we probably couldn't make this alternative happen, but we also think that it would be beneficial to analyze increased impacts at the village of Nuiqsut, which this alternative also does.

MR. GEORGE OLEMANN: George Olemann, in regards to Alternative C, that if Nuiqsut is a hub, it would be like the -- I mean, the industrialized -- industrializing more as like a hub for the expansion or about -- can you explain that?

MS. PSARIANOS: Right, the idea was that the airport would be expanded and the Nuiqsut Spur Road would be expanded. The alternative

kind of tries to analyze what the economic impacts would be to Nuiqsut.

You know, I think the village thought that if their airport was used, there'd be a lot more money coming in and so they wanted us to analyze that, but this alternative doesn't include things like building additional new infrastructure, like hotels or anything like that.

We also -- Conoco has said that they would still continue to use the airport at Alpine, since they do have an airport there and an airstrip and so it's not really clear that this would really be a big, a much bigger economic benefit to Nuiqsut than one of the other proposed action alternatives.

If there's no other questions on that, I'll move onto Alternative D. Alternative D also tiers to an alternative that was analyzed in 2004, which sought to not use roads between the satellite pads and so under this alternative, there would be no road between CD5 and GMT1. So this yellow line would just be the pipeline.

There would also have to be an airstrip at GMT1 and so all construction -- there would be an ice road constructed every winter. The pad would be 15-point-I-think-three acres, as opposed to 11.8 acres. So it

would be a slightly larger drill pad to accommodate the additional infrastructure that they would need.

There would have to be a camp out at GMT1 and some additional facilities, like for emergency response and water processing and things like that. So you'd have a larger pad and increased air traffic under this alternative, because the ice roads would only be available in the winter.

MR. BROWER, III: On this alternative, was there any -- any report done on the increased air activity on this proposed runway in this area or is this just the other (indiscernible - too far from microphone) on that or (indiscernible - too far from microphone) resources (indiscernible - too far from microphone) migratory birds and all that (indiscernible - too far from microphone) resources, like caribou (indiscernible - too far from microphone)?

MS. PSARIANOS: Yes, we -- we received flight estimates from ConocoPhillips based a lot in part, I think, on what kind of flights they bring into the current Alpine airstrip and also CD3, which is up here, is currently roadless, although that's only operational seasonally and so the

draft EIS in Chapter Two discusses the increased flights that would be needed under Alternative D and then the impact section does cover the increased impacts from more air traffic and as Dave Yokel will cover later, Alternative D, of all the alternatives, does have the greatest impact to caribou and it looks like it would have the greatest impacts on subsistence and -- just due to the, you know, we hear a lot from traditional knowledge about the impacts of air traffic on wildlife and so that's in there.

If you don't have any more questions about that -- so this slide is also in a handout that's available at the front of the room that I hope people picked up. It -- I think it makes it a little bit easier to look at, because it has all of the alternatives just on one slide and so here's the existing Alpine field and then here's the path of the proposed project and the path for Alternative B and then the pipeline only route and the industrialization of the Nuiqsut Spur Road and the airport that would be built under Alternative D.

This slide sort of compares the major components of all of the alternatives. The drill pad would be the same size acreage-wise under all of

the alternatives, except for Alternative D, which as I said before, would need to be a little bit bigger to accommodate the increased amount of infrastructure that would be needed on the pad, because there would be no road.

The road length under Alternatives A and C, between -- just between CD5 and GMT1 would be 7.8 miles. Under Alternative B, it would 8.6 miles. Under Alternative D, there would be no road, and of all the alternatives, Alternative C would have the largest amount of gravel fill. That's due to the industrialization of the Nuiqsut Spur Road, the widening of that road and the increased size of the Nuiqsut airport and then the second largest gravel footprint would be from Alternative D, due to the larger pad and additional airstrip that would need to be built out at GMT1.

There's also a table in here that covers a lot of -- we have a lot of tables in the draft that cover a lot more additional details, but these seem to be the ones that people are most interested in.

As I said before, we're still in the middle of the NEPA process for this. We released this draft supplemental EIS on February 1st and we're

now in a 60-day public comment period. We'll be accepting public comments on the draft through April 22nd.

We have a lot more public meetings to go and all substantive comments that we receive during these meetings and through email, mail, Fax, will all be addressed in the final EIS and we don't have a preferred alternative in the draft SEIS. There will be a preferred alternative in the final.

What often happens is that we don't have a preferred alternative that's exactly what's in one of the alternatives now. A lot of times, we'll pick parts from each alternative and kind of create a preferred alternative and we'll do that based heavily on what we hear in public comments and we'll do that in consultation with our cooperating agencies.

BLM will be releasing a final SEIS for public review, hopefully sometime in the late summer and then they'll be at least a 30-day period for public review and then BLM will make a decision on how -- or on whether Conoco can build this project, how Conoco's going to do it, you know, which alternative and with what additional mitigation measures to be

incorporated into it.

And one thing we've been trying to do in these meetings is kind of talk about a good way to approach this document. It's pretty lengthy. I think when we started out, we thought we could make it about 150 pages, because it's just a supplemental EIS, but it's obviously a little denser than 150 pages now, but there's a table in here, Table 4.1-1, that lays out a lot of the kind of major direct impacts from each alternative and the table right after it, 4.1-2, summarized the impacts of each alternative.

Basically, every environmental impact statement is structured the same way. Chapter One is kind of an introduction. It tells you about BLM and the cooperating agencies. Chapter Two goes over the alternatives. So it's a more lengthy discussion of what I just went over. Chapter Three is the affected environment, which is what BLM thinks we know about the resources on the ground, and Chapter Four are the impacts of the proposed action, as well as the impacts of all of the alternatives.

Chapter Four also contains cumulative effects, so it's impacts from this project, as well as other reasonably foreseeable development in the

area, such as a road to Umiat, future development west of the Greater Mooses Tooth Unit, a future pipeline, cumulative impacts from climate change, things like that, and we also have -- we discuss mitigation measures.

BLM already has a lot of mitigation measures in place from the previous 2004 document, as well as our earlier land use plans and those are all built into Conoco's project design and then we've also been hearing some new mitigation measures. We've heard them in scoping comments and from folks in Nuiqsut. So there's new mitigation measures in here, too, that would be project specific.

So when people are reviewing the document, we're hoping that they can pay close attention to the impacts analysis and let us know if we're -- we've missed anything or mischaracterized anything, and you know, we're always looking for ideas for mitigation.

So if you don't have any questions, I'm going to turn it over to Dave Yokel, who's going to talk a little bit about just one section of the document, but that's the analysis of caribou.

MR. GEORGE OLEMANN: George Olemann, and in regards to what you just stated that this is -- that Lon stated, this is the beginning of the first development in NPRA and then will this be the standard or I know, as you progress, it's going to change, but it seems like when things are done one way, then they follow suit, follow it through with the expectation that if they are following the oil, whatever oil, for the route that (indiscernible - too far from microphone) they always talk about, I'm sure they're still following that, so will this be the standard or within each -- I'm sure there'll be times when things will change, but -- and with that, if that's -- with the NPRA is the -- I guess the BLM, the state is involved in all aspects of that or what?

MS. PSARIANOS: Well, we've -- we've definitely been hearing a lot about how important this is because it is the first development in NPRA and we're really lucky that we did just do this big kind of master leasing plan and that document really looked at, you know, areas that should be leased, areas that shouldn't be leased and we already have a lot of mitigation measures in place that kind of consider this sort of full-field, you

know, what would oil development look like going westward.

So I think this document does do a good job of trying to set a standard and that's another reason why we're looking so closely at project-specific mitigation measures because there's already a lot of development at Alpine, but none of it has been on BLM surface, at this point, and so I guess the answer to your question would be sort of.

I mean, because like you said, we're not really sure what development's going to look like the further west we move and another thing that BLM has been working on is something called a scenario plan to kind of look at what development across the entire NPRA would look like to kind of get a big picture idea, but we are being really careful in how we think about this because we want to make sure that we're, you know, setting some good standards to have industry live up to as development continues to move west.

MR. YOKEL: Yeah (affirmative), well, that's Miranda's mic. It' doesn't help the audience hear. The audience...

MS. PSARIANOS: I know, but I'm afraid if we use two mics

together, this one is for the Court Reporter and I'm afraid that we'll have disturbance and interference and I'll have the awful squeaking noise, but do you want to try it or we can just have people speak up, but that's so that the Recorder can get your comments.

