

To: Wendy Loya[wendy_loya@fws.gov]
From: Conn, Sarah
Sent: 2018-11-09T15:47:29-05:00
Importance: Normal
Subject: Re: Planning for 1002 FWS EIS, EA comments
Received: 2018-11-09T15:47:45-05:00

Hi Wendy,
I've actually got a few deadlines for today so I'm not going anywhere early I'm afraid... Give me a call this afternoon at 456-0499 and we can chat.

Sarah

On Fri, Nov 9, 2018 at 9:23 AM Wendy Loya <wendy_loya@fws.gov> wrote:

Hi Sarah,

I wanted to follow up with you regarding planning for FWS comments on the Coastal Plain Leasing EIS and Seismic EA. I am looking at the NPRA IAP comments now, and see you submitted those, and it would be great to work with you on this. I'd like to have a plan to share with staff next week ☺

Do you have time to chat today between 11-1 or at 2pm (it is early out, so don't stick around for this) or on Tuesday next week?

Thanks!

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

To: Sarah Conn[sarah_conn@fws.gov]
From: Wendy Loya
Sent: 2018-11-12T19:00:19-05:00
Importance: Normal
Subject: Draft email: Review of Arctic Refuge Coastal Plain Draft EIS
Received: 2018-11-12T19:00:30-05:00
2018 0618 FWS Coastal Plain Leasing EIS Scoping Comments (sn) RD .pdf
FWS NPRA DEIA IAP Letter 2012.pdf

Hi Sarah,

This is a draft of an email I'd like to send out by Friday to the 1002 team. I would be grateful if you could take a look and see if I have covered what is needed to get people ready, especially if it comes out while I am away the last two weeks of this month. The parts in red are notes and will be deleted or filled in.

Thanks!
Wendy

Dear 1002 Interdisciplinary Team,

The Arctic Refuge Coastal Plain Draft EIS (DEIS) should be out for public review soon, and I wanted to touch base on the approach we plan to take for the FWS comments.

During our review of the preliminary DEIS as a cooperating agency, you all did a phenomenal job of providing constructive comments and edits on the document. BLM provided a response to each comment we submitted, and we can feel good that we really took a hard, detailed look at the document and offered suggestions for improvement. BLM and the contractors have continued to work on the document in response to suggestions from others, including DOI solicitors, BLM headquarters and DOI secretaries; so it will look different than the draft we saw in August in some sections.

During the public review period of the DEIS, we will focus on the potential implications of the alternatives with regards to all 5 purposes of the Refuge and other management designations, focusing on the subjects we raised in our scoping letter (attached). I anticipate our comments will largely make the case for support for the stipulations and Required Operating Procedures (which were Best Management Practices in the NPRA IAP) that we helped craft last summer, or suggestions on how to further improve any of those elements of the plan. Our review will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a "fatal flaw" in how the DEIS portrays information about the resources we have expertise in. I am attaching a copy of the FWS comments on the NPRA DEIS/IAP from 2012 as an example. The timing of the release of the DEIS is uncertain, but we may get a copy of it a week prior to when it is posted for public comment. Regardless of when it comes out, we'll try to adhere to the following timeline during the expected 45 day (6 week) comment period:

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fail to meet aforementioned criteria to guide selection of a Preferred Alternative for the Final EIS;

- A teleconference will be scheduled to go over the scope of our comments and answer questions ;*Wendy to schedule this for week for Dec 3rd after sending this email*
- Comments shall be submitted to Wendy Loya for collation.
- Week 2-4: Wendy and the POCs (Drew, John, Steve, Joanna-depending on availability) edit draft letter, working with subject matter experts to refine key points;
- Weeks 4-6: Draft letter goes through review by 1002 ARDs (1 week) and on to Regional Directors' office for signing (1 week); Subject Matter Experts provide supplemental info for briefings to HQ if necessary.

BLM will be holding public meetings in Kaktovik, Arctic Village, Venetie, Fort Yukon, Utqiagvik, Fairbanks, Anchorage and DC. The format is anticipated to be "open house" style, and FWS may be able to send 1-3 people to participate; Steve Berendzen will help coordinate between FWS and BLM if/as those opportunities arise. Public meetings can start 2 weeks after the release of the DEIS.

I look forward to working with you again on this important document. I will be out of town from Nov 16-29th, so if the DEIS comes out during that period, XXX will distribute the DIES to this email list.

Thank you,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

To: Joanna Fox[joanna_fox@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Paul Leonard[paul_leonard@fws.gov]; Loya, Wendy[wendy_loya@fws.gov]
From: Berendzen, Steve
Sent: 2018-11-13T13:24:54-05:00
Importance: Normal
Subject: Fwd: [EXTERNAL] Snow monitoring - Seismic activities
Received: 2018-11-13T13:25:12-05:00
Monitoring of snow conditions during seismic exploration.doc

I haven't looked at it yet, but Shelly makes it sound like a possible application and I think we should check it out

Steve Berendzen
Refuge Manager, Arctic National Wildlife Refuge
907 456 0253

----- Forwarded message -----

From: Jones, Nichelle (Shelly) <njones@blm.gov>
Date: Tue, Nov 13, 2018 at 9:01 AM
Subject: Fwd: [EXTERNAL] Snow monitoring - Seismic activities
To: Matt Whitman <mwhitman@blm.gov>, Eric Geisler <egeisler@blm.gov>, Murphy, Ted <t75murph@blm.gov>, Wendy Loya <>wendy_loya@fws.gov>, LaMarr, Sarah <slamarr@blm.gov>, Donna Wixon <dwixon@blm.gov>, Steve Berendzen <steve_berendzen@fws.gov>, Donato Judice <djudice@blm.gov>

I had not seen this and thought you might be interested. We will need to start pulling our thoughts together and outreach to SAE soon, but it will probably need to be after Thanksgiving based on our schedules.

Shelly Jones
Acting Manager
Arctic District Office
222 University Avenue
Fairbanks, AK 99709

(907) 474-2310 (w)
(907) 460 0086 (c)

----- Forwarded message -----

From: Head, Melissa M (DNR) <melissa.head@alaska.gov>
Date: Fri, Nov 9, 2018 at 1:06 PM
Subject: [EXTERNAL] Snow monitoring - Seismic activities
To: Jones, Nichelle (Shelly) <njones@blm.gov>, Leonard, Paul <paul_leonard@fws.gov>

Shelly and Paul,

I was going through and organizing some of our electronic files and found the attached. It's a procedures document written by Torre Jorgenson in 2003 that lays out a plan for monitoring snow conditions seismic activities. This was spurred by a BLM workshop so, you may have this already.

Kind Regards,

Melissa

Melissa Head

Manager, Northern Oil & Gas Team

DNR/DMLW

907-451-2719

To: LaMarr, Sarah[slamarr@blm.gov]; Wendy Loya[wendy_loya@fws.gov]; Stephanie Rice[srice@blm.gov]; Fox, Joanna[joanna_fox@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Robert Brumbaugh[rbrumbau@blm.gov]
From: Jones, Nichelle (Shelly)
Sent: 2018-11-13T13:37:58-05:00
Importance: Normal
Subject: Cancellation of Seismic EA Meeting Today
Received: 2018-11-13T13:38:41-05:00

Shelly Jones
Acting Manager
Arctic District Office
222 University Avenue
Fairbanks, AK 99709

(907) 474-2310 (w)
(907) 460 0086 (c)

To: Loya, Wendy[wendy_loya@fws.gov]
Cc: Joanna Fox[joanna_fox@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Paul Leonard[paul_leonard@fws.gov]
From: Berendzen, Steve
Sent: 2018-11-13T14:21:24-05:00
Importance: Normal
Subject: Re: [EXTERNAL] Snow monitoring - Seismic activities
Received: 2018-11-13T14:21:37-05:00

That sounds good, Wendy
Steve Berendzen
Refuge Manager, Arctic National Wildlife Refuge
907 456 0253

On Tue, Nov 13, 2018 at 10:10 AM Wendy Loya <wendy_loya@fws.gov> wrote:

I had a look through this, and it looks like a good approach for sampling during seismic operations that we can work to implement. We still need to come to agreement on tundra opening measurements, so maybe we can use some time at tomorrow's POC meeting to talk about both?

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

From: Berendzen, Steve <steve_berendzen@fws.gov>
Sent: Tuesday, November 13, 2018 9:25 AM
To: Joanna Fox <joanna_fox@fws.gov>; Joshua Rose <joshua_rose@fws.gov>; Paul Leonard <paul_leonard@fws.gov>; Loya, Wendy <wendy_loya@fws.gov>
Subject: Fwd: [EXTERNAL] Snow monitoring - Seismic activities

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Steve Berendzen

Refuge Manager, Arctic National Wildlife Refuge

907-456-0253

----- Forwarded message -----

From: **Jones, Nichelle (Shelly)** <njones@blm.gov>

Date: Tue, Nov 13, 2018 at 9:01 AM

Subject: Fwd: [EXTERNAL] Snow monitoring - Seismic activities

To: Matt Whitman <mwhitman@blm.gov>, Eric Geisler <egeisler@blm.gov>, Murphy, Ted <t75murph@blm.gov>, Wendy Loya <wendy_loya@fws.gov>, LaMarr, Sarah <slamarr@blm.gov>, Donna Wixon <dwixon@blm.gov>, Steve Berendzen <steve_berendzen@fws.gov>, Donato Judice <djudice@blm.gov>

I had not seen this and thought you might be interested. We will need to start pulling our thoughts together and outreach to SAE soon, but it will probably need to be after Thanksgiving based on our schedules.

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----- Forwarded message -----

From: **Head, Melissa M (DNR)** <melissa.head@alaska.gov>

Date: Fri, Nov 9, 2018 at 1:06 PM

Subject: [EXTERNAL] Snow monitoring - Seismic activities

To: Jones, Nichelle (Shelly) <njones@blm.gov>, Leonard, Paul <paul_leonard@fws.gov>

0000010535

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Kind Regards,

Melissa

Melissa Head

Manager, Northern Oil & Gas Team

DNR/DMLW

907-451-2719

To: Wendy Loya[wendy_loya@fws.gov]
From: Conn, Sarah
Sent: 2018-11-13T16:39:37-05:00
Importance: Normal
Subject: Re: Draft email: Review of Arctic Refuge Coastal Plain Draft EIS
Received: 2018-11-13T16:40:50-05:00
Dear 1002 Interdisciplinary Team SCC.docx

Hi Wendy,
I think it sounds like a plan! Of course I couldn't resist making a few suggested changes. To make those easier to see I just pasted your email into a Word document and made my suggested edits in track changes.

Let me know if you have any questions or need more help with this.

Cheers,

Sarah

On Mon, Nov 12, 2018 at 3:00 PM Wendy Loya <wendy_loya@fws.gov> wrote:

Hi Sarah,

This is a draft of an email I'd like to send out by Friday to the 1002 team. I would be grateful if you could take a look and see if I have covered what is needed to get people ready, especially if it comes out while I am away the last two weeks of this month. The parts in red are notes and will be deleted or filled in.

Thanks!

Wendy

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phenomenal job of providing constructive comments and edits on the document. BLM provided a response to each comment we submitted, and we can feel good that we really took a hard, detailed look at the document and offered suggestions for improvement. BLM and the contractors have continued to work on the document in response to suggestions from others, including DOI solicitors, BLM headquarters and DOI secretaries; so it will look different than the draft we saw in August in some sections.

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Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

To: Sarah Conn[sarah_conn@fws.gov]
From: Wendy Loya
Sent: 2018-11-13T17:28:25-05:00
Importance: Normal
Subject: RE: Draft email: Review of Arctic Refuge Coastal Plain Draft EIS
Received: 2018-11-13T17:28:56-05:00

Thank you! I will try to send out Wednesday or Thursday, if you happen to find a better letter by then.

I greatly appreciate you finding time to have a look and make suggestions,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

From: Conn, Sarah <sarah_conn@fws.gov>
Sent: Tuesday, November 13, 2018 12:40 PM
To: Wendy Loya <wendy_loya@fws.gov>
Subject: Re: Draft email: Review of Arctic Refuge Coastal Plain Draft EIS

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Thank you,

Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

To: Steve Berendzen[steve_berendzen@fws.gov]; Joanna Fox[joanna_fox@fws.gov]
From: Wendy Loya
Sent: 2018-11-13T18:34:08-05:00
Importance: Normal
Subject: Draft email for Coastal Plain DEIS review
Received: 2018-11-13T18:34:16-05:00
DEIS Review process email DRAFT 111318.docx

Hi Steve and Joanna,

Attached is a draft email for your consideration that describes the proposed process for reviewing the DEIS and Draft EAs when they come out. I worked with Sarah Conn on this, as her team typically develops comments on behalf of the region. I've identified the POCs as helping review the comments after I collate them to ensure we are accurately framing them within the context of FWS authorities, and hope you two in particular can ensure they strongly support all five purposes of the Refuge and other refuge management considerations. Drew can review for MMPA/ESA authorities.

Steve, I am also wondering if you would be able to serve as the Regional POC while I am away from email contact Nov 16-Dec 28th? The primary tasks would be to be Nicole Hayes' point of contact for any questions or updates, and to send a link to the DEIS and/or Draft EA to the 1002 Interdisciplinary team if they come out before I return (I can send the list of email addresses). The earliest I think we will see the Draft EIS is 11/30 when I am back on email, but should know more this week.

Thank you, welcome any feedback of questions on the draft proposed plan for reviews.

Cheers,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

To: Mary Colligan[mary_colligan@fws.gov]
Cc: Drew Crane[drew_crane@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Bud Cribley[bud_cribley@fws.gov]; Joanna Fox[joanna_fox@fws.gov]; John Trawicki[john_trawicki@fws.gov]; Sarah Conn[sarah_conn@fws.gov]; Steve Berendzen[steve_berendzen@fws.gov]; Leonard, Paul[paul_leonard@fws.gov]; Socheata Lor[socheata_lor@fws.gov]; Doug Damberg[doug_damberg@fws.gov]; greg_siekaniec@fws.gov[greg_siekaniec@fws.gov]; Karen Clark[karen_clark@fws.gov]; Sara Boario[sara_boario@fws.gov]; Karen Murphy[karen_a_murphy@fws.gov]
From: Loya, Wendy
Sent: 2018-11-13T20:06:45-05:00
Importance: Normal
Subject: Re: Arctic Refuge Coastal Plain updates for week of 11/13
Received: 2018-11-13T20:06:59-05:00

Hi Mary and everyone,

I would offer that on Wednesday at 1pm during the 1002 POC meeting, we will discuss research logistics coordination, which Josh Rose/Arctic Refuge are taking the lead on. Steve B/Josh Rose can report out on Friday with information from that meeting and answer any questions or concerns.

I will not be here Friday to lead the RD meeting, but can send out an agenda that includes items for discussion/further updates based off what happens this week.

Thanks!
Wendy

Dr. Wendy M. Loya, Coordinator
Office of Science Applications -Arctic Program
US Fish and Wildlife Service
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

On Tue, Nov 13, 2018 at 3:57 PM Colligan, Mary <mary_colligan@fws.gov> wrote:

Thanks Wendy. Does this mean we are not meeting on Friday morning? I was wondering about the status of the research logistics coordination plan? I remain concerned over the amount of activity planned and the need to coordinate all of the logistics to make sure we are minimizing our footprint and also securing all of the necessary permits and authorizations required.

On Tue, Nov 13, 2018 at 9:04 AM, Wendy Loya <wendy_loya@fws.gov> wrote:

Hi 1002 leadership team,

Updates for this week:

Nicole at BLM indicated that they feel revisions on the Coastal Plain Leasing DEIS are complete, but are waiting for the go-ahead from the Washington Office to start the public comment period. The very earliest we could see it is Nov 23rd, but she feels that is unlikely, and “will have a better idea about seeing it by Nov 30th by the end of this week.” The original plan was for 45 days, but imagine with the holidays that might flex a little, and expect there to be requests for an extension from the public, but we’ll see!

For the Seismic EA, as of the end of last week we were waiting for SAE to respond to feedback from our Marine Mammals team on a possible path forward in modifying their proposed action to eliminate possible lethal take, by shifting exploration near the coast to post-denning. We still have to get through ESA consultation and work with BLM and SAE on snow depth monitoring protocols.

I will be on Annual Leave Friday Nov 16 through Weds 28th without email access, and will send out further information to you all our 1002 Subject Matter Experts to provide guidance on getting started with the DEIS if it comes out before I return and lay out the plan for our complete review and comment process.

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

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Mary Colligan
Assistant Regional Director
Fisheries and Ecological Services
U.S. Fish and Wildlife Service, Alaska Region
1011 E. Tudor Road, MS-361
Anchorage, AK 99503
907-786-3505
cell: 907-223-5945

To: John Trawicki[john_trawicki@fws.gov]; Eric Taylor[eric_taylor@fws.gov]; Joanna Fox[joanna_fox@fws.gov]; Mary Colligan[mary_colligan@fws.gov]; Stephanie Brady[stephanie_brady@fws.gov]; Doug Damberg[doug_damberg@fws.gov]; Sarah Conn[sarah_conn@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Drew Crane[drew_crane@fws.gov]; Kenneth Stahlnecker[kenneth_stahlnecker@fws.gov]; Steve Berendzen[steve_berendzen@fws.gov]; Paul Leonard[paul_leonard@fws.gov]; Socheata Lor[socheata_lor@fws.gov]
From: Wendy Loya
Sent: 2018-11-14T12:31:02-05:00
Importance: Normal
Subject: Agenda for today's 1002 POC meeting (b) (5) CIP passcode: (b) (5) CIP
Received: 2018-11-14T12:31:14-05:00
DEIS Review process email DRAFT 111318.docx

Call in using phone line: (b) (5) CIP passcode: (b) (5) CIP

We will meet today at 1pm to discuss a few items:

- ☐ Wendy out Nov 16- Nov 29th: Steve B will be POC, discuss plan for Draft EIS/EA review (see attached)
- ☐ Logistics coordination: overview from Josh Rose/Arctic and needs moving forward
- ☐ Seismic timing/snow monitoring next steps
- ☐ Science Planning for 1002 next steps

Let me know if you have other items to add,
Thank you,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

-----Original Appointment-----

From: john_trawicki@fws.gov <john_trawicki@fws.gov>
Sent: None
To: john_trawicki@fws.gov; wendy_loya@fws.gov; eric_taylor@fws.gov; joanna_fox@fws.gov; mary_colligan@fws.gov; stephanie_brady@fws.gov; doug_damberg@fws.gov; sarah_conn@fws.gov; joshua_rose@fws.gov; drew_crane@fws.gov; kenneth_stahlnecker@fws.gov; steve_berendzen@fws.gov; paul_leonard@fws.gov; socheata_lor@fws.gov
Subject: FWS_Arctic Refuge_Weekly_POC_Updates
When: Wednesday, November 14, 2018 1:00 PM-2:00 PM (UTC-09:00) Alaska.
Where: FWS-FW7 NWRs Conference Room/Regional Office

Agenda and call in for weekly Meeting

Rolling agenda and notes in Google Docs:

<https://docs.google.com/document/d/1xmo2N2wn5jqdGaORCldQ29gTvWb93TaTJCIL5BqsXm0/edit>

Join by Vidyo to Refuges Conference Room

or call in (b) (5) CIP passcode: (b) (5) CIP

----- Please do not edit this section of the description. This event has a Google Hangouts video call. Join: https://plus.google.com/hangouts/_/doi.gov/john-trawicki?hceid_am90bl90cmF3aWNraUBmd3MuZ292.2034q2628vr62c1vdi53122lia&hs_12_1 -----

To: Wendy Loya[wendy_loya@fws.gov]
From: Rose, Joshua
Sent: 2018-11-14T12:49:21-05:00
Importance: Normal
Subject: Re: Update today on Logistics Coordination at 1pm POC meeting
Received: 2018-11-14T12:49:28-05:00

Wendy,

I was planning to update everyone so no problem. I thought you had access to the table since it is just modifications to the table you sent out on Oct. 23rd. I am including the link in case somehow moving to my folder has made a copy and you can't see it.

2019 Field Research in Arctic Refuge Coastal Plain

I also sent you a link to a running list of every project on the coastal plain. This will likely grow as we move forward and Arctic staff fill it out and I learn of other projects.

Thanks,
Josh

On Wed, Nov 14, 2018 at 8:19 AM, Wendy Loya <wendy_loya@fws.gov> wrote:

Hey Josh,

Would you please be prepared to provide an update on logistics coordination at today's 1pm 1002 POC meeting? I know you have been working on this, and it would be good to share with the group as an update and to plan out next steps and find out what type of help you need, if any. I think it is probably important to make sure to reach out to every PI with a funded field project in the next week before anyone gets too far along in making plans that could affect other projects if that hasn't been done.

I'm also interested in seeing the table of projects that I inquired about last week, to share with BLM per their request. I have one with the USGS projects, contaminants, and Veg/NWI/NHD, but you mentioned other refuge projects. Would like to send that off to BLM by the end of the week (and I am out Friday).

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

--

Joshua Rose

Acting Oil and Gas Coordinator

Arctic National Wildlife Refuge

101 12th Ave., Rm 236

Fairbanks, AK 99701

phone: (907) 456-0409

To: Wendy Loya[wendy_loya@fws.gov]
Cc: Andy Loranger[andy_loranger@fws.gov]; Stephen Miller[stephen_a_miller@fws.gov]
From: Kahn, Lynnda
Sent: 2018-11-14T12:59:37-05:00
Importance: Normal
Subject: Arctic
Received: 2018-11-14T13:00:28-05:00

Hey Wendy, what's the latest on the Arctic Seismic EA and the development EIS?

LYNNDA KAHN

Fish and Wildlife Biologist
Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service
P.O. Box 2139 | Soldotna, AK
907.260.2818 - Office ><(((°>_..^-`..\_><(((°>\_..^-`.._><(((°>_..^-`.._><(((°>

To: Wendy Loya[wendy_loya@fws.gov]
From: Kahn, Lynnda
Sent: 2018-11-14T13:13:19-05:00
Importance: Normal
Subject: Re: FW: Arctic Refuge Coastal Plain updates for week of 11/13
Received: 2018-11-14T13:14:52-05:00

Okay, thanks Wendy. Andy just got back to the office after being out-of-state for a week and he was asking me if I'd heard anything, so will relay this to he and Steve.
Thanks again and have a nice vacation!

LYNNDA KAHN

Fish and Wildlife Biologist
Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service
P.O. Box 2139 | Soldotna, AK
907.260.2818 - Office ><(((o>_..^-^.._><(((o>_..^-^.._><(((o>_..^-^.._><(((o>

On Wed, Nov 14, 2018 at 9:09 AM Wendy Loya <wendy_loya@fws.gov> wrote:

Sorry I didn't include you when I sent this out yesterday morning!

Hi 1002 leadership team,

Updates for this week:

Nicole at BLM indicated that they feel revisions on the Coastal Plain Leasing DEIS are complete, but are waiting for the go-ahead from the Washington Office to start the public comment period. The very earliest we could see it is Nov 23rd, but she feels that is unlikely, and "will have a better idea about seeing it by Nov 30th by the end of this week." The original plan was for 45 days, but imagine with the holidays that might flex a little, and expect there to be requests for an extension from the public, but we'll see!

For the Seismic EA, as of the end of last week we were waiting for SAE to respond to feedback from our Marine Mammals team on a possible path forward in modifying their proposed action to eliminate possible lethal take, by shifting exploration near the coast to post-denning. We still have to get through ESA consultation and work with BLM and SAE on snow depth monitoring protocols.

I will be on Annual Leave Friday Nov 16 through Weds 28th without email access, and will send out further information to you all our 1002 Subject Matter Experts to provide guidance on getting started with the DEIS if it comes out before I return and lay out the plan for our complete review and comment process.

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

To: Wendy Loya[wendy_loya@fws.gov]
From: Powers, Elizabeth
Sent: 2018-11-14T19:35:00-05:00
Importance: Normal
Subject: Fwd: [EXTERNAL] Re: FW: 2019 USGS Research in 1002 Area and logistics coordination
Received: 2018-11-14T19:35:19-05:00

Hi Wendy,

Thank you for forwarding this information along. I got set up with a new email and phone number yesterday and want to make sure you have my contact information.

I hope you are doing well. (b) (6)

Cheers,
Elizabeth

Elizabeth Powers, P.h.D.
Science Coordinator
United States Geological Survey
4210 University Drive
Anchorage, AK 99508
Email: epowers@usgs.gov
Phone: (907) 786- 7085

FYI

From: Wendy Loya <wendy_loya@fws.gov>
Sent: Friday, October 19, 2018 2:25 PM
To: Joanna Fox <joanna_fox@fws.gov>; John Trawicki <john_trawicki@fws.gov>; Joshua Rose <joshua_rose@fws.gov>; Drew Crane <drew_crane@fws.gov>; Steve Berendzen <steve_berendzen@fws.gov>; Paul Leonard <paul_leonard@fws.gov>
Cc: Mary Colligan <mary_colligan@fws.gov>; Socheata Lor <socheata_lor@fws.gov>; Doug Damberg <doug_damberg@fws.gov>; Karen Murphy <karen_a_murphy@fws.gov>
Subject: 2019 USGS Research in 1002 Area and logistics coordination

Hi 1002 POCs,

0000010554

Below is an email that USGS sent to Steve B about the selected USGS QRP/SSP projects, and I wanted to make sure everyone is in the loop on next steps, which include how we work with USGS and receive updates, data and products as well as coordinating logistics. Each USGS QRP/SSP project has a FWS collaborator, although some will be more involved than others.

John Pearce and I discussed having quarterly updates on the projects so that FWS can stay up to speed and help with any decisions that are being made and to discuss data management and sharing, and I'd like to suggest that we **use our regularly scheduled FWS POC meeting on Wednesday October 31st to have the first quarterly update on USGS projects, inviting USGS to join.**

Winter field projects on the list include: Polar Bear Den Disturbance monitoring (Todd Atwood and Ryan Wilson) and Dolly Varden overwintering in Canning (Vanessa von Biela and Randy Brown). The only summer field project is on Groundwater (Josh Koch and Josh Rose), while the remainder are "desktop" studies (ACP waterbird habitat mapping and caribou habitat) or meetings/coordination (polar bear population monitoring). The list of projects is attached, and the proposals are on the shared drive at: xr7common(\\ifw7ro-file):\\1002ArcticRefuge\\1-Working\\2019 USGS QRP_SSSP Proposals.

At this time, Josh Rose will be the team lead for logistics coordination for research projects in the 1002 area, so please keep him in the loop on any projects from your division. He and John Trawicki will work on a project tracking list and setting up a means for logistics coordination for all projects. Please cc John Pearce in communications with the PI's for the QRP/SSP projects. In addition, USGS also has the Hulahula stream gauge and we have shorebird studies that will be conducted by Rick Lanctot (FWS Mig Birds) and Jim Lyons (USGS). USGS and FWS have some different requirements for flying that need to be kept in mind as we try to share aircraft among projects, and we want to make sure that we are communicating consistently across all agencies (FWS, USGS, BLM, etc) and with industry about aircraft use in sensitive areas, including Kaktovik and subsistence areas, polar bear, caribou and migratory bird habitats, and recreational areas (especially river corridors).

Lots going on! Please share any other thoughts or feedback as we get this off the ground and pass along to relevant members of your division,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

----- Forwarded message -----

From: **Pearce, John** <jpearce@usgs.gov>

Date: Wed, Sep 19, 2018 at 11:34 AM

Subject: Fwd: USFWS Alaska Region Recommendations for FY2019 QRP/SSP

To: Steve Berendzen <steve_berendzen@fws.gov>

Cc: Grant Hilderbrand <ghilderbrand@usgs.gov>

Dear Steve,

Sending to USGS for consult

[REDACTED]

[REDACTED]

[REDACTED]

Best Regards,

John

John M. Pearce, Ph.D.

Supervisory Wildlife Biologist

0000010556

Manager, Wetland and Terrestrial Ecosystems Office

U.S.Geological Survey, Alaska Science Center

4210 University Drive

Anchorage, Alaska 99508

Tel. 907.786.7094

Email: jpearce@usgs.gov

<https://www.usgs.gov/staff-profiles/john-m-pearce>

--

Elizabeth Powers, P.h.D.

Science Coordinator

United States Geological Survey

4210 University Drive

Anchorage, AK 99508

Email: epowers@usgs.gov

Phone: (907) 786- 7085

To: Greg Siekaniec[greg_siekaniec@fws.gov]
From: Wendy Loya
Sent: 2018-11-15T17:51:03-05:00
Importance: Normal
Subject: RE: DEIS Release Date still pending
Received: 2018-11-15T17:51:36-05:00
Final Conoco Seismic EA seismic 2017.pdf

Seismic in NPRA is evaluated through step-down NEPA, so EA's get done each time there is a proposed seismic survey. I am attaching the Conoco Dec 2017 EA for Seismic near Greater Moose's Tooth in NPRA. This winter, there is an EA for winter drilling. So each action gets step-down project specific NEPA, as will happen in the Arctic Refuge.

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

From: Siekaniec, Greg <greg_siekaniec@fws.gov>
Sent: Thursday, November 15, 2018 11:44 AM
To: Wendy Loya <wendy_loya@fws.gov>
Subject: Re: DEIS Release Date still pending

that is a lot of moving pieces. do you know if seismic is already permitted as part of the willow and within the IAP?

On Thu, Nov 15, 2018 at 6:55 AM Wendy Loya <wendy_loya@fws.gov> wrote:
It sounds like BLM will release a NOI to redo the NPRA IAP this Friday, so there is a lot going on with that, 1002 and Willow.

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

On Nov 14, 2018, at 16:25, Greg Siekaniec <greg_siekaniec@fws.gov> wrote:

Curious.