MR. YOKEL: Right.

MR. BROWER, III: Thomas Brower for the record. I'm just kind of curious if there a reason why you didn't pull up on your presentation of the previous 2004 (indiscernible - too far from microphone) that was done for Conoco and on the map where -- for the lease location on the preferred (indiscernible - too far from microphone) location of GMT1 where it was initially located at and why was it -- the driving factor to relocate GMT1 into federal lands away from where it was originally -- where the decision was made in 2004?

MS. PSARIANOS: We don't have a map in the presentation. I do have a map that I should have brought with me that shows, you know, where CD6 was authorized and where GMT1 is authorized now. A big reason, from my understanding, I wasn't here in 2004, but I think a big

reason for the relocation is that the Nigliq Channel bridge was moved, and you know, I hope Conoco can correct me if I'm wrong, the Nigliq Channel bridge was relocated as well and so was the CD5 site and so that was part of it and then I think also they moved the pad out of the Fish Creek setback. It was originally in that setback area and so they moved it out, I think, as a way to be less environmentally impactful in the 10 years that has elapsed since then, but I think Lisa has corrections.

MS. PEKICH: I don't think it reaches all the way to there, so -- Lisa Pekich for the record, the primary reason really was the Fish Creek buffer and we know that was an important (indiscernible - too far from microphone) established in the original leasing and we heard that and we've made attempts to move it out and it really wasn't due to the first location. It was due to the Fish Creek Buffer.

MS. PSARIANOS: Okay.

MR. GEORGE OLEMANN: George Olemann and I thank you for that and I was hoping I would be able to stay here longer, but anyway, in regards to your -- the whole span of NPRA and I think when we met in

Fairbanks and discussed NPRA, I'll just mention that Kuupik land has trust and responsibility for the tribes and the subsistence users, but also ask about or mention about what we've done with outlying villages with sensitive areas, subsistence areas that we've started with ICAS and they do it -- if you're going to look at the whole scope or plan to -- then we should - - ICAS should be part of that, because we need to look at and consider the villages that -- so with that, I thank you and I think we'll meet again later with Lon to schedule that (indiscernible - too far from microphone) and go further with that. Thank you.

MS. PSARIANOS: Thanks. Okay, thanks and with that, I'll turn it over to Dave to talk about caribou.

MR. YOKEL: Good evening. So this environmental impact statement analyzes the effects of this proposed action and the alternatives on many different resources and human values and we're using caribou and subsistence activities as two of those to give you an example of how those impacts are assessed in this document.

So this slide shows the definitions that were used in assessing

impacts for terrestrial mammals and it breaks the impacts into four different categories, the intensity of the impact, the duration, how long it lasts, the context compared to the resource and its geographic extent, how broad of an area it affects and for each of these four classes, there's three levels of impact and then there's definitions so that you know when you assess the impact, you say, "Okay, it falls into this level."

So for example, under intensity, it was decided that the intensity would be low if it affects 5% or less of the habitat for the mammals or 5% or less of the population of the animals and medium, if it's 5% to 25%, and high...

UNIDENTIFIED SPEAKER: Can I ask you to tone it up a bit?  
There's some people in here who are hard of hearing.

MR. YOKEL: Is that better?

UNIDENTIFIED SPEAKER: No, but speak up, don't be scared of the mic.

MR. YOKEL: Well, if yell in the mic, I'm afraid that I'll get feedback, but...

UNIDENTIFIED SPEAKER: I don't think it's even working.

UNIDENTIFIED SPEAKER: (Indiscernible - too far from microphone).

UNIDENTIFIED SPEAKER: Some of these guys are hard of hearing, that's why.

MR. YOKEL: Okay, I understand. I am too.

MR. KELLY: It might help if you turn it up.

MR. YOKEL: Okay, Lon's going to go try to turn up the volume on the PA system.

UNIDENTIFIED SPEAKER: That's a little better.

MR. YOKEL: The problem is when I had my mouth around the mic, I can't turn around to put my pointer on the slides, so then I'll just appoint somebody else, but I'll try my best.

Okay, in terms of duration, the three levels are temporary, interim, and long-term. Temporary is defined to be less than two breeding seasons, whereas interim is two -- or two or longer, but less than five, and five or more would be long-term.

In context, common context in this case means the affected resource is ordinary in the area, such as caribou are pretty common out there, rare -- they're not rare, or the habitat we're talking about is pretty common and ordinary. It's better? Thank you, Lon.

Important, if the affected resource is protected by legislation or plays an important role in the ecosystem or unique, if the resource is rare or depleted and then in terms of geographic extent, it's considered...

UNIDENTIFIED SPEAKER: (Indiscernible - too far from microphone)...

MR. YOKEL: Hopefully, that will go away. It's considered local if the habitat loss is contained immediately underneath the gravel pad or within 300 feet of it or if the effect on the animals is within that same area. Regional, if it's greater than 300 feet, but within the range-wide area of the caribou herds, in this case, and the word statewide here is defined as being Arctic coastal plain. So that's the definitions used in describing in relative terms the impacts here.

Now this slide shows the result of that when looking at the impacts

for terrestrial mammals and I have highlighted in yellow here the rows of this table that refer to caribou. The thing that you see in this upper table is that Alternatives A, B, and C all have the same, according to this -- these criteria for assessing impacts, all three of these alternatives have the same level of impact on caribou and caribou habitat.

So the intensity is low, whether we're talking about habitat loss or alteration or disturbance of caribou. The duration is long-term because the infrastructure's going to be on the ground for a long time. The context is common because caribou and their habitat are common in the area and the geographic extent is local. The effects of this development are going to remain local. Yeah (affirmative), Ryan.

MR. KLIMSTRA: Ryan Klimstra, Barrow resident. What are you defining -- like how are you defining habitat in this case? Are you just saying like any -- any tundra or is there specific to any of these lands in defining habitat?

MR. YOKEL: Well, in this table, which takes a very broad look at it, more of a lay person's look, habitat is the part of the land out there that

the caribou use, not just what they walk over in getting from area A that they use or area B, but what's really important to the caribou. Does that -- you don't look satisfied, so what did you...

MR. KLIMSTRA: No, I think -- I think that -- yeah (affirmative), I was just thinking, you know, I mean habitat, maybe it's not the same quality throughout, but it's still considered habitat. I just didn't know if there -- there was like...

MR. YOKEL: No, and this did not attempt to assess habitat differences, just what would be the level of impact on that "habitat."

MR. KLIMSTRA: Okay, thank you.

MR. YOKEL: Okay, the lower table here is for Alternative D and when we look at habitat loss and alteration, again it shows the same level of impact as Alternatives A, B, and C, low, long-term, common and local, and it's also the same for calving caribou and that's because caribou don't calve within a short distance of this area. It's 25 miles -- most of the -- the core calving area for the Teshekpuk Herd is 25 or more miles away and it's even further for the Central Arctic Herd.

The one thing that's different for caribou is that in Alternative D, not -- the disturbance to non-calving caribou is considered to be medium in intensity instead of low and the -- and that's on Alternative D because that's the one that does not have a road. It has a lot more aircraft flying around because there will be -- there'll have to get a lot of their people and materials to the drill site by air rather than by road and also, the geographic extent is regional rather than local because the noise impacts of the aircraft and the planes flying around is greater in geographic extent. Are there any questions on that?

Okay, one of the kinds of studies that ConocoPhillips did in preparing for this was to do aerial surveys of caribou density in the area and this map shows their survey areas and I want to concentrate on the one that's in the NPRA here, this block, and they changed the size and shape of their block twice during this long survey period.

They started out in 2001, just doing this cross-hatched area. In 2002, they added this area here and in 2005, they added this, and I want to show you this block because the next slide I'm going to show you shows some

data and I want you to understand where those data came from.

What this shows are the density of the caribou seen within that block and it shows it in terms of caribou per kilometer squared. For each of the different years, there's a different symbol to show the value of the data from that time and it shows it over all those years and over different times of the year.

In general, what you can see from this graph is that for almost every survey, the density of caribou was less than two caribou per kilometer squared, which is about something like five caribou per square mile, if that makes more sense to you in terms of area, and in fact, most of those surveys showed results of less than one caribou per kilometer squared.

So in general, in this survey block, caribou density is usually fairly low and on top of that, this, as the next slide will show you, this particular development is in an area of pretty much the lowest caribou density in that entire block, at least during most seasons.