Sent from my iPhone

On Nov 14, 2018, at 2:41 PM, Wendy Loya <wendy_loya@fws.gov> wrote:

Just in. Please share with your programs....

From: Hayes, Miriam (Nicole) <mnhayes@blm.gov>

Sent: Wednesday, November 14, 2018 2:28 PM

Subject: DEIS Release Date still pending

Hi Cooperating Agencies,

I just wanted to provide an update that the DEIS is still going through final reviews so it is very unlikely to be released before December now. If and when I know anything more definitive, I will provide an update so everyone may plan accordingly.

Nicole

Nicole Hayes

Project Coordinator
Bureau of Land Management
222 W. 7th Avenue #13
Anchorage, Alaska 99513
Desk: (907) 271-4354
Cell: (907) 290-0179

To: Sarah LaMarr[slamarr@blm.gov]
Cc: Wendy Loya[wendy_loya@fws.gov]
From: Leonard, Paul
Sent: 2018-11-15T19:03:21-05:00
Importance: Normal
Subject: Science-Management Discussion with FWS
Received: 2018-11-15T19:03:55-05:00
[Resources of Concern.docx](#)

Hi Sarah,

Over the last few weeks we have been discussing the possibility of getting together with a few key BLM staff (resource specialists) to have a single day meeting at BLM (targeted for late January - early Feb) that could address upcoming management challenges, questions, and science needs.

The focus would be for us (FWS staff) to sit down with BLM and tease out the management decision points over the next few years. It doesn't need to focus exclusively on the arctic refuge but I think that would be a good place to start. We would like to work with you guys to identify data/science needs that might help inform some of these decision points. We'd also like to hear from BLM about what is working and what is not in regards to stips/rops and or identify if there are opportunities to better examine/understand their effectiveness. In addition, we'd like to get a handle on what data industry typically collects and for what purposes? Ultimately, we would like to use this type of information in a science planning and prioritization process that we are starting.

Wendy and I briefly spoke with Matthew Whitman about this and he liked the idea of using targeted small groups (focused on specific disciplines/themes) to have a free-flowing discussion about how we can work together to achieve the management objectives we all seek. Some of our topics of concern are already being addressed by loosely coordinated groups (e.g., Polar Bears, Snow & Climate) but others need a bit of work to take shape and help get jump started. Regardless, we'd like BLM to play a key role in helping us get a handle on the decision space for some of these groups and we think a meeting might be the best way to start.

Some of our early ideas for issues/groups are focused around:

- Water Resources & Fish
- Vegetation /Soils / Permafrost
- Caribou / Other Mammals
- Paleontological Resources

We welcome your feedback and ideas in regards to identifying key people and for putting a meeting like this together sooner rather than later. If you'd like to schedule a call to discuss or have other suggestions on how to move forward, we'd really appreciate it. Also, I'm attaching a full list of issues we've identified if you have thoughts about omissions or prioritization from BLMs perspective.

Cheers,
Paul

--

Paul Leonard, PhD

Science Coordinator

Arctic LCC

101 12th Ave. Room 216

Fairbanks, AK 99701

(907) 456-0445

To: Angela Matz[angela_matz@fws.gov]; Bill Leacock[william_leacock@fws.gov]; Carl Johnson[carl_johnson@fws.gov]; Catherine Collins[catherine_collins@fws.gov]; Christopher Latty[christopher_latty@fws.gov]; Christopher Putnam[christopher_putnam@fws.gov]; Doug Damberg[doug_damberg@fws.gov]; Edward Decleva[edward_decleva@fws.gov]; Jennifer Reed[jennifer_reed@fws.gov]; Joanna Fox[joanna_fox@fws.gov]; John Trawicki[john_trawicki@fws.gov]; Joshua Ream[joshua_ream@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Karen Murphy[karen_a_murphy@fws.gov]; Lynnda Kahn[lynnda_kahn@fws.gov]; Mary Colligan[mary_colligan@fws.gov]; Patrick O'Dell[patrick_odell@fws.gov]; Paul Leonard[paul_leonard@fws.gov]; Randy Brown[randy_j_brown@fws.gov]; Roger Kaye[roger_kaye@fws.gov]; Ryan Wilson[ryan_r_wilson@fws.gov]; Sara Boario[sara_boario@fws.gov]; Sarah Conn[sarah_conn@fws.gov]; Socheata Lor[socheata_lor@fws.gov]; Stephanie Brady[stephanie_brady@fws.gov]; Stephen Arthur[stephen_arthur@fws.gov]; Steve Berendzen[steve_berendzen@fws.gov]; Tim Allen[tim_allen@fws.gov]
Cc: Greg Siekaniec[greg_siekaniec@fws.gov]; Karen Clark[karen_clark@fws.gov]
From: Wendy Loya
Sent: 2018-11-15T19:26:06-05:00
Importance: Normal
Subject: Info to prepare for Arctic Refuge Coastal Plain EIS and Seismic EA reviews
Received: 2018-11-15T19:26:18-05:00
[2018 0618 FWS Coastal Plain Leasing EIS Scoping Comments \(sn\) RD .pdf](#)
[20171030 USFWS Comment Letter Nanushuk POA Final signed.pdf](#)
[FWS NPRA DEIS IAP Letter 2012.pdf](#)

Dear 1002 Interdisciplinary Team,

I wanted to touch-base on the approach we plan to take for the FWS comments for the Arctic Refuge Coastal Plain Draft EIS (DEIS) and Draft Seismic EA when released for public review. The earliest we are likely to see either the DEIS or Seismic EA is early December, and things could get busy if they come out simultaneously and we head into the Christmas/New Year's holidays.

In our review of the publicly available DEIS and Draft EA, we will focus on the potential implications of the alternatives with regards to all 5 purposes of the Refuge and other management designations, based on our authorities for the subjects we raised in our scoping letter (attached). I anticipate our comments will largely make the case for support for the Stipulations, Required Operating Procedures (ROPs; term used in DEIS) and Best Management Practices (BMPs, term used in the Draft Seismic EA) that we helped craft last summer, and suggestions on how to further improve any of those elements of the plans. Our reviews will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a "fatal flaw" in how the DEIS or Draft EA portrays or analyzes information about the resources we have expertise. Your reviews should be short narratives. I am attaching a copy of the recent FWS comments on the Nanushuk DEIS and our comments from the 2012 NPRA DEIS/IAP as examples.

For the review, we will try to adhere to the following timeline during the expected 45-day (6 week) comment period for the DEIS:

- ☐ **Week 1-2:** Subject Matter Experts (you!) review DEIS with focus on Stipulations and ROPs related to your expertise. Please provide written comments about how the Stipulations and ROPs may or may not protect FWS trust resources, in the context of our authorities such as Refuge purposes, regulatory guidelines and/or other management directives/authorities. If there are additional comments you feel could help inform the selection of the Preferred Alternative for the Final EIS, those may also

be provided at this time.

- A teleconference will be scheduled to go over the scope of our comments and answer questions on December 5th at 1pm;
- Comments shall be submitted to Wendy Loya for collation, due date determined once DEIS is released.
- **Week 2-4:** Wendy and the POCs (Drew, John, Steve, and Joanna (depending on availability)) edit draft letter, working with subject matter experts to refine key points;
- **Weeks 4-6:** Draft letter goes through review by 1002 ARDs (1 week) and on to Regional Directors' office for review (1 week); Subject Matter Experts provide supplemental info for briefings to HQ if necessary.

BLM will be holding public meetings for the DEIS in Kaktovik, Arctic Village, Venetie, Fort Yukon, Utqiagvik, Fairbanks, Anchorage and DC. The format is anticipated to be "open house" style, and FWS may be able to send 1-3 people to participate; Steve Berendzen will help coordinate between FWS and BLM if/as those opportunities arise. Public meetings can start 2 weeks after the release of the DEIS.

For the Draft Seismic EA, we'll likely be on a compressed timeline of 30 days. If so, we will attempt to follow this schedule:

- **Week 1:** Subject Matter Experts (you!) review Draft EA (It is much shorter than the DEIS) with focus on BMPs related to your expertise. Please provide written comments about how the BMPs may or may not protect FWS trust resources, in the context of our authorities such as Refuge purposes, regulatory guidelines and/or other management directives/authorities. If there are additional comments you feel could help inform the selection of the Preferred Alternative for the Final Seismic EA, those may also be provided at this time.
 - We'll talk about both the DEIS and EA on a teleconference on December 5th at 1pm;
 - Comments shall be submitted to Wendy Loya for collation, due date determined once Draft EA is released.
- **Week 2+:** Wendy and the POCs edit draft letter, working with subject matter experts to refine key points;
- **Weeks 3-4:** Draft letter goes through review by 1002 ARDs (1 week) and on to Regional Directors' office for review (1 week)

I look forward to working with you again on these important documents. I will be out of the office Nov 16-29th, and will answer any questions when I return.

Thank you, and Happy Thanksgiving!
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

To: Mary Colligan[mary_colligan@fws.gov]
Cc: Patrick Lemons[patrick_lemons@fws.gov]
From: Wendy Loya
Sent: 2018-11-15T19:39:45-05:00
Importance: Normal
Subject: RE: Polar Bear Follow Up
Received: 2018-11-15T19:40:01-05:00

Thanks, Mary and Patrick.

I am headed out of town for the next two weeks, so if the TOYR info gets collated, can you please share with Joshua Rose and Steve Berendzen?

For the science needs, we (Science Apps, Arctic Refuge and Refuges IM) plan to work with all divisions to build off the Resource Assessments from last year. We are envisioning a draft science plan with a scope of 1-10 years (exploration to possible development), taking into account the timing of important steps (seismic, exploratory drilling, development) and associated permits/regulatory processes to prioritize research needs and thus investments. I am happy to help with the polar bear team in any way I can, such as helping convene the relevant subject matter experts that you identify, as sometimes that just takes time and if you want to bring in any outside perspectives, we can help with scheduling, planning, etc.. Greg of course sees polar bear information needs as our highest priority, and we'll want the region to understand what's ahead and work together to get as much off the ground as we can. With the Draft EIS and EA reviews likely starting in December and holidays, we're hoping to schedule 1-2 day workshops for the other resources of concern in late January to February. Hopefully that gets us where we need to be to get contracts and agreements in place with 2019 funding. BLM is excited about this as having value for NPRA as well.

Ok, I will check back in when I return.

Happy Thanksgiving,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

From: Colligan, Mary <mary_colligan@fws.gov>
Sent: Wednesday, November 14, 2018 1:46 PM
To: Wendy Loya <wendy_loya@fws.gov>
Cc: Patrick Lemons <patrick_lemons@fws.gov>
Subject: Polar Bear Follow Up

Wendy - I talked with Patrick and he would like to be the POC for the Science Needs Prioritization exercise. He is going to work with his staff to get you TOYR information for polar bears and 1002.

Thanks

--

Mary Colligan
Assistant Regional Director
Fisheries and Ecological Services
U.S. Fish and Wildlife Service, Alaska Region
1011 E. Tudor Road, MS-361
Anchorage, AK 99503
907-786-3505
cell: 907-223-5945

To: Nichelle Jones[njones@blm.gov]
Cc: Wendy Loya[wendy_loya@fws.gov]; Joanna Fox[joanna_fox@fws.gov]; Rose, Joshua[joshua_rose@fws.gov]; Robert Brumbaugh[rbrumbau@blm.gov]; Rice, Stephanie[srice@blm.gov]
From: LaMarr, Sarah
Sent: 2018-11-19T18:13:00-05:00
Importance: Normal
Subject: Re: Cancellation of Seismic EA Meeting Today
Received: 2018-11-19T18:13:19-05:00

Shelly is out this week and we don't have any updates on our end (still waiting for approval to post EA) so I propose cancelling the seismic EA meeting this week. But, if other folks have updates and think we should meet, let me know! Thanks!

Sarah La Marr
Bureau of Land Management
Arctic District Office
Fairbanks, Alaska
907-474-2334 (desk)
907-888-3407 (cell)
slamarr@blm.gov

On Tue, Nov 13, 2018 at 9:38 AM Jones, Nichelle (Shelly) <njones@blm.gov> wrote:

Shelly Jones
Acting Manager
Arctic District Office
222 University Avenue
Fairbanks, AK 99709

(907) 474-2310 (w)
(907) 460 0086 (c)

To: Steve Berendzen[steve_berendzen@fws.gov]
Cc: John Trawicki[john_trawicki@fws.gov]; Eric Taylor[eric_taylor@fws.gov]; Fox, Joanna[joanna_fox@fws.gov]; Mary Colligan[mary_colligan@fws.gov]; Stephanie Brady[stephanie_brady@fws.gov]; Damberg, Doug[doug_damberg@fws.gov]; Sarah Conn[sarah_conn@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Kenneth Stahlnecker[kenneth_stahlnecker@fws.gov]; Paul Leonard[paul_leonard@fws.gov]; Socheata Lor[socheata_lor@fws.gov]; Wendy Loya[wendy_loya@fws.gov]
From: Crane, Drew
Sent: 2018-11-20T19:27:58-05:00
Importance: Normal
Subject: Re: Coastal Plain POC Meeting for Tomorrow?
Received: 2018-11-20T19:28:14-05:00

Hi Steve,
I don't have any pressing issues to discuss with the group, but will be in if we decide to have a meeting. I know several of the folks on this email are on leave this week.

Thanks

Drew Crane
Regional Endangered Species Coordinator
Alaska Region
U.S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, AK 99503
907-786-3323

On Tue, Nov 20, 2018 at 1:31 PM Berendzen, Steve <steve_berendzen@fws.gov> wrote:

Greetings, I'm requesting feedback as to whether anyone has significant information to justify a POC meeting tomorrow? If so, please let me know so we can schedule. I expect we'll miss a lot of folks if it's scheduled for the normal 1:00 meeting time, so we should consider a morning meeting if we decide to have one.

Steve Berendzen
Refuge Manager, Arctic National Wildlife Refuge
907 456 0253

To: Kuletz, Kathy[kathy_kuletz@fws.gov]
Cc: Eric Taylor[eric_taylor@fws.gov]; Karen Murphy[karen_a_murphy@fws.gov]; Andrea Medeiros[andrea_medeiros@fws.gov]
From: Wendy Loya
Sent: 2018-11-29T13:17:50-05:00
Importance: Normal
Subject: Re: Updated invitation with note: 1002 Coastal Plain Coordination Biweekly Meeting (This w... @ Thu Nov 29, 2018 9am - 10am (AKST) (eric_taylor@fws.gov)
Received: 2018-11-29T13:45:36-05:00

It looks like Lucille cancelled it this am as both Greg and Karen are out of town, as am I. I don't believe we had any updates.

Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

On Nov 29, 2018, at 11:13, Kuletz, Kathy <kathy_kuletz@fws.gov> wrote:

I was asked by Eric to attend this meeting today both Rick Lancot and I went to the OSM boardroom and no one was there, nor was the room reserved for a meeting. We also tried to call in no luck. Was the meeting changed or cancelled?