So this is a pretty complex picture or a group of 16 pictures, and what we have here are data from satellite-collared caribou and there's two

sets of eight, because there's two different collar technologies used here and they didn't want to mix them up (indiscernible).

So the left half are the older satellite collars and it had more data from those for longer periods of time and for more caribou. The right half are GPS collars. They're nicer, a little more expensive and started using them later, so there's less data. The green or darker colored, I don't know what color you see it as, are data for collared caribou that we think to be Teshekpuk animals and the red are data from collars from animals that we believe to be Central Arctic Herd animals.

Now this development, proposed development is right here. It's in the same place on each picture and what you can see from -- actually the road depicted here is a little bit longer, it goes to what may be proposed as the GM2 development in the future, but what you can see is that those two developments or proposed developments or visions of developments are in an area of the lowest caribou density in most of these maps by chance, okay.

We didn't put the development there because of the caribou density.

We put it there because of where the oil is. In this one case, that just happens to be fortuitously in an area of low caribou density. Any questions on this, because that's all I have. Thank you. Yes.

MS. KAIGELAK: On your earlier statement about the impacts, I guess you meant by habitat (indiscernible - too far from microphone) for the caribou.

MS. STUDSTILL: Can you state your name for record?

MS. KAIGELAK: Bernice Kaigelak.

MS. STUDSTILL: Thank you.

MR. YOKEL: The assessment looked at impacts to caribou habitat, in terms of alteration or destruction of the habitat and it also looked at impacts directly to caribou through disturbance.

MS. KAIGELAK: Just from experience only, I think air traffic probably is more impacted the caribou more than anything, just from...

MR. YOKEL: Well...

MS. KAIGELAK: ...being in that area. So when you say there's no -  
- the impacts are the same, it...

MR. YOKEL: Actually, Bernice, what I said was that for the alternative that has greater air -- is there a way I can stop it from doing that, Lon?

MR. KELLY: I think it does that when you jiggle the table.

MR. YOKEL: Okay. I'll turn this mic toward -- okay. Here's the alternative where there's more aircraft and here's disturbance of caribou in this block and here's the only medium and regional levels of impacts in all of this. So this table agrees with you, Bernice.

MS. KAIGELAK: You said earlier -- you said they were all the same impact.

MR. YOKEL: What I meant to say, if I did not, is that Alternatives A, B, and C have all the same levels of impact on caribou and that Alternative D has the same levels of impact on caribou habitat and on calving caribou, because when caribou are calving, they're not close to this development. It's during the non-calving season that we see this difference.

MS. KAIGELAK: Thank you for the clarification.

MR. YOKEL: You're welcome.

MR. ADAMS: I have a question. John Adams for the record. On the caribou migration routes, will the alternative affect the migratory route?

MR. YOKEL: Nobody can hear you.

MS. WALLIS: The microphone for the Court Reporter is...

UNIDENTIFIED SPEAKER: (Indiscernible - speaking simultaneously) record.

UNIDENTIFIED SPEAKER: Does this one work?

UNIDENTIFIED SPEAKER: Turn it on.

UNIDENTIFIED SPEAKER: They may squeak, but...

UNIDENTIFIED SPEAKER: Well, hold the other one back.

UNIDENTIFIED SPEAKER: They shouldn't, actually.

UNIDENTIFIED SPEAKER: She'll hear it.

UNIDENTIFIED SPEAKER: She wasn't hearing it. That's the problem.

UNIDENTIFIED SPEAKER: We still need that one, okay. This is...

UNIDENTIFIED SPEAKER: Let's try this, I'll hold it.

MR. ADAMS: Will the alternatives affect the migratory route of the caribou herds for -- for instance, the Teshekpuk Herd or the Central Arctic Herd?

MR. YOKEL: One thing I forgot to mention is that the reason each of these is broken into eight maps, and you can't see it from that far back, but that's eight different seasons in a caribou's year and it's -- they're not in chronological order for a reason I don't understand, but this is winter here and then you go from there to the spring migration, from spring migration to calving, from there to post-calving, mosquito season, oestrid fly season, late summer and fall migration.

So here's the migratory period when you see that we have a lot of caribou going into this area from the Teshekpuk Herd. So if I understand your question, yes, during fall migration, there are caribou -- there's higher density of caribou in this area during two seasons, fall migration and oestrid fly season, which is usually late July, early August.

MR. ADAMS: And the alternative routes will go over the migratory routes of these herds?

MR. YOKEL: Yes, because the development is pretty tiny in the context of this map. So it's right in here and you can see that there are lots of caribou tracks in that same area.

MR. FORREST OLEMANN: Forrest Olemann for the record. I've listened to many of these types of presentations and the one thing that always comes to my mind is just when you think you have the science down, something different happens and so it always occurs to me that hunger knows no fear.

If the food is there, the animals are going to go where the food is at, unless it's altered by some heavy activity, and so you know, I go back to thinking that in my lifetime, you know, we've gone three generations reliant on motorized hunting activity and so the thing that -- when we talk about impacts to terrestrial animals, there never seems to be an attempt to correlate social impacts accordingly.

I think, you know, there are three villages that come to my mind that are heavily impacted and affected regardless of what these studies may show and so if this is an attempt to open the gateways to allow more

activity then the question that I'd like to know for future reference is what's the alternative for those that are reliant on the subsistence resource?

MR. YOKEL: Well, let me -- before we go the microphone situation straightened out, hopefully, I began by saying what I'm here to do is talk about how impacts to caribou were assessed and use that as one example of how this environmental impact statement works.

I also said that Stacey would talk about impacts to subsistence activities. So all of those different values that you're talking about are assessed in this document. The results, we hope, are close to reality. We're not saying there are no impacts to caribou or there are no impacts to subsistence users. We're trying to assess those impacts as close to what we can figure out they will be.

Now, what mitigations there will be for people who use caribou and may be affected by this resource are pretty much set up in how we try to lessen the impacts of the development on caribou with rules we put on the development and how we try to lessen the impacts to subsistence users with rules that we put on the development, but I don't want to try to mislead you

and say, "Don't worry, there will be no impact to subsistence users," but Stacey is going to cover that. So I don't want to step on her -- her share of the show here.

MR. BROWER, III: I'd like to (indiscernible - too far from microphone) presentation (indiscernible - too far from microphone) data collection here, it doesn't state the type of season it was, either it was wet, dry, light snow, heavy snow, (indiscernible - too far from microphone) every year where it's all different. That is where your data is lacking here, even though you made a good attempt to do it like (indiscernible - too far from microphone) 2005, probably the most heaviest snow season (indiscernible - too far from microphone) least amount of area where they hang around because they -- they migrated to where there was less snow where they can have access to the feeding (indiscernible - too far from microphone) and also there are some seasons where, in the last season, it could start freezing of the rain and there's a (indiscernible - too far from microphone) cover of ice where their feeding (indiscernible - too far from microphone). That's where this pattern here where your data is lacking, the

type of (indiscernible - too far from microphone), the type of season, this data that's collected (indiscernible - too far from microphone) super dry or it's super wet, was there hardly any snow, was it all iced up or ice melts, that's where the type (indiscernible - too far from microphone) you can acquire that data for a future presentation.

MR. YOKEL: Well, I certainly agree with you, Tom, that there's variability among years and that caribou behave differently among years due to many different factors. We do the best we can here by using all the data that we have and these dark green data here are the sum total of collared data we have for that kind of collar from 1990 to 2012. So that's 22 years' of data. So it represents a lot of diversity and what weather -- what Mother Nature does to the caribou over time, but I'd be the last person to say it shows everything.

For one thing, it only shows a very small part of the caribou range, because we're focused here on where that development is and it also shows a very small percentage of caribou. I mean, there's only a few hundred caribou represented in these figures because of -- we can only afford so

many collars and even if we could afford to collar every caribou, we don't want to cause that -- the biggest impact on the land and caribou would be us.

So we sample with the assumption, and I'm not saying it's correct, the assumption that the patterns we see are representative of what the herds do as a whole. I think it's your turn, Bridgett.

MS. PSARIANOS: Hello, and as I was saying earlier, we're here to collect public comments. This document is just a draft. So there's probably some things that we could explain better, information that might be missing, and so we're really hoping that the public comment period can help us flesh out anything that we might have missed and so the best kinds of public comments are the ones that identify new information that would affect our analysis in the document, identify anything that's inaccurate or any discrepancies, internally -- internal inconsistencies within the document or anything that's not accurate in the portrayal of resources or the status of the area that we're talking about.

Like I was saying, Chapter Three is the affected environment and so

that's what BLM -- that's what we think is happening on the ground based on our data, but people who live in the area probably have a much better idea than we do, and any comments that identify new impacts or ideas for new alternatives or especially potential mitigation measures are very helpful and we're also, as I said, we don't have a preferred alternative identified, so suggestions on what components of these alternatives would be good for the preferred alternative would be very helpful.

This slide goes over how to comment. On the front table there's a letter that is included on our CDs and in the draft called the "Dear Reader" letter and it has all this -- all this stuff written out, but you can comment by email, writing a letter. You can send me a Fax. You can also hand-write or hand-deliver comments to the BLM Public Information Center in Anchorage or at the one in Fairbanks, too.

You can also submit hand-written comment letters here at this meeting and speaking at this public meeting on the draft, as we said earlier, anything you say is captured and in the record and these are all formal public comments that we're taking right now. So if there's not questions

about how to comment, I'll turn it over to Stacey Fritz to talk about the subsistence analysis that's in the document.

UNIDENTIFIED SPEAKER: Don't bump the table.

MS. FRITZ: Don't bump the table, but talk to the microphone, okay. Okay, can you hear me okay? Can you hear me? So before I talk specifically about subsistence, I think it's worth explaining, a lot of people have had questions about how subsistence is analyzed and how it's separated out.

So I'll just briefly explain that as Dave and Lon and Bridgett explained, there are many different resources that are analyzed separately and there are four that I review that I think are very closely connected, so they look at the economic impact of this proposed development, so that's one section.

Now, obviously, that is heavily impacted by impacts to subsistence. We look at the sociocultural systems, that is very heavily impacted by subsistence. We look at subsistence and when we look at subsistence, that section tries to analyze without considering those other elements, simply

the impacts to subsistence, so that's user access, availability of resources, all kinds of different impacts specifically about subsistence.

There's also an environmental justice section, so that looks at whether the population that is being impacted is a minority or disenfranchised community, which is always the case on the North Slope where the communities are majority of Inupiaq, recognized minority tribe.

So in a way, it tries to simplify things by breaking them apart, however if you look at the document and read those sections, what the economic and sociocultural and environmental justice sections say is that subsistence is the most important aspect in sociocultural systems and so if subsistence is impacted, then sociocultural systems are impacted, economy is impacted and it's an environmental justice issue.

So I'm going to talk just about the subsistence sections and talk about what the analysis of that has been. Does that big picture make sense, and again, Chapter Three talks about what we know about all those things, including subsistence. Chapter Four tries to analyze what the impacts would be of the project and all the different alternatives.

So as most of you know better than I do, but I've certainly tried to listen to people, the -- well, I should say that the types of impacts to subsistence are generally the same for all of the alternatives, the types of impacts. Now, there's a varying degree of impacts among the alternatives, but they all have impacts, direct and indirect impacts to subsistence.

So the number one type of impact that we see to user access -- so when we talk subsistence hunters ability to get to the areas where they like to hunt. There is not usually, in this kind of scenario, a physical infrastructure blocking people, but the number one user access impact is avoidance and many people are familiar with that, that subsistence hunters tend to avoid areas of development.

So even though the actual footprint of the development is relatively small, we look at a larger area that's the user area that people would avoid, avoid hunting. So each individual hunter has different ideas about how close they want to be to development when they're hunting. Some people avoid it entirely. Some people don't mind at all, but we do consider that by and large, subsistence hunters tend to avoid development areas.

Then we look at the impacts to availability of resources. The number one impact that we see there is that there could be an effect on the caribou migrating through the area that would affect, not the population of caribou, but the availability of caribou in the area when people are trying to hunt them.

These impacts, if people have fewer subsistence hunting opportunities has, as you know, many wider-ranging impacts. If people can't use the same area where they've hunted for generations, community participation and subsistence is lessened. The transfer of knowledge about subsistence hunting, especially in a particular area that somebody knows well, the transfer of knowledge about that are to their children or grandchildren is diminished.

People have to travel farther to successfully hunt caribou. So the trips take longer. They are more expensive. There is a greater risk of accident. It's overall more effort and costlier to travel further and especially if people can't go where they used to go, they have to go to new areas that they are not familiar with and there may be then greater

competition in those areas that are still open to hunters.

Overall of the alternative, so A and B, including the road and pipeline directly from CD5 to GMT1, have the fewest number of impacts, but I should say that in this entire EIS, subsistence is the one resource that has been identified as having -- experiencing major impacts. So major impacts to subsistence, as I said, then results in a major impact to sociocultural systems and environmental justice.

A and B, among those alternatives, do have the fewest impacts in our analysis, mainly because there would be less air traffic in those alternatives and disturbance from aircraft is the number one impact to subsistence that the BLM hears about. We hear about it at all the public meetings that we have for these National Environmental Policy processes and at every NPRA Subsistence Advisory Panel meeting. We talk about aircraft all the time and the impacts from aircraft.

So that is the number one impact and there would likely be a lot less air traffic in A and B, because there would be a road, and I should also say that this particular development project -- so we look at avoidance as the

number one impact for user access, but in this project under A, B, and C, there would be a road that hunters would be able to use to access that subsistence hunting area and so at the same time that people tend to avoid development, this project would allow facilitative access to that use area.

We call that a countervailing impact. So we'd like to think that easier access has a countervailing effect on the avoidance. Some people will avoid. Some people will have easier access. That may create more traffic and competition in that area. We try to analyze what those impacts will be. It's -- that's a little bit of an unknown. Some people will prefer to use the road. It will make getting there easier.

Alternative C, also known as the Nuiqsut hub alternative, would most likely have slightly higher impacts because there would be more air traffic and more industrial road traffic very close to Nuiqsut and so we think that the effects of that would be to make caribou, for example, avoid the area around Nuiqsut and make it harder for people to catch caribou near town.

Alternative D, we estimate that Alternative D will have greater

impacts than A, B, or C, and that is mainly because of air traffic and the increased amount of air traffic that we would see if there were no road and there was an airstrip at GMT1. So that's the big picture. Does that make sense to everybody? Do you have any questions.

Okay, I -- actually, I should also explain that, just quickly, so we do that analysis in an environmental impact statement. We look at A, B, C, and D, and then we look at the cumulative analysis. So in A, B, C, and D we're looking at what could be the direct and indirect impacts of these alternatives.

Then we also have to do a cumulative analysis and that has to consider what the impacts are to subsistence from all of the development and other projects that have occurred in the past, combined with this project and all of the reasonably foreseeable projects that could occur in the future and so while A, B, C, and D would have -- we estimate that they will have a major impact on subsistence for the Nuiqsut subsistence use area, then obviously, the cumulative analysis, which looks at the loss of subsistence hunting ground from Prudhoe Bay, Kuparuk, Alpine and now extending to

the west, the cumulative analysis also has to consider the impacts of future projects, such as a road to Umiat, further development to the west from Nuiqsut, offshore development and the pipelines that would carry offshore oil across the NPRA.

When we look at the potential impact from all those combined projects, if they were all to happen, including the impacts of climate change, we have to conclude that there could be major impacts to all the NPRA communities, Point Lay, Wainwright, Barrow, Atqasuk, Nuiqsut, and Anaktuvuk Pass, and that is the reason why in addition to having a public meeting on this draft EIS, we're also holding what's called an official ANILCA 810 subsistence hearing, specifically legally required to be held in any community that could experience a major impact. Once again, that major impact is -- would be the result of the cumulative scenario.

MR. FORREST OLEMANN: Forrest Olemann again and so when we're trying to get the true picture, or I shouldn't say the true picture, but more of an accurate picture of what's been happening in the last 20 years, it would seem to me that, you know, we've had folks take in public

comments, written, what have you, and in a lot of cases, the same people digressing all that has been happening over the last 20 years, but you know, what has been taught me since I was able to listen and understand about the animals, there's a certain way that you treat the animals so that the abundance level is still evident year after year after year and so that would lead me to a question to the degree that what does BLM rely on in the sense of traditional and cultural application versus science?

MS. FRITZ: We talk to people and listen and take their input.

MR. FORREST OLEMANN: But wouldn't it serve the people's interest, especially the federal government, to the degree that the folks that have relied on these animals for decades and generations on end, that they be the ones that analyze the findings of what may -- an attempt to be science?