Thanks
Kathy

On Sat, Nov 24, 2018 at 8:30 AM Taylor, Eric <eric_taylor@fws.gov> wrote:

Hi Kathy

Please represent MBM at this meeting as I will be flying home that day. Thank you.

Eric

----- Forwarded message -----

From: **Lucille Frerich** <lucille_frerich@fws.gov>

Date: Fri, Nov 16, 2018 at 3:05 PM

Subject: Updated invitation with note: 1002 Coastal Plain Coordination Biweekly Meeting (This w... @ Thu Nov 29, 2018 9am - 10am (AKST) (eric_taylor@fws.gov)

To: <eric_taylor@fws.gov>, <joanna_fox@fws.gov>, <karen_a_murphy@fws.gov>, <amee_howard@fws.gov>, <karen_clark@fws.gov>, <patrick_lemons@fws.gov>, <kenneth_stahlnecker@fws.gov>, <mary_colligan@fws.gov>, <andrea_medeiros@fws.gov>, <socheata_lor@fws.gov>, <carl_johnson@fws.gov>, <jenifer_kohout@fws.gov>, <stephanie_brady@fws.gov>,

<drew_crane@fws.gov>, <sarah_conn@fws.gov>, <mitch_ellis@fws.gov>,
<doug_damberg@fws.gov>, <bud_cribley@fws.gov>,
<wendy_loya@fws.gov>, <sara_boario@fws.gov>, <joshua_rose@fws.gov>,
<steve_berendzen@fws.gov>, <greg_siekaniec@fws.gov>,
<john_trawicki@fws.gov>, Santos, Lynne <lynne_santos@fws.gov>

This event has been changed with this note:

"This week's meeting will take place in the OSM Board Room"

[more details »](#)

Changed: 1002 Coastal Plain Coordination Biweekly Meeting (This week only in OSM Board Room) Call in: (b) (5) CIP or 877-953-4720

Participant: (b) (5) CIP

When Thu Nov 29, 2018 9am – 10am Alaska Time - Anchorage

Where **Changed:** FWS-FW7 OSM Board Room/Regional Office, FWS-FW7 OSM Board Room/Regional Office ([map](#))

Video call https://plus.google.com/hangouts/_/doi.gov/doi-gov-4ugntr6

Calendar eric_taylor@fws.gov

Who

- tauline_davis@fws.gov creator
- joanna_fox@fws.gov
- karen_a_murphy@fws.gov
- amee_howard@fws.gov
- karen_clark@fws.gov
- patrick_lemons@fws.gov
- kenneth_stahlnecker@fws.gov
- mary_colligan@fws.gov
- eric_taylor@fws.gov
- andrea_medeiros@fws.gov
- socheata_lor@fws.gov
- carl_johnson@fws.gov
- jenifer_kohout@fws.gov
- stephanie_brady@fws.gov
- drew_crane@fws.gov
- sarah_conn@fws.gov

- mitch_ellis@fws.gov
- doug_damberg@fws.gov
- bud_cribley@fws.gov
- wendy_loya@fws.gov
- sara_boario@fws.gov
- joshua_rose@fws.gov
- steve_berendzen@fws.gov
- greg_siekaniec@fws.gov
- john_trawicki@fws.gov
- Santos, Lynne

Going (eric_taylor@fws.gov)? **Yes - Maybe - No** [more options »](#)

Invitation from [Google Calendar](#)

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To stop receiving these emails, please log in to <https://www.google.com/calendar/> and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to modify your RSVP response. [Learn More](#).

--

Dr. Kathy Kuletz
U.S. Fish & Wildlife Service
1011 E. Tudor Rd.
Anchorage, Alaska 99503
Office ph: 907-786-3453
Cell ph: 907-830-5378
Email: kathy_kuletz@fws.gov

To: Kuletz, Kathy[kathy_kuletz@fws.gov]
Cc: Eric Taylor[eric_taylor@fws.gov]; Andrea Medeiros[andrea_medeiros@fws.gov]; Lucille Frerich[lucille_frerich@fws.gov]; Wendy Loya[wendy_loya@fws.gov]
From: Karen Murphy
Sent: 2018-11-29T13:17:51-05:00
Importance: Normal
Subject: Re: Updated invitation with note: 1002 Coastal Plain Coordination Biweekly Meeting (This w... @ Thu Nov 29, 2018 9am - 10am (AKST) (eric_taylor@fws.gov)
Received: 2018-11-29T13:26:09-05:00

Hi Kathy, yes the meeting was canceled. So sorry that you didn't get the cancellation message.

Sent from m

On Nov 29, 2018, at 9:13 AM, Kuletz, Kathy <kathy_kuletz@fws.gov> wrote:

I was asked by Eric to attend this meeting today both Rick Lancot and I went to the OSM boardroom and no one was there, nor was the room reserved for a meeting. We also tried to call in no luck. Was the meeting changed or cancelled?

Thanks
Kathy

On Sat, Nov 24, 2018 at 8:30 AM Taylor, Eric <eric_taylor@fws.gov> wrote:

Hi Kathy

Please represent MBM at this meeting as I will be flying home that day. Thank you.

Eric

----- Forwarded message -----

From: **Lucille Frerich** <lucille_frerich@fws.gov>

Date: Fri, Nov 16, 2018 at 3:05 PM

Subject: Updated invitation with note: 1002 Coastal Plain Coordination Biweekly Meeting (This w... @ Thu Nov 29, 2018 9am - 10am (AKST) (eric_taylor@fws.gov)

To: <eric_taylor@fws.gov>, <joanna_fox@fws.gov>, <karen_a_murphy@fws.gov>, <amee_howard@fws.gov>, <karen_clark@fws.gov>, <patrick_lemons@fws.gov>, <kenneth_stahlnecker@fws.gov>, <mary_colligan@fws.gov>, <andrea_medeiros@fws.gov>, <socheata_lor@fws.gov>, <carl_johnson@fws.gov>, <jenifer_kohout@fws.gov>, <stephanie_brady@fws.gov>, <drew_crane@fws.gov>, <sarah_conn@fws.gov>, <mitch_ellis@fws.gov>, <doug_damberg@fws.gov>, <bud_cribley@fws.gov>, <wendy_loya@fws.gov>, <sara_boario@fws.gov>, <joshua_rose@fws.gov>, <steve_berendzen@fws.gov>, <greg_siekaniec@fws.gov>, <john_trawicki@fws.gov>, Santos, Lynne <lynne_santos@fws.gov>

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Changed: 1002 Coastal Plain Coordination Biweekly Meeting (This week only in OSM Board Room) Call in: (b) (5) CIP or 877-953-4720

Participant: (b) (5) CIP

When Thu Nov 29, 2018 9am – 10am Alaska Time - Anchorage

Where **Changed:** FWS-FW7 OSM Board Room/Regional Office, FWS-FW7 OSM Board Room/Regional Office ([map](#))

Video call https://plus.google.com/hangouts/_/doi.gov/doi-gov-4ugntr6

Calendar eric_taylor@fws.gov

Who . tauline_davis@fws.gov creator

. joanna_fox@fws.gov

. karen_a_murphy@fws.gov

. amee_howard@fws.gov

. karen_clark@fws.gov

. patrick_lemons@fws.gov

. kenneth_stahlnecker@fws.gov

. mary_colligan@fws.gov

. eric_taylor@fws.gov

. andrea_medeiros@fws.gov

. socheata_lor@fws.gov

. carl_johnson@fws.gov

. jenifer_kohout@fws.gov

. stephanie_brady@fws.gov

. drew_crane@fws.gov

. sarah_conn@fws.gov

. mitch_ellis@fws.gov

. doug_damberg@fws.gov

. bud_cribley@fws.gov

. wendy_loya@fws.gov

- sara_boario@fws.gov
- joshua_rose@fws.gov
- steve_berendzen@fws.gov
- greg_siekaniec@fws.gov
- john_trawicki@fws.gov
- Santos, Lynne

Going (eric_taylor@fws.gov)? **Yes - Maybe - No** [more options »](#)

Invitation from [Google Calendar](#)

You are receiving this email at the account eric_taylor@fws.gov because you are subscribed for updated invitations on calendar eric_taylor@fws.gov.

To stop receiving these emails, please log in to <https://www.google.com/calendar/> and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to modify your RSVP response. [Learn More](#).

--

Dr. Kathy Kuletz
U.S. Fish & Wildlife Service
1011 E. Tudor Rd.
Anchorage, Alaska 99503
Office ph: 907-786-3453
Cell ph: 907-830-5378
Email: kathy_kuletz@fws.gov

To: Wendy Loya[wendy_loya@fws.gov]
From: Kahn, Lynnda
Sent: 2018-11-30T12:24:53-05:00
Importance: Normal
Subject: Re: Info to prepare for Arctic Refuge Coastal Plain EIS and Seismic EA reviews
Received: 2018-11-30T14:22:18-05:00

Hi Wendy, I am on leave from Dec 7 - Jan 2. It's unfortunate that this is becoming the 'norm', waiting to publish until December, knowing full well that many people take leave during this timeframe. BUT, we always seem to prevail, although comments may not be as thorough as they would otherwise. Any way, I just wanted to let you know my schedule and will hopefully be available on Dec 5th for teleconference, for what it's worth. I already have something scheduled out of the office from 1 - 2:45 on the 5th but am around that morning.

Hope you had a nice Thanksgiving.

LYNNDA KAHN

Fish and Wildlife Biologist
Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service
P.O. Box 2139 | Soldotna, AK
907.260.2818 - Office

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On Thu, Nov 15, 2018 at 3:26 PM Wendy Loya <wendy_loya@fws.gov> wrote:

Dear 1002 Interdisciplinary Team,

I wanted to touch-base on the approach we plan to take for the FWS comments for the Arctic Refuge Coastal Plain Draft EIS (DEIS) and Draft Seismic EA when released for public review. The earliest we are likely to see either the DEIS or Seismic EA is early December, and things could get busy if they come out simultaneously and we head into the Christmas/New Year's holidays.

In our review of the publicly available DEIS and Draft EA, we will focus on the potential implications of the alternatives with regards to all 5 purposes of the Refuge and other management designations, based on our authorities for the subjects we raised in our scoping letter (attached). I anticipate our comments will largely make the case for support for the Stipulations, Required Operating Procedures (ROPs; term used in DEIS) and Best Management Practices (BMPs, term used in the Draft Seismic EA) that we helped craft last summer, and suggestions on how to further improve any of those elements of the plans. Our reviews will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a "fatal flaw" in how the DEIS or Draft EA portrays or analyzes information about the resources we have expertise. Your reviews should be

short narratives. I am attaching a copy of the recent FWS comments on the Nanushuk DEIS and our comments from the 2012 NPRA DEIS/IAP as examples.

For the review, we will try to adhere to the following timeline during the expected 45-day (6 week) comment period for the DEIS:

- ☐ **Week 1-2:** Subject Matter Experts (you!) review DEIS with focus on Stipulations and ROPs related to your expertise. Please provide written comments about how the Stipulations and ROPs may or may not protect FWS trust resources, in the context of our authorities such as Refuge purposes, regulatory guidelines and/or other management directives/authorities. If there are additional comments you feel could help inform the selection of the Preferred Alternative for the Final EIS, those may also be provided at this time.
 - A teleconference will be scheduled to go over the scope of our comments and answer questions on December 5th at 1pm;
 - Comments shall be submitted to Wendy Loya for collation, due date determined once DEIS is released.
- ☐ **Week 2-4:** Wendy and the POCs (Drew, John, Steve, and Joanna (depending on availability)) edit draft letter, working with subject matter experts to refine key points;
- ☐ **Weeks 4-6:** Draft letter goes through review by 1002 ARDs (1 week) and on to Regional Directors' office for review (1 week); Subject Matter Experts provide supplemental info for briefings to HQ if necessary.

BLM will be holding public meetings for the DEIS in Kaktovik, Arctic Village, Venetie, Fort Yukon, Utqiagvik, Fairbanks, Anchorage and DC. The format is anticipated to be "open house" style, and FWS may be able to send 1-3 people to participate; Steve Berendzen will help coordinate between FWS and BLM if/as those opportunities arise. Public meetings can start 2 weeks after the release of the DEIS.

For the Draft Seismic EA, we'll likely be on a compressed timeline of 30 days. If so, we will attempt to follow this schedule:

- ☐ **Week 1:** Subject Matter Experts (you!) review Draft EA (It is much shorter than the DEIS) with focus on BMPs related to your expertise. Please provide written comments about how the BMPs may or may not protect FWS trust resources, in the context of our authorities such as Refuge purposes, regulatory guidelines and/or other management directives/authorities. If there are additional comments you feel could help inform the selection of the

Preferred Alternative for the Final Seismic EA, those may also be provided at this time.

- We'll talk about both the DEIS and EA on a teleconference on December 5th at 1pm;
- Comments shall be submitted to Wendy Loya for collation, due date determined once Draft EA is released.
- **Week 2+:** Wendy and the POCs edit draft letter, working with subject matter experts to refine key points;
- **Weeks 3-4:** Draft letter goes through review by 1002 ARDs (1 week) and on to Regional Directors' office for review (1 week)

I look forward to working with you again on these important documents. I will be out of the office Nov 16-29th, and will answer any questions when I return.

Thank you, and Happy Thanksgiving!

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

To: Paul Leonard[paul_leonard@fws.gov]
Cc: Wendy Loya[wendy_loya@fws.gov]
From: LaMarr, Sarah
Sent: 2018-12-04T17:10:56-05:00
Importance: Normal
Subject: Re: Science-Management Discussion with FWS
Received: 2018-12-04T17:11:13-05:00

Hi Paul - thanks so much for reaching out again and I apologize for not responding to your original request. This sounds like a great opportunity for both FWS and BLM staff. Late January or early February would be a good time for the meeting to happen. If you'd like to suggest a date, we can get it on our calendar. It will also be a good time to discuss the agreement and any potential monitoring or research that could be done through the agreement. Thanks so much and, again, I apologize for the delay!

Sarah La Marr
Bureau of Land Management
Arctic District Office
Fairbanks, Alaska
907-474-2334 (desk)
406-565-3567 (cell)
slamarr@blm.gov

On Tue, Dec 4, 2018 at 10:40 AM Leonard, Paul <paul_leonard@fws.gov> wrote:

Hi Sarah,
I know you guys have been swamped over at BLM but I was curious if you've had an opportunity to consider this request and if you have any feedback about pulling this together?

Thanks for your consideration!

Also, feel free to give me a buzz if that is more convenient for you (456-0445) or we could set up a time to discuss.

Cheers,
Paul

On Thu, Nov 15, 2018 at 3:03 PM Leonard, Paul <paul_leonard@fws.gov> wrote:

Hi Sarah,
Over the last few weeks we have been discussing the possibility of getting together with a few key BLM staff (resource specialists) to have a single day meeting at BLM (targeted for late Januaray - early Feb) that could address upcoming management challenges, questions, and science needs.

The focus would be for us (FWS staff) to sit down with BLM and tease out the management

decision points over the next few years. It doesn't need to focus exclusively on the arctic refuge but I think that would be a good place to start. We would like to work with you guys to identify data/science needs that might help inform some of these decision points. We'd also like to hear from BLM about what is working and what is not in regards to stips/rops and or identify if there are opportunities to better examine/understand their effectiveness. In addition, we'd like to get a handle on what data industry typically collects and for what purposes? Ultimately, we would like to use this type of information in a science planning and prioritization process that we are starting.

Wendy and I briefly spoke with Matthew Whitman about this and he liked the idea of using targeted small groups (focused on specific disciplines/themes) to have a free-flowing discussion about how we can work together to achieve the management objectives we all seek. Some of our topics of concern are already being addressed by loosely coordinated groups (e.g., Polar Bears, Snow & Climate) but others need a bit of work to take shape and help get jump started. Regardless, we'd like BLM to play a key role in helping us get a handle on the decision space for some of these groups and we think a meeting might be the best way to start.

Some of our early ideas for issues/groups are focused around:

- Water Resources & Fish
- Vegetation /Soils / Permafrost
- Caribou / Other Mammals
- Paleontological Resources

We welcome your feedback and ideas in regards to identifying key people and for putting a meeting like this together sooner rather than later. If you'd like to schedule a call to discuss or have other suggestions on how to move forward, we'd really appreciate it. Also, I'm attaching a full list of issues we've identified if you have thoughts about omissions or prioritization from BLMs perspective.

Cheers,
Paul

--

Paul Leonard, PhD
Science Coordinator

Arctic LCC

101 12th Ave. Room 216
Fairbanks, AK 99701
(907) 456-0445

--

Paul Leonard, PhD

Science Coordinator

Arctic LCC

101 12th Ave. Room 216

Fairbanks, AK 99701

(907) 456-0445

To: john_trawicki@fws.gov[john_trawicki@fws.gov]
From: Wendy Loya
Sent: 2018-12-06T17:28:21-05:00
Importance: Normal
Subject: Fwd: Cooperator coordination meeting
Received: 2018-12-06T17:28:27-05:00

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

Begin forwarded message:

From: "Rose, Joshua" <joshua_rose@fws.gov>
Date: December 3, 2018 at 15:45:13 AKST
To: Aaron Wells <awells@abrinc.com>, Andy Robertson <aroberts@smumn.edu>, Angela Matz <angela_matz@fws.gov>, Brian Urich-Koch <buher-koch@usgs.gov>, Christopher Latty <christopher_latty@fws.gov>, David Houseknecht <dhouse@usgs.gov>, David Wigglesworth <david_wigglesworth@fws.gov>, Frank Urban <furban@usgs.gov>, John Pearce <jpearce@usgs.gov>, Joshua Koch <jkoch@usgs.gov>, Matt Macander <mmacander@abrinc.com>, Michael Carey <mcarey@usgs.gov>, Randy Brown <randy_j_brown@fws.gov>, Stephen Arthur <stephen_arthur@fws.gov>, Todd Atwood <tatwood@usgs.gov>, Vanessa von Biela <vvonbiela@usgs.gov>
Cc: Steve Berendzen <Steve_Berendzen@fws.gov>, "Fox, Joanna" <joanna_fox@fws.gov>, "Leonard, Paul" <paul_leonard@fws.gov>, Wendy Loya <wendy_loya@fws.gov>
Subject: Cooperator coordination meeting

Everyone,
With the earthquake last week many folks do not have access to email or are dealing with cleanup. To ease the workload on those affected and ensure as many folks as possible can attend I am rescheduling the meeting for the week of December 17th. I apologize to those who have already completed the poll but everyone will need to go back in and complete the new poll.
<https://doodle.com/poll/uygmpqpifhwpxtv5>

I thank everyone for their patience and flexibility.
Josh
--
Joshua Rose

Acting Oil and Gas Coordinator
Arctic National Wildlife Refuge
101 12th Ave., Rm 236
Fairbanks, AK 99701
phone: (907) 456-0409

To: Wendy Loya[wendy_loya@fws.gov]
From: Murphy, Karen
Sent: 2018-12-06T17:54:29-05:00
Importance: Normal
Subject: Fwd: Polar Bear and 1002
Received: 2018-12-06T17:54:46-05:00
Polar Bear Research related to the 1002 Area.docx
Polar Bear Study Needs for 1002 - 181130 v5.docx

Here's what Mary sent to Greg.

Karen A Murphy
Science Applications
907-786-3501
karen_a_murphy@fws.gov

----- Forwarded message -----

From: **Colligan, Mary** <mary_colligan@fws.gov>
Date: Fri, Nov 30, 2018 at 6:09 PM
Subject: Polar Bear and 1002
To: Gregory Siekaniec <greg_siekaniec@fws.gov>, Karen Clark <karen_clark@fws.gov>
Cc: Patrick Lemons <patrick_lemons@fws.gov>, Karen A Murphy
<karen_a_murphy@fws.gov>, Socheata Lor <socheata_lor@fws.gov>

Greg & Karen I have attached an updated polar bear study needs document jointly drafted by MMM and USGS (Polar Bear Study Needs for 1002). This identifies the key information needs and associated studies needed to inform the upcoming SBS ITRs. The second document attached (Polar Bear Research related to the 1002 Area) identifies the key work that is planned or underway this winter.

We have a meeting set up for Thursday to talk about these and the other priority research needs across the subject areas.

Finally, we did receive an updated Plan of Operations from SAE today. I have not had a chance to review it yet or compare notes with Christopher and others, given the eventful day we have had here in Anchorage. We expect, but will verify, that this Plan of Operations is consistent with the proposal that Ryan analyzed and will allow us to make determinations. Christopher and his team have been working to compile all of the components of the ITRs that they could, while waiting for SAE to settle on a proposed plan and to provide the additional details.

Patrick's folks are working under a schedule of having 2 weeks to compile the ITR, EA and associated documents in 2 weeks from receiving the application from SAE. It sounds like Josh Kindred is planning to brief the Deputy Secretary on Friday December 14th on the ITR and to use that briefing to seek approval so that it can move immediately to the FR. Since we just received the application today, that will be a very tight timeline.

We will be able to provide an update early next week on our read of the revised Plan of Operation.

Thanks and I hope you made it home safely!

Mary

--

Mary Colligan
Assistant Regional Director

0000010582

Fisheries and Ecological Services
U.S. Fish and Wildlife Service, Alaska Region
1011 E. Tudor Road, MS-361
Anchorage, AK 99503
907-786-3505
cell: 907-223-5945

To: Wendy Loya[wendy_loya@fws.gov]
From: Murphy, Karen
Sent: 2018-12-06T17:56:02-05:00
Importance: Normal
Subject: Fwd: Snow Status Summary
Received: 2018-12-06T17:56:20-05:00
Snow Status Summary.docx

Here's what Paul pulled together.

Karen A Murphy
Science Applications
907-786-3501
karen_a_murphy@fws.gov

----- Forwarded message -----

From: **Leonard, Paul** <paul_leonard@fws.gov>
Date: Fri, Nov 30, 2018 at 3:02 PM
Subject: Snow Status Summary
To: Karen Murphy <karen_a_murphy@fws.gov>

Hi Karen,
I was a bit unclear how much detail you were looking for but here is a status update.

Cheers,
Paul

--

Paul Leonard, PhD
Science Coordinator
Arctic LCC
101 12th Ave. Room 216
Fairbanks, AK 99701
(907) 456-0445

To: Angela Matz[angela_matz@fws.gov]; Bill Leacock[william_leacock@fws.gov]; Carl Johnson[carl_johnson@fws.gov]; Catherine Collins[catherine_collins@fws.gov]; Christopher Latty[christopher_latty@fws.gov]; Christopher Putnam[christopher_putnam@fws.gov]; Doug Damberg[doug_damberg@fws.gov]; Edward Decleva[edward_decleva@fws.gov]; Jennifer Reed[jennifer_reed@fws.gov]; Joanna Fox[joanna_fox@fws.gov]; John Trawicki[john_trawicki@fws.gov]; Joshua Ream[joshua_ream@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Karen Murphy[karen_a_murphy@fws.gov]; Lynnda Kahn[lynnda_kahn@fws.gov]; Mary Colligan[mary_colligan@fws.gov]; Patrick O'Dell[patrick_odell@fws.gov]; Paul Leonard[paul_leonard@fws.gov]; Randy Brown[randy_j_brown@fws.gov]; Roger Kaye[roger_kaye@fws.gov]; Ryan Wilson[ryan_r_wilson@fws.gov]; Sara Boario[sara_boario@fws.gov]; Sarah Conn[sarah_conn@fws.gov]; Socheata Lor[socheata_lor@fws.gov]; Stephanie Brady[stephanie_brady@fws.gov]; Stephen Arthur[stephen_arthur@fws.gov]; Steve Berendzen[steve_berendzen@fws.gov]; Tim Allen[tim_allen@fws.gov]
Cc: Greg Siekaniec[greg_siekaniec@fws.gov]; Karen Clark[karen_clark@fws.gov]
From: Wendy Loya
Sent: 2018-12-06T19:51:46-05:00
Importance: Normal
Subject: No update on Public release of Draft EIS and EA
Received: 2018-12-06T19:51:52-05:00

Hi Everyone,

With the earthquake and passing of former President Bush, our operations here in Anchorage were on hiatus until today. I expected to come back from a trip in the Grand Canyon and hit the ground running with you all to review the Coastal Plain Draft EIS or EA, but they aren't out and we don't have any updates at this time. It seems like the earliest possible that either could come out would be the week of Dec 17th; when we know or it happens, we'll figure out a pathway forward that accommodates the holidays at the end of December.

I'll be in touch as soon as we hear more.

Best regards,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

From: Wendy Loya <wendy_loya@fws.gov>
Sent: Thursday, November 15, 2018 3:26 PM
To: 'Angela Matz' <angela_matz@fws.gov>; 'Bill Leacock' <william_leacock@fws.gov>; 'Carl Johnson' <carl_johnson@fws.gov>; 'Catherine Collins' <catherine_collins@fws.gov>; 'Christopher Latty' <christopher_latty@fws.gov>; 'Christopher Putnam' <christopher_putnam@fws.gov>; 'Doug Damberg' <doug_damberg@fws.gov>; 'Edward Decleva' <edward_decleva@fws.gov>; 'Jennifer Reed' <jennifer_reed@fws.gov>; 'Joanna Fox' <joanna_fox@fws.gov>; 'John Trawicki' <john_trawicki@fws.gov>; 'Joshua Ream' <joshua_ream@fws.gov>; 'Joshua Rose' <joshua_rose@fws.gov>; 'Karen Murphy' <karen_a_murphy@fws.gov>; 'Lynnda Kahn' <lynnda_kahn@fws.gov>; 'Mary Colligan' <mary_colligan@fws.gov>; 'Patrick O'Dell'

<patrick_odell@fws.gov>; 'Paul Leonard' <paul_leonard@fws.gov>; 'Randy Brown' <randy_j_brown@fws.gov>; 'Roger Kaye' <roger_kaye@fws.gov>; 'Ryan Wilson' <ryan_r_wilson@fws.gov>; 'Sara Boario' <sara_boario@fws.gov>; 'Sarah Conn' <sarah_conn@fws.gov>; 'Socheata Lor' <socheata_lor@fws.gov>; 'Stephanie Brady' <stephanie_brady@fws.gov>; 'Stephen Arthur' <stephen_arthur@fws.gov>; 'Steve Berendzen' <steve_berendzen@fws.gov>; 'Tim Allen' <tim_allen@fws.gov>

Cc: Greg Siekaniec <greg_siekaniec@fws.gov>; Karen Clark <karen_clark@fws.gov>

Subject: Info to prepare for Arctic Refuge Coastal Plain EIS and Seismic EA reviews

Dear 1002 Interdisciplinary Team,

I wanted to touch-base on the approach we plan to take for the FWS comments for the Arctic Refuge Coastal Plain Draft EIS (DEIS) and Draft Seismic EA when released for public review. The earliest we are likely to see either the DEIS or Seismic EA is early December, and things could get busy if they come out simultaneously and we head into the Christmas/New Year's holidays.

In our review of the publicly available DEIS and Draft EA, we will focus on the potential implications of the alternatives with regards to all 5 purposes of the Refuge and other management designations, based on our authorities for the subjects we raised in our scoping letter (attached). I anticipate our comments will largely make the case for support for the Stipulations, Required Operating Procedures (ROPs; term used in DEIS) and Best Management Practices (BMPs, term used in the Draft Seismic EA) that we helped craft last summer, and suggestions on how to further improve any of those elements of the plans. Our reviews will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a "fatal flaw" in how the DEIS or Draft EA portrays or analyzes information about the resources we have expertise. Your reviews should be short narratives. I am attaching a copy of the recent FWS comments on the Nanushuk DEIS and our comments from the 2012 NPRA DEIS/IAP as examples.

For the review, we will try to adhere to the following timeline during the expected 45-day (6 week) comment period for the DEIS:

- ☐ **Week 1-2:** Subject Matter Experts (you!) review DEIS with focus on Stipulations and ROPs related to your expertise. Please provide written comments about how the Stipulations and ROPs may or may not protect FWS trust resources, in the context of our authorities such as Refuge purposes, regulatory guidelines and/or other management directives/authorities. If there are additional comments you feel could help inform the selection of the Preferred Alternative for the Final EIS, those may also be provided at this time.
 - A teleconference will be scheduled to go over the scope of our comments and answer questions on December 5th at 1pm;
 - Comments shall be submitted to Wendy Loya for collation, due date determined once DEIS is released.
- ☐ **Week 2-4:** Wendy and the POCs (Drew, John, Steve, and Joanna (depending on availability)) edit draft letter, working with subject matter experts to refine key points;
- ☐ **Weeks 4-6:** Draft letter goes through review by 1002 ARDs (1 week) and on to Regional Directors' office for review (1 week); Subject Matter Experts provide supplemental info for briefings to HQ if necessary.

BLM will be holding public meetings for the DEIS in Kaktovik, Arctic Village, Venetie, Fort Yukon, Utqiagvik, Fairbanks, Anchorage and DC. The format is anticipated to be “open house” style, and FWS may be able to send 1-3 people to participate; Steve Berendzen will help coordinate between FWS and BLM if/as those opportunities arise. Public meetings can start 2 weeks after the release of the DEIS.

For the Draft Seismic EA, we’ll likely be on a compressed timeline of 30 days. If so, we will attempt to follow this schedule:

- ☐ **Week 1:** Subject Matter Experts (you!) review Draft EA (It is much shorter than the DEIS) with focus on BMPs related to your expertise. Please provide written comments about how the BMPs may or may not protect FWS trust resources, in the context of our authorities such as Refuge purposes, regulatory guidelines and/or other management directives/authorities. If there are additional comments you feel could help inform the selection of the Preferred Alternative for the Final Seismic EA, those may also be provided at this time.
 - We’ll talk about both the DEIS and EA on a teleconference on December 5th at 1pm;
 - Comments shall be submitted to Wendy Loya for collation, due date determined once Draft EA is released.
- ☐ **Week 2+:** Wendy and the POCs edit draft letter, working with subject matter experts to refine key points;
- ☐ **Weeks 3-4:** Draft letter goes through review by 1002 ARDs (1 week) and on to Regional Directors’ office for review (1 week)

I look forward to working with you again on these important documents. I will be out of the office Nov 16-29th, and will answer any questions when I return.