MS. FRITZ: Well, and I think that is the major -- that's the -- that's the primary reason that these analyses of subsistence impacts are major is from what people tell us, because we cannot find -- the biologists cannot find that there is an impact to the population of caribou, right.

MR. FORREST OLEMANN: I guess why I -- I try to -- maybe I'm not being very forthright and clear, but more often than any, we're always trying to find ways why we can't do this, rather than using the traditional and cultural application as to how we can do this, using the science that may have been -- and the data that has been put together for the last 20 years. It's just a thought.

MS. FRITZ: I'm not sure if I understand what...

MR. FORREST OLEMANN: I'm not sure I understand what I just said either.

MS. FRITZ: I mean, I understand the big picture, but there is Western science over here with it's black and white data, and then there is whatever we want to call it, local knowledge, traditional ecological knowledge, the wisdom of people who have lived here forever...

MR. FORREST OLEMANN: (Indiscernible - speaking simultaneously) I guess there is the best way. Here's the best way; I'm from the village and folks that we've seen come and go over the last 20 years are here to say, "Well, you know, we have the best people putting all this data

together, writing and reading and writing and reading and now, we have this extravagant disciplined presentation." I'm going to sit here and awe and wonder what purpose does this really serve when all Billy has to do is stand up and tell me that we don't have a problem or we have a problem.

MS. FRITZ: I would say the big picture of what this serves, and I understand that it can be a very frustrating process, because the government comes back every time there's a project and we have another EIS and we ask for your input and we hear this a lot, "But we've been giving you the same input for 20 or 30 years. Please look at all the comments that we've submitted in the past. They're still true. Look at what our elders in the '70's when you started managing NPRA," and so we are trying to do that and looking at all the historic comments that have been made on every single one of these land management documents.

What I will say is that this process, the National Environmental Policy Act process, it's very frustrating for people. We continually come and ask for your input. The main point is to analyze the impacts and disclose those impacts to the public and to let the public know what is

being permitted and what will be developed before it happens and so it's a frustrating long, complicated process, but I think it's much better than the alternative, which was before we had NEPA when the government allowed industry to build and development without consulting the communities. It's not perfect and we're constantly trying to make it better and I hear your frustration.

MR. BROWER, III: Thomas Brower for the record. Thank you, Stacey, for your presentation, also Dave Yokel, on the caribou one. I think -- I think a lot of young folks nowadays -- to understand caribou (indiscernible) yet because right now, we're starting to see an incline -- decline of the population.

We have enjoyed the maximum allowable of what the land can support -- the caribou -- what's been the highest peak to (indiscernible) recently in about (indiscernible) contest to that, but we're starting -- I'm starting to see from my knowledge, the competitive subsistence hunter here in Barrow. They have to compete with all of the other folks that are -- that have ATVs, that have boats to be out there in the fall first.

This is what's going to happen. That's just Barrow. It's going to happen at Nuiqsut, to every village and (indiscernible) more and more, but right now, the caribou is starting to peak (indiscernible). It will never be the same. There's always a low peak and a high peak.

At one point, there was over 400,000 caribou population. Now it's going on the low peak side, because that's what part of Mother Nature does. When it overpopulates, it (indiscernible) and only extracts what its resources -- what its needs are and it's going to happen again.

This happened years ago. Roy can probably contest to that when we were in the time of starvation. Right now, there's no -- none of you here probably have no history of it at all. When our grandparents were (indiscernible) whatever they can survive to eat off these resources before any development had ever occurred.

Now, you've got to take into consideration, enjoy what we have for now and now, it's time to compete. Nothing against (indiscernible) nothing against BLM, but we have (indiscernible). I can't see just (indiscernible) if you access from a road that's constructed to the west, easterly access. Yes,

it would be, as we are now aware, we have more equipment, more access to gas and equipment than (indiscernible).

We're going to be in a program competing on each other. So we'll always have it because we don't live off (indiscernible). We're in a high (indiscernible) super accurate rifle to be a better shooter and whatnot, better boat. They have less (indiscernible). We are now our own competitors, but we need to understand that, regardless if there is development or not.

Even if there's no access, we're going to still pick up our own competitors of ourselves as subsistence hunters, so be aware the population of caribou will never be the same. We're already seeing the decline. Right now, in the (indiscernible) area there's so much abundant to take a drive a couple of minutes, you go out to the caribou right now. That's how close it is. This summer, we might not even see them, because they'll be all harvested. That's for sure.

The thing about -- talking about caribou, I really do (indiscernible) here and it's going to be (indiscernible) the individual for economic needs to sustain ourselves and if we're relying on subsistence, but we have to rely

on other stuff. So we are (indiscernible) we are (indiscernible) oil and gas lines. We can't go back. We'll never go back. So thank you.

MS. FRITZ: And just I forgot, I'll just quickly show this slide that...

MR. KELLY: No, you won't.

MS. FRITZ: No, I won't, never mind. It's a really nice slide that you can't see.

MR. KELLY: Well, we could show it, but you have to...

UNIDENTIFIED SPEAKER: I have a question. (Indiscernible) for the record. If a well and a pad is built and there's a pipeline with or without a road, the questions to subsistence -- well, I guess what's missing in here is we've got nothing but biologists, all the study groups, yet there is no enforcement personnel here that's going to tell us that you cannot hunt along the pipeline.

So that's a question that the locals always want to know, because those guys come around at the peak hunt and try enforce it. Thank you.

UNIDENTIFIED SPEAKER: Do you want to field that?

MS. FRITZ: Well, can I just -- Mayor Hopson, can I just say that it

didn't actually make it into the draft, but we have a long list of potential subsistence mitigation measures and one thing that we heard loud and clear from people of Nuiqsut is we want clear written rights. We want our rights to use that road to be written and clearly articulated to everybody in the village.

UNIDENTIFIED SPEAKER: That's the proposed Nuiqsut road?

MS. FRITZ: No, that includes the GMT1 road.

UNIDENTIFIED SPEAKER: Okay.

MAYOR HOPSON: John Hopson for the record. I just want to comment on what Mr. Olemann was talking about and Mr. Brower and it just goes back to having to thank you guys for the opportunity to speak during these types of activities because I think the knowledge that we had, our elders had 30, 40 years ago, we've learned a lot more today and being able to share that is important.

So even though we have good comments from our elders about their lifestyle back then, I'm just grateful that we have new technology to learn more about where animals are, where we hunt, where we can map and so

on, so thank you.

UNIDENTIFIED SPEAKER: (Indiscernible) for the record. The traditional (indiscernible) interviewing the elders from both villages, that area was a major (indiscernible) and (indiscernible - speaking Native language) that's just wanted to let you know.

MS. FRITZ: Reindeer herders in this area?

UNIDENTIFIED SPEAKER: Yes.

MS. FRITZ: And I'll just quickly explain this slide since I finally got it up, so -- and I should say that the sections on subsistence for this draft EIS were done -- were written by Stephen R. Braund and Associates and then we, at BLM, reviewed them.

Stephen R. Braund and Associates, most of you are familiar with, has conducted subsistence studies in all the coastal villages and Anaktuvuk Pass over the past many, many years. He has an incredible database of information and he's able to accurately map the densest subsistence use areas and then able -- he's able to -- because he does that, put actual numbers on the percentage of land that could effectively be removed from

the subsistence area and allow us to say with some kind of quantifiable evidence that this is a major impact. It's a long-term impact from a heavily used area.

So the black line there is the project study area. So it's two-and-a-half miles from every part of the GMT1 project and as you can see, it's right in the heart of the densest Nuiqsut subsistence use area, now that I got my slide up.

MR. ITTA: Edward Itta for the record. Thank you for the comments and I hear what John said that we certainly know a lot more today, along with the knowledge that was passed on to us, especially those in that area and in particular, Nuiqsut, and my comment is based on what you said, and I appreciate your perspective on environmental justice, the economy, the cultural -- the connection that's tied into -- into this particular project that affects so many different things, and that's the point of my comment is that without strong subsistence activity for Nuiqsut, who's already surrounded basically on three sides by development and not supporting a road option, I think is -- is irresponsible, not only because of safety, but to be able to

grant access to the very community that's impacted the most by this development, notwithstanding the impacts to all the other villages.

We understand that and we have been dealing with this issue in some form ever since the original attempt to permit the Trans-Alaska Pipeline and the caribou are flourishing over there, by the way, and I support a road access to GMT1. I think that's a good move for everybody and it just -- I know you have 60 days for a comment period, what my specific suggestion is or consideration is that when you go to Nuiqsut tomorrow, I believe it's tomorrow...