Thank you, and Happy Thanksgiving!
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

To: Paul Leonard[paul_leonard@fws.gov]
From: Wendy Loya
Sent: 2018-12-07T16:03:01-05:00
Importance: Normal
Subject: Have a look
Received: 2018-12-07T16:03:19-05:00
[Snow Monitoring on Coastal Plain Update 120718.docx](#)

And let me know if this is an adequate overview ☺ Edit as you like.

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

To: Wendy Loya[wendy_loya@fws.gov]
From: Leonard, Paul
Sent: 2018-12-07T16:50:48-05:00
Importance: Normal
Subject: Re: Have a look
Received: 2018-12-07T16:51:23-05:00
Snow Monitoring on Coastal Plain Update 120718_pbl.docx

I think its adequate. Just a few small edits.

The first big bullet could play out in difference scenarios I just sent you but you hit all the major points (we may need some BLM and Refuge assistance withe personnel)

On Fri, Dec 7, 2018 at 12:03 PM Wendy Loya <wendy_loya@fws.gov> wrote:

And let me know if this is an adequate overview ☺ Edit as you like.

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

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--

Paul Leonard, PhD
Science Coordinator
Arctic LCC
101 12th Ave. Room 216
Fairbanks, AK 99701
(907) 456-0445

To: Berendzen, Steve[steve_berendzen@fws.gov]; John Trawicki[John_Trawicki@fws.gov]; Wendy Loya[wendy_loya@fws.gov]; Doug Damberg[doug_damberg@fws.gov]; Ken Stahlnecker[kenneth_stahlnecker@fws.gov]
From: Lor, Socheata
Sent: 2018-12-11T17:37:12-05:00
Importance: Normal
Subject: Fwd: [EXTERNAL] IUCN intervention letter on seismic exploration in ANWR
Received: 2018-12-11T17:37:47-05:00
Let Hon Ryan Zinke US-2018-12-06.pdf

FYI.

Soch

~~~~~

*Socheata Lor, Ph.D.  
Deputy Assistant Regional Director Region 7  
National Wildlife Refuge System  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
Office: 907.786.3420  
Cell: 907.891.6194*

~~~~~

----- Forwarded message -----

From: Siekaniec, Greg <greg_siekaniec@fws.gov>
Date: Tue, Dec 11, 2018 at 11:25 AM
Subject: Fwd: [EXTERNAL] IUCN intervention letter on seismic exploration in ANWR
To: Mary Colligan <mary_colligan@fws.gov>, Patrick Lemons <patrick_lemons@fws.gov>, Boario, Sara <sara_boario@fws.gov>, Lor, Socheata <socheata_lor@fws.gov>

FYI

----- Forwarded message -----

From: Williams, Margaret <margaret.williams@wwfus.org>
Date: Tue, Dec 11, 2018 at 11:11 AM
Subject: [EXTERNAL] IUCN intervention letter on seismic exploration in ANWR
To: Gregory Siekaniec@fws.gov <Gregory_Siekaniec@fws.gov>

To: Wendy Loya[wendy_loya@fws.gov]
From: Trawicki, John
Sent: 2018-12-12T19:27:45-05:00
Importance: Normal
Subject: Re: Time of Year Restrictions (TOYR)
Received: 2018-12-12T19:28:30-05:00

Meeting was good. The collective we need to put together a list of permits/restrictions/requirements for research projects within the 1002 area. This should have been part of requirements within an RFP, and built into the project proposal. Will need to work with PI's this year and be sure future RFP/projects understand that with all of the new activities occurring on the coastal plain there will be spatial and temporal and activity restrictions.

I will send a request to each POC and/or appropriate program to provide a necessary information for planning and conducting work on the coastal plain. Would like to have a draft ready for next Monday.s PI meeting.

john t

On Wed, Dec 12, 2018 at 3:12 PM Wendy Loya <wendy_loya@fws.gov> wrote:

Thanks!
Tried to call in at 1pm but didn't hear anything.

Dr. Wendy M. Loya
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On Dec 12, 2018, at 18:09, Trawicki, John <john_trawicki@fws.gov> wrote:

fyi-

----- Forwarded message -----

From: **Lemons, Patrick** <patrick_lemons@fws.gov>
Date: Wed, Dec 12, 2018 at 12:52 PM
Subject: Re: Time of Year Restrictions (TOYR)
To: James Wilder <james_wilder@fws.gov>
Cc: Christopher Putnam <Christopher_Putnam@fws.gov>, John Trawicki <john_trawicki@fws.gov>, Joshua Rose <joshua_rose@fws.gov>

Hi Jim,

We talked about this several week's ago but it's fallen through the cracks. Numerous folks are chomping at the bit to know when they can conduct their research activities within the 1002 Area and not have an MMPA take issue with polar bears. I spoke with Michelle and Ryan about this today, and for now, we are comfortable telling everyone that if they conduct their work between May 15th and August 1st, they are likely okay. There's still a chance for a take as defined under MMPA but it's a low probability. However, Ryan and Michelle both felt that we could probably be more temporally and spatially explicit if we had time to look at the telemetry and habitat use information. Ryan is pretty swamped with the 1002 ITR analysis so can you get on this ASAP on Friday when you are back in the office? I just spoke with John Trawicki and they are having a meeting Monday morning at 930am. It would be useful to have something by then. However, if that's not possible, can you give us all an update on when you think you could provide the information?

Let me know if you have questions. Also, please include everyone on this email in your response so we're all in the loop.

Thanks,
Patrick

On Sun, Nov 18, 2018 at 4:45 PM Patrick Lemons <patrick_lemons@fws.gov> wrote:

It's a wide and varying research plan that covers everything the Region is involved in and then some. Think of it as a "Best Management Practices" fact sheet. I've cc'd Putnam here as he has experiences with this kinda stuff and I should have included him the first time.
Timeline is ASAP as they're planning for next year and already doing work this year.

Patrick

Sent from my iPhone

On Nov 16, 2018, at 12:55 PM, Wilder, James <james_wilder@fws.gov> wrote:

Yes, that shouldn't be a problem.
When do they need this by?

Also, can she provide something that discusses the details/nature of the research they are contemplating, and the time of year it would take place?

On Fri, Nov 16, 2018 at 12:12 PM Lemons, Patrick <patrick_lemons@fws.gov> wrote:

Hi Jim,

Wendy Loya is putting together a list of research priorities for the 1002 Area for this coming year. One issue we ran into last year is that the projects do not have an authorization for incidental take of polar bears while conducting their research. This is for research that is not explicitly directed at polar bears and therefore not covered under a polar bear research permit. One way for them to avoid having to get MMPA take authorization is for them to avoid certain areas at certain times of year. Can the polar bear program put something together that would provide them guidance on avoiding take of polar bears based on TOYR so that we could provide this to them as guidance (i.e. no activity around Kaktovik and the barrier islands in Fall)?

Let me know what you think.

Patrick

--

Patrick Lemons, Ph.D.
Chief, Marine Mammals Management
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e-mail: patrick_lemons@fws.gov

--

James M. Wilder
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Office Phone: [\(907\) 786 3913](tel:9077863913)
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--

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--

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Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"
George Bernard Shaw

--

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Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"
George Bernard Shaw

To: Colligan, Mary[mary_colligan@fws.gov]
Cc: Wendy Loya[wendy_loya@fws.gov]; Drew Crane[drew_crane@fws.gov]; Eric Taylor[eric_taylor@fws.gov]; Joanna Fox[joanna_fox@fws.gov]; Socheata Lor[Socheata_Lor@fws.gov]; Sarah Conn[sarah_conn@fws.gov]; Patrick Lemons[pattick_lemons@fws.gov]
From: John Trawicki
Sent: 2018-12-15T21:36:39-05:00
Importance: Normal
Subject: Re: PI- Operational Needs
Received: 2018-12-15T21:36:46-05:00

Thank you

Sent from my iPhone

On Dec 15, 2018, at 10:41 AM, Colligan, Mary <mary_colligan@fws.gov> wrote:

John I know MMM is working to provide information, but Sarah Conn provided information from the Endangered Species Act perspective. Any project (inc. research) that would be permitted, authorized, or funded by a Federal agency (e.g., getting a Refuge permit) will need to be reviewed pursuant to section 7 of the ESA. If we have a basic project description (what work is occurring where, when and how) we can screen those and identify those that require closer review. If incidental take of a listed species is likely to occur, formal consultation under the Endangered Species Act would be required.

In general, the review process under the Marine Mammal Protection Act is quite similar. We would need to review the project description to determine the potential for incidental take of marine mammals. If incidental take is

likely to occur, then coverage for such take would need to be obtained.

We understand the conversation with PIs next week is a first step in alerting them to some of the requirements and we look forward to having more detailed discussions at the appropriate time to screen the projects and provide more specific recommendations.

Thanks

On Wed, Dec 12, 2018 at 4:26 PM Trawicki, John <john_trawicki@fws.gov> wrote:

POCs-

I am limiting the distribution of this to POC to minimize duplicate responses from a Program. It will be your responsibility to touch base with appropriate staff within your program and coordinate a response. **Please provide your responses to all POCs.**

With increased activities the Arctic Refuge needs to ensure disturbance to wildlife, habitat and refuge users minimized.

The request: A list of applicable laws/regulations, permits or stipulations researchers and other activities will need to follow on the coastal plain of the Arctic Refuge. Your response should include spatial and/or temporal

stipulations or requirements.

Due Date: **COB Friday, Dec. 14.** Josh is meeting with PI's Monday morning and information will facilitate his discussion.

Your response will be compiled with other program responses. The responses will assist the Service in working with PI's in a timely manner for activities this summer and will provide guidance for future RFPs and on the ground activities.

Thank you and I apologize for the short-turn around.

john t

--

John Trawicki
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"The single biggest problem with communication is the illusion that it has taken place"
George Bernard Shaw

--

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Anchorage, AK 99503
907-786-3505
cell: 907-223-5945

To: Joshua Rose[Joshua_Rose@fws.gov]
Cc: Wendy Loya[wendy_loya@fws.gov]
From: Trawicki, John
Sent: 2018-12-17T12:05:39-05:00
Importance: Normal
Subject: STIPS and BMPs
Received: 2018-12-17T12:06:27-05:00
DRAFT Activity Stips and BMPs 121418.docx

Josh-

I went through our draft stips and BMPs and pulled ones that may be relevant to summer work. Not ready to share with PI's, but you should look through them. And we can discuss later today or this week.

Some are actions the refuge will need to take, others may require the PI to do some work (invasive species).

--

John Trawicki
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Work: (907) 786-3474
Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"
George Bernard Shaw

To: Nichelle (Shelly) Jones[njones@blm.gov]
Cc: Wendy Loya[wendy_loya@fws.gov]
From: Leonard, Paul
Sent: 2018-12-17T18:04:25-05:00
Importance: Normal
Subject: snow monitoring conversation with SAE
Received: 2018-12-17T18:05:01-05:00

Hi Shelly,

I just wanted to follow up with you and see if you were able to get a meeting with SAE scheduled regarding snow monitoring?

Just to recap from our previous conversation: We'd like to engage in a conversation with other partners (e.g., Melissa & UAF) as well as SAE to help figure out site-specific conditions and monitoring plans for tundra travel inside the refuge. This agency-industry partnership would help advance science questions related to snow monitoring and tundra travel impacts. The second component on the conversation revolves around delineated physiographic regions within the refuge that might have different opening criteria similar to the state's.

Thanks so much!

Cheers,
Paul

On Mon, Dec 10, 2018 at 11:14 AM Jones, Nichelle (Shelly) <njones@blm.gov> wrote:

Sarah La Marr and I will be out of the office most of this week and Donna has a conflicting obligation on tuesday. I do not have any updates on whether we are closer to posting the EA for public comment. I will try to set up meeting to discuss the snow monitoring with SAE when I get back next week.

-Shelly

Shelly Jones
Acting Manager
Arctic District Office
222 University Avenue
Fairbanks, AK 99709

(907) 474-2310 (w)
(907) 460 0086 (c)

--

Paul Leonard, PhD
Science Coordinator
[Arctic LCC](#)
101 12th Ave. Room 216

Fairbanks, AK 99701
(907) 456-0445

To: Wendy Loya[wendy_loya@fws.gov]
Cc: Steve Berendzen[steve_berendzen@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Paul Leonard[paul_leonard@fws.gov]; Fox, Joanna[joanna_fox@fws.gov]; LaMarr, Sarah[slamarr@blm.gov]; Donna Wixon[dwixon@blm.gov]; Robert Brumbaugh[rbrumbau@blm.gov]
From: Jones, Nichelle (Shelly)
Sent: 2018-12-18T14:46:47-05:00
Importance: Normal
Subject: Re: Coastal Plain Seismic EA meeting today?
Received: 2018-12-18T14:47:34-05:00

Yes. We will be having our meeting at 3pm today and will use the phone bridge so you can call in. Some of the FWS people will be coming over at 2pm for the Coastal Plain Leasing EIS call.

Shelly Jones
Acting Manager
Arctic District Office
222 University Avenue
Fairbanks, AK 99709

(907) 474-2310 (w)
(907) 460 0086 (c)

On Tue, Dec 18, 2018 at 10:11 AM Wendy Loya <wendy_loya@fws.gov> wrote:

Hi Shelly,

Do you all have time to do a Seismic EA check-in today at 3pm? It would be good to talk about timeline scenarios given the holidays and to make plans for advancing the snow monitoring discussion.

Thanks!

Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

From: Jones, Nichelle (Shelly) <njones@blm.gov>
Sent: Monday, December 10, 2018 11:14 AM
To: Steve Berendzen <steve_berendzen@fws.gov>; Joshua Rose <joshua_rose@fws.gov>; Wendy Loya <wendy_loya@fws.gov>; Paul Leonard <paul_leonard@fws.gov>; Fox, Joanna <joanna_fox@fws.gov>; LaMarr, Sarah <slamarr@blm.gov>; Donna Wixon <dwixon@blm.gov>; Robert Brumbaugh <rbrumbau@blm.gov>
Subject: Canceling Coastal Plain Seismic EA Meeting Tomorrow Afternoon

Sarah La Marr and I will be out of the office most of this week and Donna has a conflicting obligation on tuesday. I do not have any updates on whether we are closer to posting the EA for public comment. I will try to set up meeting to discuss the snow monitoring with SAE when I get back next week.

-Shelly

Shelly Jones

Acting Manager

Arctic District Office

222 University Avenue

Fairbanks, AK 99709

(907) 474-2310 (w)

(907) 460 0086 (c)

From: wendy_loya@fws.gov
Location: BLM-AK FDO Arctic Conference Room, BLM-AK FDO Bridge 20 (b) (5) CIP
Passcode: (b) (5) CIP BLM-AK FDO Chandalar Conference Room
Importance: Normal
Subject: Invitation: Coastal Plain Seismic EA-Status Check @ Weekly from 3pm to 3:30pm on Tuesday (AKDT) (paul_leonard@fws.gov)
Start Date/Time: 2018-05-15T18:00:00-05:00
End Date/Time: 2018-05-15T18:30:00-05:00
[invite.ics](#)

[more details »](#)

Coastal Plain Seismic EA-Status Check

This is a standing meeting, so we can check in and discuss what is happening with the Seismic EA.

When	Weekly from 3pm to 3:30pm on Tuesday Alaska Time
Where	Anchorage BLM AK FDO Arctic Conference Room, BLM AK FDO Bridge 20 (b) (5) CIP Passcode (b) (5) CIP BLM AK FDO Chandalar Conference Room (map)
Calendar	paul_leonard@fws.gov
Who	

•
•

wendy_loya@fws.gov
paul_leonard@fws.gov

Going (paul_leonard@fws.gov)? All events in this series: [Yes](#) [Maybe](#) [No](#) [more options »](#)
Invitation from [Google Calendar](#)

You are receiving this email at the account paul_leonard@fws.gov because you are subscribed for invitations on calendar paul_leonard@fws.gov.

To stop receiving these emails, please log in to <https://www.google.com/calendar/> and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to modify your RSVP response. [Learn More.](#)

From: Google Calendar
Location: BLM-AK FDO Arctic Conference Room, BLM-AK FDO Bridge 20 (b) (5) CIP
Passcode: (b) (5) CIP BLM-AK FDO Chandalar Conference Room
Importance: Normal
Subject: Accepted: Coastal Plain Seismic EA-Status Check @ Tue Dec 18, 2018 3pm - 3:30pm (AKST) (wendy_loya@fws.gov)
Start Date/Time: 2018-12-18T19:00:00-05:00
End Date/Time: 2018-12-18T19:30:00-05:00
[invite.ics](#)

Paul Leonard has accepted this invitation.

Coastal Plain Seismic EA-Status Check

This is a standing meeting, so we can check in and discuss what is happening with the Seismic EA.

When

Tue Dec 18, 2018 3pm - 3:30pm Alaska Time

Anchorage

Where

BLM AK FDO Arctic Conference Room, BLM AK FDO
Bridge 20 (b) (5) CIP Passcode (b) (5) CIP BLM AK FDO
Chandalar Conference Room ([map](#))

Calendar

wendy_loya@fws.gov

Who

-
-

wendy_loya@fws.gov
paul_leonard@fws.gov

Invitation from [Google Calendar](#)

You are receiving this email at the account wendy_loya@fws.gov because you are subscribed for invitation replies on calendar wendy_loya@fws.gov.

To stop receiving these emails, please log in to <https://www.google.com/calendar/> and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to modify your RSVP response. [Learn More](#).

To: Paul Leonard[paul_leonard@fws.gov]
From: Wendy Loya
Sent: 2018-12-18T18:05:50-05:00
Importance: Normal
Subject: Meeting Proposal to BLM 121818.docx
Received: 2018-12-18T18:05:41-05:00
Meeting Proposal to BLM 121818.docx

I think this looks great! I suggested simplifying the 2nd paragraph, but feel free to change to your language. I think if you could call Sarah or talk to her this afternoon that would be ideal, but if not, then sending as an email would be good alternative.



To: John Trawicki[john_trawicki@fws.gov]; Doug Damberg[doug_damberg@fws.gov]; Kenneth Stahlnecker[kenneth_stahlnecker@fws.gov]; Drew Crane[drew_crane@fws.gov]; Steve Berendzen[steve_berendzen@fws.gov]; Socheata Lor[socheata_lor@fws.gov]; Sarah Conn[sarah_conn@fws.gov]; Paul Leonard[paul_leonard@fws.gov]; Joanna Fox[joanna_fox@fws.gov]; Mary Colligan[mary_colligan@fws.gov]; Stephanie Brady[stephanie_brady@fws.gov]
From: Wendy Loya
Sent: 2018-12-19T14:44:26-05:00
Importance: Normal
Subject: RE: Meeting Weds: FWS_Arctic Refuge_Weekly_POC_Updates
Received: 2018-12-19T14:44:34-05:00

Hi Everyone,

I got feedback that the VTC connection works better than the phone, so for today's 1pm meeting we will connect by Vidyo to Refuges Conference Room. I will also call in on the phone line for those that don't have vidyo.

As a heads up, I would like to propose that for the DEIS and Draft EA comments, that we have a meeting of the interdisciplinary team on January 2nd to "get started" rather than trying to get something on the schedule for tomorrow or Friday this week in anticipation of the documents being publically available by Friday. If I understand correctly, the official comment periods start when it is published in the Fed Reg, which would be next week. We likely have a lot of people on leave next week, and I don't want to ruin folks holidays asking them to start working on comments. If they are working and choose to get started, that would be fantastic, those experts can come on the 2nd informed with questions that will help us work efficiently. I'll draft what the calendars for 45 d and 30 d comment periods would look like with that approach. So, just a heads up so you all can provide feedback on which approach you and your staff might prefer.

Thanks, talk to you at 1pm,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
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907.227.2942 (mobile)

From: Berendzen, Steve <steve_berendzen@fws.gov>
Sent: Wednesday, December 19, 2018 9:57 AM
To: Wendy Loya <wendy_loya@fws.gov>
Cc: Joanna Fox <joanna_fox@fws.gov>; Joshua Rose <joshua_rose@fws.gov>; Paul Leonard <paul_leonard@fws.gov>
Subject: Re: Meeting Weds: FWS_Arctic Refuge_Weekly_POC_Updates

Wendy, we have a tough time understanding a lot of the conversations from your end when we meet by phone. The VTC seems to work a lot better - especially for some people, possibly because of their distance from the phone or the direction they are from it.

If you could line it up to conduct via VTC, I think that would improve our communications.

Steve Berendzen
Refuge Manager, Arctic National Wildlife Refuge
907-456-0253

On Tue, Dec 18, 2018 at 3:55 PM Wendy Loya <wendy_loya@fws.gov> wrote:

Hi Everyone,

The DEIS and Seismic EA are moving forward, let's touch base tomorrow at 1pm by phone.

(b) (5) CIP [REDACTED] passcode: (b) (5) CIP [REDACTED]

- ☐ DEIS and Draft EA comment preparation
 - Proposed 1002 team meeting on Jan 3rd
- ☐ FWS representation at public meetings (open house format) (Steve, Greg/Karen, other?)
- ☐ Logistics update (Josh),
 - Need for spatial/temporal map of research/regulatory activities?
 - Helicopter manager?
- ☐ Prioritize tasks January-March 2019

Get ready an exciting January!

Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

-----Original Appointment-----

From: john_trawicki@fws.gov <john_trawicki@fws.gov>

Sent: None

To: john_trawicki@fws.gov; wendy_loya@fws.gov; doug_damberg@fws.gov;
kenneth_stahlnecker@fws.gov; drew_crane@fws.gov; steve_berendzen@fws.gov;
socheata_lor@fws.gov; sarah_conn@fws.gov; paul_leonard@fws.gov; joanna_fox@fws.gov;
mary_colligan@fws.gov; eric_taylor@fws.gov; stephanie_brady@fws.gov; joshua_rose@fws.gov

Subject: FWS_Arctic Refuge_Weekly_POC_Updates

When: Wednesday, December 19, 2018 1:00 PM-2:00 PM (UTC-09:00) Alaska.

Where: FWS-FW7 NWRS Conference Room/Regional Office

Agenda and call in for weekly Meeting

Rolling agenda and notes in Google Docs:

<https://docs.google.com/document/d/1xmo2N2wn5jqdGaORCldQ29gTvWb93TaTJCIL5BqsXm0/edit>

Join by Vidyo to Refuges Conference Room

or call in (b) (5) CIP passcode: (b) (5) CIP

Please do not edit this section of the description. This event has a Google Hangouts video call. Join: https://plus.google.com/hangouts/_/doi.gov/john-trawicki?hceid_am9obl90cmF3aWNraUBmd3MuZ292.2034q2628vr62c1vdi53122lia&hs_1_21

To: Wendy Loya[wendy_loya@fws.gov]
From: Bud Cribley
Sent: 2018-12-19T19:49:59-05:00
Importance: Normal
Subject: Re: Coastal Plain DEIS expected this week, public mtgs starting week Jan 14th
Received: 2018-12-19T19:50:05-05:00

Thank you Wendy.
Bud

Sent from my iPad
Bud C Cribley
Senior Advisor for Energy with the U.S. Fish & Wildlife Service
Office # 202-208-4331
Cell # 907-717-5141
Office # MIB 3341
email: bud_cribley@fws.gov

On Dec 19, 2018, at 7:46 PM, Wendy Loya <wendy_loya@fws.gov> wrote:

Hi 1002 RDT,

We just got off the phone with Nicole at BLM, and we will likely see the Arctic Refuge Coastal Plain DEIS tomorrow morning or Friday, on the BLM eplanning website; I will send link when it is up. It is scheduled to be published in the Federal Register on Dec 28th, which starts the 45 day comment period, which would end on Feb 11th.

Public meetings will begin week of Jan 14th and will be held in Kaktovik, Arctic Village, Venetie, Utqiagvik, Ft Yukon, Fairbanks, Anchorage and DC. FWS for sure has 2 seats on the aircraft that will start in Anchorage and likely stop in Fairbanks for refueling. Greg and Karen, what are your perspectives on attending, along with Steve B?

I asked if FWS could supply any of the resource experts that will be present for the open-house style part of the meetings. Nicole is checking up the chain to see if FWS could provide expertise for resources of greatest public interest and will get back with us. My thought is that it would be great to have Steve Arthur there to answer questions about caribou and other wildlife, and someone from Marine Mammals to answer polar bear questions; at the very least in Anchorage and Fairbanks, also caribou in Arctic V, Venetie and Ft. Yukon.

We decided today to start our internal comment process officially on Jan 7th instead of Jan 2nd. I will send a link to the documents as soon as we get them, and can work with anyone wanting to get started before the 7th. RDT surnaming will likely happen between Feb 1-11.

Finally, this does push back the DEIS ROD target date by 2 months, so mid-June'ish.

Cheers,

Wendy
Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

To: Damberg, Doug[doug_damberg@fws.gov]
From: Wendy Loya
Sent: 2018-12-19T22:28:02-05:00
Importance: Normal
Subject: Re: Steve Arthur - could he attend any of the open houses?
Received: 2018-12-19T22:28:03-05:00

Perfect! Can't imagine they can hit every place in one week especially in January, but hope we can get him to some meetings given his experience.

Cheers,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

On Dec 19, 2018, at 16:05, Damberg, Doug <doug_damberg@fws.gov> wrote:

FYI - see Steve's response

Doug Damberg
Refuge Supervisor, AK North Zone
U.S. Fish and Wildlife Service
1011 E. Tudor Rd.; Anchorage, AK 99503
Office: (907) 786-3329
Cell: (907) 947-6302

----- Forwarded message -----

From: **Berendzen, Steve** <steve_berendzen@fws.gov>
Date: Wed, Dec 19, 2018 at 4:01 PM
Subject: Re: Steve Arthur - could he attend any of the open houses?
To: Damberg, Doug <doug_damberg@fws.gov>
Cc: Fox, Joanna <joanna_fox@fws.gov>

Doug, yes - we talked about Steve being a good SME for PC herd as well as other refuge resources. We have no idea if he could be available, but we'll check with him tomorrow or as soon as we can. One complication is going to be transportation. BLM expects to have 2 seats on their charter plane available for FWS, but we saw how that worked out last spring..... If we want to send more than 2 people, we'll have to do commercial flights that in some cases won't match up well at all with their charter (i.e. Arctic Village or Venetie), but maybe the priority for SME

attendance is Fairbanks, Anchorage and possibly Utqiagvik?
We'll check with Steve to see if he could come up for that week, just to keep that as an option and pursue further if we decide we can make it work.

Steve Berendzen
Refuge Manager, Arctic National Wildlife Refuge
907 456 0253

On Wed, Dec 19, 2018 at 3:32 PM Damberg, Doug <doug_damberg@fws.gov> wrote:

Steve:

Wendy just stopped by and mentioned it looks like the open houses will be the week of Jan 14th. She will be talking with Greg/Karen very soon to get their expectations on who they would like to attend and what our role will be. As we talked earlier, it is very likely that someone from the refuge will need to be there (i.e. you or Joanna). Is it possible to check with Steve Arthur and see if he would be able to attend at least some of the meetings that week as well? We need to hear from Greg/Karen, and the Department may have some expectations, but in the event that SMEs are wanted for the meeting Steve A would be able to address caribou and other issues well.

Thoughts?
d

Doug Damberg
Refuge Supervisor, AK North Zone
U.S. Fish and Wildlife Service
1011 E. Tudor Rd.; Anchorage, AK 99503
Office: (907) 786-3329
Cell: (907) 947-6302

To: wendy_loya@fws.gov[wendy_loya@fws.gov]
From: Christopher Latty
Sent: 2018-12-20T14:28:56-05:00
Importance: Normal
Subject: Fwd: Arctic Refuge Coastal Plain DEIS Review
Received: 2018-12-20T14:29:09-05:00
[ATT00001.htm](#)
[2018 0618 FWS Coastal Plain Leasing EIS Scoping Comments \(sn\) RD .pdf](#)
[FWS NPRA DEIS IAP Letter 2012.pdf](#)
[ATT00002.htm](#)
[20171030 USFWS Comment Letter Nanushuk POA Final signed.pdf](#)
[ATT00003.htm](#)

Hi Wendy

I didn't see my name associated with the bird review, so just wanted to check in.

Cheers
Chris

Sent from my iPhone

Begin forwarded message:

From: Wendy Loya <wendy_loya@fws.gov>
Date: December 20, 2018 at 10:18:03 AM AKST
To: Angela Matz <angela_matz@fws.gov>, Bill Leacock <william_leacock@fws.gov>, Carl Johnson <carl_johnson@fws.gov>, Catherine Collins <catherine_collins@fws.gov>, Christopher Latty <christopher_latty@fws.gov>, Christopher Putnam <christopher_putnam@fws.gov>, Drew Crane <drew_crane@fws.gov>, Edward Decleva <edward_decleva@fws.gov>, Jennifer Reed <jennifer_reed@fws.gov>, Joanna Fox <joanna_fox@fws.gov>, John Trawicki <john_trawicki@fws.gov>, Joshua Ream <joshua_ream@fws.gov>, Joshua Rose <joshua_rose@fws.gov>, Karen Murphy <karen_a_murphy@fws.gov>, Lynnda Kahn <lynnda_kahn@fws.gov>, Mary Colligan <mary_colligan@fws.gov>, "Patrick O'Dell" <patrick_odell@fws.gov>, Paul Leonard <paul_leonard@fws.gov>, Randy Brown <randy_j_brown@fws.gov>, Roger Kaye <roger_kaye@fws.gov>, Ryan Wilson <ryan_r_wilson@fws.gov>, Sara Boario <sara_boario@fws.gov>, Sarah Conn <sarah_conn@fws.gov>, Socheata Lor <socheata_lor@fws.gov>, Stephanie Brady <stephanie_brady@fws.gov>, Stephen Arthur <stephen_arthur@fws.gov>, Steve Berendzen <steve_berendzen@fws.gov>, Tim Allen <tim_allen@fws.gov>, Kenneth Stahlnecker <kenneth_stahlnecker@fws.gov>, Doug Damberg <doug_damberg@fws.gov>, Todd Hopkins <todd_hopkins@fws.gov>
Cc: Greg Siekaniec <greg_siekaniec@fws.gov>, Karen Clark <karen_clark@fws.gov>
Subject: Arctic Refuge Coastal Plain DEIS Review

Hi Everyone,

After a 2 month delay, the Arctic Refuge Coastal Plain Draft EIS is now posted on the BLM eplanning website, where we and the public can begin review:

<https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=152110>

Please continue to refer media inquiries to Sara Boario who is working with BLM's communication lead.