MS. FRITZ: Yes.

MR. ITTA: That you present the socioeconomic aspects and the connection to subsistence, which they really understand and which I dealt with during my terms as mayor here sometime back. So I think, no question, helicopters, air traffic is the biggest disruption. So it seems almost like a no-brainer to be in support of the road project there and by the way, that spur road for Nuiqsut that Kuukpik had been -- their company had been working on was just permitted here a day or two ago. So that's

what the community wants and I just want to echo and support their desire to be able to live off the land, considering development is all around them.

Thank you.

MS. FRITZ: Thank you. Turn it back over to (indiscernible).

MR. BILLY ADAMS: Thank you. Well, Stacey.

MS. FRITZ: Yes.

MR. BILLY ADAMS: Can you hear me?

MS. FRITZ: Yes.

MR. BILLY ADAMS: Thank you for your...

UNIDENTIFIED SPEAKER: Billy Adams.

MS. FRITZ: Billy Adams.

MR. BILLY ADAMS: My name is Billy Adams and although I work for the North Slope Borough Wildlife Department, I'm going to speak as a hunter, you know. I'm not representing the Borough. You know, I grew up here in Barrow and my parents were, you know, at the age where they grew up as land users mainly. Nowadays, we're -- a lot of us have jobs, employment opportunities for us.

You know, I'd hear stories from my dad, there was hardly any caribou around back then. Nowadays, you know, they're outside my door, literally, but you know -- you know, I feel the frustration from the hunters at Nuiqsut, the community members.

A lot of them used to live in Barrow and they moved there for a reason, and you know, there's development that's going to go on into the future and I think, you know, that's -- you know, I worked at Prudhoe Bay in the mid '90's, went to all the pads from Endicott to -- all the way to before Meltwater was even made, you know, I did caribou surveys, and you know, in the summertime a lot of them use the valve for insect relief. I mean, I thought that pretty sad.

As a hunter, you know, but you know, I've got to be optimistic all the time, you know. There's seasons to hunt and I, you know, I, you know, support what Edward was saying, John, Dino (sp), you know, there's some people in Nuiqsut, you know, I'm not going to step on their feet, but look at Barrow, there's a lot of pipeline out there.

We use the roads to go hunting off of, but you know, when it gets --

the idea that mitigating, maybe what you mentioned earlier, they're the ones that really need to use the access for those roads and I'm glad you mentioned, because you know, I was probably going to go out and use those and -- but you know, like I say, you know, I grew up here and my parents, you know, they were -- my father was born in 1914.

He was a reindeer herder, you know, and there were a lot of stories he -- like I mentioned earlier, they had to go a long ways to go get caribou. Nowadays, they're here. They used dog teams. Now we've got four-wheelers and snow machines. I give those residents of Nuiqsut to use these roads for their purposes and be able to hunt from those roads.

You know, I'm glad, you know, I'm -- I'm honored and privileged to talk here as a hunter and I finally met you. I've heard about you a lot.  
Thank you.

MR. FORREST OLEMANN: We heard about you.

MS. FRITZ: Can I leave now?

MR. KELLY: (Indiscernible).

MR. BROWER, III: Well, I think I'm going to add one more

comment pertaining to travel (indiscernible). As you saw earlier, Conoco plans to dig a mine site called Clover mine site and also, there's an existing mine site there (indiscernible) mine site, across the street from Nuiqsut on the other side of Kuukpik River or the Colville River.

The North Slope Borough had policies on consolidation usage of its existing resources. One of them will be a gravel mine site to -- the maximum allowable to (indiscernible) use of an existing source, which is the gravel (indiscernible) and come to the point to where the existing mine pad has come to the end of its life should BLM on federal lands open -- open up a new mine site where it's the least amount of impact -- when you open a new mine site versus opening another large-scale mine site, even if they have access to it only in the wintertime because it's going to be another big hole out there, if you -- if they shut down the ASRC1 site.

The mine site has a protective (indiscernible) to support the majority of this project, but at the end of the GMT1, ASRC won't have that potentially. The area will be gravel -- excavated to its maximum level. So take that into consideration when you put your final EIS together -- is that

gravel (indiscernible) a bunch of holes out there, but the maximum use of existing resources of the mine site. Thank you. That's all I have to say and I hope that BLM does have something in the whole NPRA ROD or record of decision on potential use of existing resources would be the (indiscernible) mine site.

MR. KELLY: Thank you.

MR. FORREST OLEMANN: One last one, I was just mentioning to Edward and I -- and I appreciate the comments that John and Edward made. I agree that, you know, we've come a long way to better understand, not only ourselves, but what the industry and the regulatory agencies are trying to accomplish here.

At the same time, I think it would serve the people better that are most impacted if all this was put in layman's terms, something that's very understandable for the regular subsistence user that doesn't make it an effort to fully understand what this whole presentation is all about, that they have some assurance that their wellbeing is being looked after.

After all, that's why we have the regulatory agencies in existence, to

make sure that the people's interests are -- are looked after. So I think we could do a better job in finding a way that -- for all this -- can be palatable and understandable. Thank you.

MR. KELLY: Thanks.

UNIDENTIFIED SPEAKER: This won't reach over there, so I need you to (indiscernible).

MS. AHTUNANGARUAK: I want to thank everybody for coming and participating in this process. We've had a lot of good discussions.

MS. STUDSTILL: Can I get your name for the record?

MS. AHTUNANGARUAK: My name is Rosemary Ahtunangaruak. I spent 24 years in Nuiqsut, worked in the village clinic over there and learned a lot about the process of what happened to that village. When I moved to the village, I used to go out of the village on days where I had terrible days on-call.

It's very healing to go out on the land to look out and see the natural environment, but nowadays, you can't do that. They're surrounding the community with all the activities that are happening. When I first went to

the village in '86, oil and gas development was 60 miles away. Around the village, it was very dark, but things changed. Now we have lights surrounding the village, infrastructure, activity, personnel, research, monitoring, regulatory enforcement, all of these things have affected our daily lives in Nuiqsut.

My three kids are out there. I've got five grandkids that are out there, two of them have inherited shares with Kuukpik Corporation. I'm not a Kuukpik shareholder, but I lived in the village and raised my family out there. All five of my children graduated from school there.

I was able to go to the University of Washington because I worked out there and I chose to further my education. Our regional corporation helped some with that, but I had to go to a lot of places to get the help to pay for the education that I did and it took me over 10 years to pay off my loans.

This stuff is really important, but it's the division of our region that has been the most painful, the most stressful, the most hurtful to all of our families. It's the changes that have happened to our families that are

feeding our families from the fruits and lands of this beautiful place on the horizon that Nuiqsut is.

It's the changes that have happened to the leadership. When we first went to the village, our whole village was united on protecting our way of life. Now, costs and profits changed the view. The divisions amongst our people hurt when brothers and sisters and uncles and nephews are against each other.

The divisions that hurt our region because of this process and trying to decide regionally how activities should occur. I know our region is not sacrificing the village of Nuiqsut. Our region is not giving up the impacts to subsistence to the village of Nuiqsut because our region is going to have to face these decisions in other villages with additional changes into the generations that are already impacting subsistence in tremendous ways.

The worst part of it is, is the social disruption that occurs to our families. When you have the young hunter that's gone out and now this \$10,000 snow machine is broken and the parts to replace it cost \$500, but it costs over \$100 to even attempt to go out to do a short hunt, it's tremendous

impacts to what we're thinking about, but when you have those young men commit suicide because they can't find a way to understand the changes to our lands and the changes to our way of life and the value they are felt (sic) as hunters to our village, it's a big problem for our whole community.

When our young hunters see the infrastructure and they can make the logical decision that it's not logical to try and go out into traditional lands because you can't harvest in the way that our elders have taught us to. That's tremendous impacts.

We held culture camps in this same area. How are we going to do that with these changes when we're already significantly impacting our young people's teaching of our traditional cultural uses of the generations of harvesting that have occurred? There are generations that don't have the stories of harvest for decades.

It's tremendous for us to sit through this. It's tremendous for the agencies that have led this process for the organizations that are pushing for these changes, but it's our people that are bearing these losses for our traditional foods and the nourishment for our bodies, for our minds, for the

unity in our families, for the unity in our region.

It hurts so bad. I know I have ulcers today because I've been working on these for so many years and I know that there's many people who have suffered that same type of problem. I got started because there were so many people having breathing problems. I kept asking questions and asking questions and asking questions, but we still have many, many people with breathing problems and the tremendous impact it takes when you take and tell a family, "You're too sick. You can't live in the village anymore."

That's a tremendous impact, but I've heard multiple families being told that same story and yet, we don't have restrictions to (indiscernible) gas during an emergency and yet, we don't have enforcements to restricting the way that industry is using their vehicles and running them 24/7 throughout the industrial season. We don't have support to restrict the traffic to reduce the amount of dust that's being accumulated.

We don't have filtration systems in our houses, in our schools, in all of our public facilities so that our children, who are being exposed to these

emissions, can have hopes that they might have a period of time when they're decreasing their exposures.

All of these things can help us in these issues, yet in our documents and decades of process, we put in many recommendations to what we should be doing, but each one of these documents have come back and told us we can't do that and told us that it cost too much and told us that we don't have support in our state because our bid is for oil and gas development.

I want a study for assessing what are the environmental triggers for people that are having respiratory illness. We should have already had that. All of our efforts to communicate have demonstrated that, but yet, we're at a drawing line in this process. Where's the restoration of what has already been done? Where is the accurate and fully -- assessment of things that have already been changed with the reinjections and the dumping of things that are -- come with this process?

We don't have adequate information to even go out there and track it, let alone the transparency to say that the words you're putting on paper and

the enforcement that is being done by regulatory process or by industry controlled process is even being done.

We want safety for our lives and our families. It's not about putting lines on this paper and putting boxes and saying things are going to happen. It's about keeping our families healthy with the changes you're bringing to us, allowing us to continue our way of life into the future, in spite of the changes you're bringing to us.

I have suffered tremendously in this process and many of our people are going to suffer tremendously in this process. I know the hardships that so many of us are bearing through this process. It can't come out on your paper with your comments, but there are tears being shed by many people over these issues.

A few years ago, we had the scare that we had the big event in the ocean. I had calls from people who said, "Rose, it's finally happened. You worked really hard to prevent it," but I don't know if I want to be here. I don't want to hear that when the caribou calls are going to be coming.

There has to be a drawing point on the sand when we say, "Too

much is too much." This area is going to be developed at some point, but is this the time now, because those who are involved in it want those dollars now? What is the real cost?

We know that we have now a new document on the National (indiscernible) of Environmental Health that talks about health issues that are changing in environments where there are changes. This needs to be brought into our process. We need it engaged with our health impact assessment, because our data is not there. We don't have the data sets to look at what's the issues.

Nobody foresaw that we needed to have all these boxes checked in our documents to say what are the health impacts, but we're going to get some assessment, but it's going to cost us a heck of a lot more.

The first time I had to work with a leukemia patient, it was very difficult to even get the initial blood test. Here, I was working in our Barrow hospital. I had to wait for a shift change, but instinctively, I knew there was something really seriously wrong with it, but we have a high turnover rate of physician staff here, nursing staff here and all of our

ancillary support staff here.

So we don't have good data sets to know what are all these things, but I know we have a tremendous amount of asthma. We have a tremendous amount of diabetes. We have a tremendous amount of heart disease. We have a tremendous amount of obesity. We have a tremendous amount of thyroid disease. These are all different things that are happening to our people, without the studies to assess what's going on, but we have only one industry that are contributing tons of emissions to the air that we breathe, the animals that we depend on, to the waters that we feed our families from and that we feed our -- we give to our families to drink, to bathe, to hunt, to fish in.

We had to find out from the environmental groups when they were drilling for the HTD (sp) crossing that they lost two million gallons of drilling muds. Nobody involved in this process from any of the organizations here told Nuiqsut about it. We had to find out from someone else.

We asked that we get some support to restrict some of the emissions

that are occurring, but yet, when they expanded Alpine, we watched the biggest flare, 23 days, flaring right next to the village. There was no support, even though the document said you're supposed to shut off the flare every few hours to allow the particulates to disperse and decrease our exposure. There was no support to shut that off. How many more non-supportive understandings (sic)?

I know our health care system can't afford the cost that respiratory illness is causing our region right now. This data isn't even there to fully assess how much our exposure is, because the data sets are mixed into a very difficult assessment process where you have to know who the people are, where you're reading it from, to know where to get the data sets from. Some of our information might be in the village, some of it might be in Barrow, some of it might be in Fairbanks, some of it might be in Anchorage, some of it is nonexistent, but the cost is tremendous for one person on a ventilator for a short period of time.

Our village suffered 10 people at one time on a ventilator. That's a small village. Why? Why? Why? I still don't have the answers, but I'm

still here asking these serious questions. I want to believe that not all my grandchildren will need inhalers to breathe because there are many that do and some of them are very serious.

When there's flares that are going on and there's lots of them, those are hard days for people who have trouble breathing and it's serious. This is a drawing point in the sand. Clean up what you've already done before you get into this area because the devastation is going to be tremendous.

Clean up existing sites. Restore areas where we have lost our way of life and our traditional ways because of too much change. Return some of the loss that we have continued to suffer and make us believe we are not the sacrificial lambs for the world's energy development. Thank you.

MAYOR HOPSON: John Hopson for the record. Can you hear me all right? I was going to comment on behalf of ASRC, but first, I want to do a personal comment. I'm a whaling captain. I'm a hunter and I'm a community leader. I am the city Mayor of Wainwright. I'm also sitting on the North Slope Borough Assembly. I also hold the AWC seat for Wainwright as a commissioner, but where I have to speak is at what cost is

the question (sic) and at what cost are we going to move forward?

I am a high school graduate of the North Slope Borough school system and I am very proud of that and that is because we had a North Slope Borough system for our tax base.

We have to move forward and continue to responsibly develop our lands and our oceans in order to continue to sustain, if not better, our lives within our own selves (sic), our own communities and our region. I have five kids at home right now ranging from two years old to 17 and I have to decide on what is best for my kids. Where (sic) do I leave them when I decide to step down, is the question I ask myself on a daily basis.

Do I fight against development and stop our process that we use today as the North Slope Borough or do I continue to agree with responsible development and sit at the table and negotiate terms that may benefit our people and our lives?

The North Slope Borough's budget has been in decline for many years and with that decline, we're always having to decide on what services do we cut, what services do we continue and how far do we go along (sic)?

Eighty percent of our whalers have North Slope Borough jobs.

Where does the budget come from, from the North Slope Borough? How many percent -- who can tell me how many percent of the tax base dollars is from oil and gas for the North Slope Borough? What was it, at 85, 90%?

UNIDENTIFIED SPEAKER: Ninety-eight.

UNIDENTIFIED SPEAKER: Ninety-eight.

MAYOR HOPSON: Ninety-eight percent, 98% of the North Slope Borough's funding that funds our school, that funds our college, that funds our clinic, our fire department, our police department comes from tax base from oil and gas and that's jobs.

People talk about the past and hunting with skin boats and dog teams. I've never done that. I grew up at (sic) a life where I drive a snow machine. I drive outboard motors and four-wheelers to hunt. That's the life I know and that's the life my kids know.

Nobody uses dog teams or skin boats to hunt year-round and where do I get that money from? My job, dividends from the companies that we're enrolled in and that's just for my family. What about the other

hunters that I have to work with? That's where their income comes from, the North Slope Borough and that's how we live and that's the life we know and that's the life we have to continue to move forward (sic).

I cannot go back to dog -- I cannot envision myself using a dog team, let alone train a dog, because I don't even know how. I can train one to pee outside, but that's about it. You know, that's all animals are to us today.

So I have to make up my mind and move forward and support projects like this that will benefit our people and not just us as Inupiat, everybody who lives on the North Slope, no matter what race, creed, or color they come from. That's the benefit of the -- of our system today. So we benefit everybody and that's why I have to support what we're doing here today.

I support Alternative A. It's the least impact, as you stated in your presentations to the community of Nuiqsut. There is (sic) impacts, but it's the least impact and it's most beneficial for the subsistence users, as well. I, for one, in Wainwright cannot be telling the community of Nuiqsut what they should be supporting. So I'm supporting what they do -- what they're

supporting, Alternative A, and that's -- and that's what we should be doing, supporting a community with the most impacts.

We, as a regional -- we, as a region, should be supporting each community and what's best for them, not just what's best for me, who lives over here in Wainwright, and those are the decisions that I have to make. So we have to be careful as to how we comment and who we hear comments from, where they live and how they live, so that the people who actually live there can -- can tell us what kind of support they need from us that live a little ways away from them and that's what we're here to do.

So we -- we've got to move forward. Oil and gas development is the way to go because I cannot see fisheries up here to sustain the \$400 million, approximately, almost \$400 million this Borough lives on. There's no other industry that will support what we're doing today and there's no turning back.

So nobody in this room can tell me we have to go backwards and start all over again. We can't fathom that. We have to move forward from where we are today. With that, I want to read a comment, statement on

behalf of ASRC.

For the record, my name is John Hopson, Jr., and I'm an employee of Arctic Slope Regional Corporation. ASRC supports Alternative A as proposed by ConocoPhillips, our partner in development. We support the efforts by Kuukpik Corporation to work with Conoco to design a project that meets the needs and concerns of the community of Nuiqsut.

ASRC owns most of the subsurface of GMT1 development and would receive significant royalty revenue through the development. GMT1 is a project of ConocoPhillips that will produce oil from ASRC subsurface, a right given to us by ANCSA to support our shareholders through sharing provisions -- benefits Alaska Natives across the state.

Alternative A responds to Nuiqsut's concerns over aircraft traffic in and around the village. The excessive amount of aircraft traffic has a negative effect on the community and subsistence through disturbance to animals.

ASRC agrees with the community that the road access is better because it will allow broader access for subsistence to the west of the

village in the Fish Creek area. Alternative A and a road also addresses safety issues for both emergency situations, but also allows for faster and more efficient oil spill response.

Local Nuiqsut residents have used the -- have use of access to the road to improve access to subsistence hunting areas west of Nuiqsut in the northeastern NPRA. GMT1 is an essential project to maintain North Slope production and the economic benefits that it brings to the North Slope Borough through its tax base that supports the infrastructure of the North Slope communities, such as our -- such as our community in Wainwright.

GMT1 is not a new project. It was reviewed and approved by BLM and the cooperating agencies in 2004. It was then known as CD6 development, a western satellite to the Alpine oil field.

Communities on the North Slope and within the NPRA would like to have the benefit of the same amenities that non-rural communities have with respect to roads to provide connections between communities and larger cities to allow for fast reliable telecommunications and internet services and to assist in lowering the cost of energy, which road

infrastructure can assist with.

Communities would rather have road developed over additional airstrips and increased air traffic for access because roads provide a broader range of access to subsistence resources, whereas aircraft traffic navigates (sic) impacts subsistence through sound disturbance to the animals.

We would also like to see the gravel remain in place after the oil and gas activity to allow residents to have continued long-term access to subsistence resources. Gravel is a very valuable commodity on the North Slope, so to have the companies pick it up and haul it away when they are done with producing oil would be bad for our villages. Our villages should have the opportunity to use the gravel in ways that benefit them. Thank you.

MR. KELLY: Are there any other comments?

MS. AHTUNANGARUAK: Yes, we started with promises that were given from Arco saying they would do some research and then we were -- there were some changes with the company and now we have ConocoPhillips. Those promises should have followed the leases when

you all took them over.

There were some studies on sociocultural impacts that were never released that have not been updated that really needs the information brought into them in a good way. I hope that -- that the promises that were given to start the development with supporting some of the research and monitoring that our village wants to help us assess some of the issues will get supported in this process if you have to go forward, because there's been so many requests that we've put forward that are still unanswered and there's a lot more broken promises from generations of this process.

MR. KELLY: Thanks. Geoff.

MR. CARROLL: Hello, my name's Geoff Carroll. I work for the Alaska Department of Fish and Game, but what I say doesn't represent the views of the state of Alaska. I just have to say that.

This -- you know, it's been a long planning process. It seems like we've been working on planning in NPRA since, you know, early to mid '90's and we've been working together a long time and I'd really like to congratulate BLM on -- I mean, this long, long public process, you know, I

mean, I think you've had a lot of that imposed upon you and I really appreciate it that you always involved the public in all these discussions and I think you've really listened and I think that you've incorporated a lot of the public's views in the policies that have been developed.

You know, I think many of us from the very beginning, you know, our (indiscernible) was the, you know, we need a little development on the North Slope. We needed to finance North Slope Borough, you know, a big corporation, ASRC, needs that income. Our villages need the money that's come from the impact funds, you know.

There's a lot of good things about oil development. So there will definitely be some, you know, areas on the North Slope that where oil development takes place. You know, on the other hand, I think many of us recognize that there are really important habitat areas on the North Slope, and you know, up in particular, the northeast area. We debated that and talked about it for -- for many years and -- and I -- from a biologist point of view, I think BLM has done a good job of outlining which areas are important and putting in a lot of protective measures around those areas.

You know, from looking at the, you know, where -- where the Greater Mooses Tooth area is and at least from a caribou biologist point of view, it's -- well, it's kind of an area that's in between where the major caribou herds spend a lot of time. The Central Arctic Herd is more to the east. The Teshekpuk Herd spends more -- more time in the west and so of all the areas on the North Slope, it's probably one that, you know, if we got to have oil development in some places, that's one that, from a wildlife habitat point of view, would probably, you know, be more acceptable than a lot of other places.

So I don't have any strong objections from a habitat point of view. It's not like, you know, it's not like the Teshekpuk area that's like a world class waterfowl molting and nesting area and has caribou calving grounds and caribou insect relief areas, and you know, it's just really important in a lot of ways.

You know, the Greater Mooses Tooth area, I, you know -- I, you know, the impact that it might have on the village of Nuiqsut, now, that's another issue and I can't really address that, but as far as a wildlife habitat

area, that's probably a reasonably good area for development.

As far as the type of development, you know, I would support one of the road -- one of the alternatives that involve a road. It seems like it just makes sense to run a road out there, rather than having aircraft in and out of there constantly.

I, like everybody -- like many people have heard from a lot of people that, you know, aircraft disturbance is one of the major issues that are irritating subsistence hunters and probably affecting subsistence resources, not -- probably not on a population level, but certainly to access for hunters to those resources.

So you know, as far as A or B, I don't know. I guess, I didn't hear a lot of information on which one -- yeah (affirmative), it's kind of a matter of which one would make the most sense for running a road, you know. I don't know if one of them or the other would require more or less gravel or it sounds like one of them would require one less bridge. That's probably a good thing, but anyway, I think that's kind of the major -- major issue there.

I, you know, the one (indiscernible) the Fish Creek setback area and

that's probably one reason you're looking at an alternative, you know. I don't know really how much of an issue that it. It seems to be like the most important thing is which one would cause the, you know, least impact on the use of resources and other things.

I guess the other big issue there, of course, is, you know, what -- what do the people from Nuiqsut want and maybe they like the one a little farther north because that provides better access to that Fish Creek area, you know, I don't really know that, but yeah (affirmative), we've learned a lot over the years about building pipelines and building roads, and you know, what we've learned there should be taken into account.

It seems to cause less impact if you separate the road from the pipeline a considerable distance. You don't want them right on top of each other. That seems to make more of a barrier. I mean, you know, let's face it, roads do impact caribou (indiscernible). There's going to be an impact there, and you know, but we want to minimize that as much as possible by separating the pipe from the road, and you know, the coloration of the pipe, you know, you probably don't want some real shiny thing out there, you

know, and (indiscernible), too, if you don't stick them way up in the air, they're less visible.

So anyway, I think as far as which alternative, it's really what's -- what's the most (indiscernible) of Nuiqsut and what would help them with access to their hunting areas and yeah (affirmative), I think that's about all, just thanks for the -- thanks for coming up here and having the hearing and giving us a chance to say something.

MR. KELLY: Thanks. Okay, do you want to read the closing statement?

MS. WALLIS: Let me get right in my multiple mics here.

MR. KELLY: You might want that or do you want to (indiscernible)?

MS. WALLIS: I'll yell it.

MR. KELLY: All right, well, again, I really want to thank everybody for coming. We'll just kind of close this down. We'll be bustling around and cleaning up, but if you have any further questions or want to look at maps, we'll be here for some time.

MS. WALLIS: Okay, I'd now like to formally close this BLM public meeting and ANILCA Section 810 hearing for the proposed Greater Mooses Tooth Unit 1 project. It's now closed. Thank you for your participation.

MR. KELLY: Thanks everybody.

### **MEETING ADJOURNMENT**

The meeting was adjourned at 8:32 p.m.