The Federal Register notification will be published on January 28th, which starts the 45 day public comment period. Given holiday schedules, the 1002 leadership team decided we would ask for your help in preparing our comments starting on January 7th. I will be sending out a meeting invite for Monday the 7th at 11am to provide guidance on the scope of our comments and answer any questions. If that time doesn't work for you, I am happy to talk with you directly any time after Jan 2nd, just send me an email or give me a call. We'll be looking for your comments in the area of your expertise by January 21st.

Of course you are welcome to get started sooner if you have time. Below is our list of Subject Matter leads, so if you have comments regarding another resource, please work with the lead to incorporate them into that section. I'll reattach our scoping letter and two example letters so you can understand the scope.

- ☐ I anticipate our comments will largely make the case for support for the Stipulations and Required Operating Procedures (ROPs) that help meet regulatory requirements and management purposes and suggestions on how to further improve any of those elements of the alternatives.
- ☐ Our reviews will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a "fatal flaw" in how the DEIS or Draft EA portrays or analyzes information, including impacts analyses, about the resources in our areas of expertise.
- ☐ Your reviews should be short narratives, see attached examples from our Ecological Services team.

Subject Matter leads:

Subsistence: Carl Johnson & Josh Ream

Cultural Resource Sites: Ed Decleva

Air Quality: Catherine Collins and Tim Allen

Petroleum/Development: Pat O'dell

Compliance/Operations: Lynnda Kahn

Hazardous materials: Angela Matz

Visitor Use: Jen Reed

Wilderness: Roger Kaye

Wild & Scenic Rivers: Jen Reed

Soils, Vegetation and Permafrost: Josh Rose

Caribou: Steve Arthur

Terrestrial Mammals: Steve Arthur/Bill Leacock

Polar Bears: Ryan Wilson
Fish and Water Resources: Randy Brown and John Trawicki
Snow: Paul Leonard
Climate: Paul Leonard
Invasive Species: TBD
Cumulative Effects: Wendy Loya
Other topics: Wendy Loya

Let me know what I am overlooking, and we will be well prepared on January 7th.

Happy holidays everyone!! Enjoy time with your family and friends and we will hit the ground running on the 7th.

Cheers,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

To: Christopher Latty[christopher_latty@fws.gov]
From: Wendy Loya
Sent: 2018-12-20T14:31:52-05:00
Importance: Normal
Subject: RE: Arctic Refuge Coastal Plain DEIS Review
Received: 2018-12-20T14:32:00-05:00

I just saw that I missed you and the birds! Yes, you are the lead. Thank you!

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

From: Christopher Latty <christopher_latty@fws.gov>
Sent: Thursday, December 20, 2018 10:29 AM
To: wendy_loya@fws.gov
Subject: Fwd: Arctic Refuge Coastal Plain DEIS Review

Hi Wendy

I didn't see my name associated with the bird review, so just wanted to check in.

Cheers
Chris

Sent from my iPhone
Begin forwarded message:

From: Wendy Loya <wendy_loya@fws.gov>
Date: December 20, 2018 at 10:18:03 AM AKST
To: Angela Matz <angela_matz@fws.gov>, Bill Leacock <william_leacock@fws.gov>, Carl Johnson <carl_johnson@fws.gov>, Catherine Collins <catherine_collins@fws.gov>, Christopher Latty <christopher_latty@fws.gov>, Christopher Putnam <christopher_putnam@fws.gov>, Drew Crane <drew_crane@fws.gov>, Edward Decleva <edward_decleva@fws.gov>, Jennifer Reed <jennifer_reed@fws.gov>, Joanna Fox <joanna_fox@fws.gov>, John Trawicki <john_trawicki@fws.gov>, Joshua Ream <joshua_ream@fws.gov>, Joshua Rose <joshua_rose@fws.gov>, Karen Murphy <karen_a_murphy@fws.gov>, Lynnda Kahn <lynnda_kahn@fws.gov>, Mary Colligan <mary_colligan@fws.gov>, "Patrick O'Dell" <patrick_odell@fws.gov>, Paul Leonard <paul_leonard@fws.gov>, Randy Brown <randy_j_brown@fws.gov>, Roger Kaye <roger_kaye@fws.gov>, Ryan Wilson <ryan_r_wilson@fws.gov>, Sara Boario <sara_boario@fws.gov>, Sarah Conn <sarah_conn@fws.gov>, Socheata Lor <socheata_lor@fws.gov>, Stephanie Brady <stephanie_brady@fws.gov>, Stephen Arthur <stephen_arthur@fws.gov>, Steve Berendzen <steve_berendzen@fws.gov>, Tim Allen <tim_allen@fws.gov>, Kenneth Stahlnecker

<kenneth_stahlnecker@fws.gov>, Doug Damberg <doug_damberg@fws.gov>, Todd Hopkins <todd_hopkins@fws.gov>
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Wendy

Dr. Wendy M. Loya
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Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

To: Angela Matz[angela_matz@fws.gov]; Bill Leacock[william_leacock@fws.gov]; Carl Johnson[carl_johnson@fws.gov]; Catherine Collins[catherine_collins@fws.gov]; Christopher Latty[christopher_latty@fws.gov]; Christopher Putnam[christopher_putnam@fws.gov]; Drew Crane[drew_crane@fws.gov]; Edward Decleva[edward_decleva@fws.gov]; Jennifer Reed[jennifer_reed@fws.gov]; Joanna Fox[joanna_fox@fws.gov]; John Trawicki[john_trawicki@fws.gov]; Joshua Ream[joshua_ream@fws.gov]; Joshua Rose[joshua_rose@fws.gov]; Karen Murphy[karen_a_murphy@fws.gov]; Lynnda Kahn[lynnda_kahn@fws.gov]; Mary Colligan[mary_colligan@fws.gov]; Patrick O'Dell[patrick_odell@fws.gov]; Paul Leonard[paul_leonard@fws.gov]; Randy Brown[randy_j_brown@fws.gov]; Roger Kaye[roger_kaye@fws.gov]; Ryan Wilson[ryan_r_wilson@fws.gov]; Sara Boario[sara_boario@fws.gov]; Sarah Conn[sarah_conn@fws.gov]; Socheata Lor[socheata_lor@fws.gov]; Stephanie Brady[stephanie_brady@fws.gov]; Stephen Arthur[stephen_arthur@fws.gov]; Steve Berendzen[steve_berendzen@fws.gov]; Tim Allen[tim_allen@fws.gov]; Kenneth Stahlnecker[kenneth_stahlnecker@fws.gov]; Doug Damberg[doug_damberg@fws.gov]; Todd Hopkins[todd_hopkins@fws.gov]; Eric Taylor[eric_taylor@fws.gov]
Cc: Greg Siekaniec[greg_siekaniec@fws.gov]; Karen Clark[karen_clark@fws.gov]
From: Wendy Loya
Sent: 2018-12-20T14:47:33-05:00
Importance: Normal
Subject: Corrections to email: Arctic Refuge Coastal Plain DEIS Review
Received: 2018-12-20T14:47:39-05:00

I had the wrong date for the start of the 45 day review process and forgot to include Migratory birds. So sorry. Please work from this email.

Hi Everyone,

After a 2 month delay, the Arctic Refuge Coastal Plain Draft EIS is now posted on the BLM eplanning website, where we and the public can begin review:

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Cumulative Effects: Wendy Loya

Other topics: Wendy Loya

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Cheers,
Wendy

Dr. Wendy M. Loya
Arctic Program Coordinator
US Fish and Wildlife Service, Office of Science Applications
Anchorage, Alaska
907.786.3532 (office)
907.227.2942 (mobile)

Location: FWS-FW7 Mary Smith Media Center/Regional OfficeCall in (b) (5) CIP
Passcode: (b) (5) CIP FWS-FW7 Mary Smith Media Center/Regional Office
Importance: Normal
Subject: FW: 1002 ITR Briefing - Call in (b) (5) CIP Passcode: (b) (5) CIP
Start Date/Time: 2018-12-21T14:00:00-05:00
End Date/Time: 2018-12-21T16:00:00-05:00

I think Patrick forwarded this, but just in case.

-----Original Appointment-----

From: lucille_frerich@fws.gov <lucille_frerich@fws.gov> **On Behalf Of** Regional Director's Office

Sent: Monday, December 17, 2018 2:17 PM

To: Regional Director's Office; wendy_loya@fws.gov; christopher_putnam@fws.gov; sara_boario@fws.gov; greg_siekaniec@fws.gov; karen_clark@fws.gov; socheata_lor@fws.gov; patrick_lemons@fws.gov; charles_hamilton@fws.gov; bud_cribley@fws.gov; mary_colligan@fws.gov

Subject: 1002 ITR Briefing - Call in (b) (5) CIP Passcode: (b) (5) CIP

When: Friday, December 21, 2018 10:00 AM-12:00 PM (UTC-09:00) Alaska.

Where: FWS-FW7 Mary Smith Media Center/Regional Office Call in (b) (5) CIP Passcode: (b) (5) CIP
FWS-FW7 Mary Smith Media Center/Regional Office

Requested by Patrick Lemons 12/17/18 -

~~~~~: Please do not edit this section of the description. This event has a Google Hangouts video call. Join: [https://hangouts.google.com/hangouts/\\_/doi.gov/greg-siekaniec?hceid\\_ZG9pLmdvdl80dWdudHI2b2FoZGFsN2hvdWk3dW1hM3Zxb0Bncm91cC5jYWxlbmRhci5nb29nbGUuY29t.3tdtulh7ak7nbn55skbl80nt7m&hs\\_121\\_-](https://hangouts.google.com/hangouts/_/doi.gov/greg-siekaniec?hceid_ZG9pLmdvdl80dWdudHI2b2FoZGFsN2hvdWk3dW1hM3Zxb0Bncm91cC5jYWxlbmRhci5nb29nbGUuY29t.3tdtulh7ak7nbn55skbl80nt7m&hs_121_-)

[illegible]

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Decleva, Edward  
**Sent:** 2018-12-20T17:47:25-05:00  
**Importance:** Normal  
**Subject:** Fwd: CP PA  
**Received:** 2018-12-20T17:47:43-05:00

FYI

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399

----- Forwarded message -----

**From:** **Decleva, Edward** <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>  
**Date:** Thu, Dec 20, 2018 at 1:43 PM  
**Subject:** Re: CP PA  
**To:** Hayes, Miriam (Nicole) <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>

Thank you Nicole,

The draft outline looks good. Clearly we (BLM and FWS) need to sit down and identify our roles/responsibilities. And I think everyone has already heard my comment that I believe FWS should be retained as a full signatory, rather than reduced to an invited signatory, due at least to the curation responsibilities FWS is likely to have for artifacts that might be collected during investigations and whatnot.

As a fed-to-fed, however, I would caution BLM about SHPO's suggestion for the development of a Cultural Resource Management Plan for the PA. I've experienced the PA/CRMP vortex a couple of times, both of which resulted in it taking 2+ years to get a PA to signature -- the problem being that a CRMP and other PA stipulations never seem to be good enough for some parties -- you can liken it to analysis/paralysis in the NEPA field. If it were me representing the lead federal agency, I'd flat out refuse to do a CRMP. But I would have also flat out resisted agreeing to develop a PA in the first place, especially for an EIS that is not authorizing an actual project -- or at least I would limit the PA to 3 or 4 pages stipulating that actual projects would go through the standard Section 106 review process as applications roll in. And I absolutely would not entertain defining the countless "what if" scenarios for treatments and mitigation strategies for the PA or EIS. As it is, the SHPO is pressing for a PA, while acknowledging that projects would be evaluated per Section 106 later, and that MOA's would be developed to resolve adverse effects for those projects that cause adverse effects. The PA just seems to be an extra and unnecessary tool. But I don't represent the BLM -- so what you all want to do is your business and I will respect that and not bring this up again.

Sorry to end on that topic.

I do sincerely wish you a happy holiday season.

Best regards,  
Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region

1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399

On Thu, Dec 20, 2018 at 12:54 PM Hayes, Miriam (Nicole) <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)> wrote:

I know we need to have a discussion but if you have any comments you can recommend before taking off on the PA that went out last month that would be great.

Enjoy your time off!!!

**Nicole Hayes**

Project Coordinator  
Bureau of Land Management  
222 W. 7th Avenue #13  
Anchorage, Alaska 99513  
Desk: (907) 271-4354  
Cell: (907) 290-0179

On Thu, Dec 20, 2018 at 12:51 PM Decleva, Edward <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)> wrote:

In less than an hour from now, I'll be out til Jan 7

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399

On Thu, Dec 20, 2018 at 12:18 PM Hayes, Miriam (Nicole) <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)> wrote:

This week has gotten away from me and I will be on leave tomorrow. Is anyone available next week to discuss this?

**Nicole Hayes**

Project Coordinator  
Bureau of Land Management  
222 W. 7th Avenue #13  
Anchorage, Alaska 99513  
Desk: (907) 271-4354  
Cell: (907) 290-0179

On Fri, Nov 30, 2018 at 6:41 AM Decleva, Edward <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)> wrote:

Thank you for the response Joe.

I agree that we (BLM and USFWS) should sort this out. The funny thing about the argument is that a PA can be executed without the signature of an invited party. While there's no possibility that USFWS wouldn't sign this one, invited status strikes me as odd given USFWS jurisdiction over cultural resources and the likely significant role USFWS would have in ARPA, NAGPRA and museum property management matters. But I am confident that we can find the best way to deal with this, regardless of how the invited signatory matter plays out.

I am currently available most of the December 17th week - the exception being unavailable midday on the 18th and the afternoons of the 20th and 21st.

Best regards,  
Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399

On Thu, Nov 29, 2018 at 2:44 PM Keeney, Joseph <[jkeeney@blm.gov](mailto:jkeeney@blm.gov)> wrote:

Hi Ed,

Sending to BLM for consult

[Redacted]

[Redacted]

Joe

On Wed, Nov 28, 2018 at 7:50 AM Decleva, Edward <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)> wrote:

Hi Nicole,

Thank you to you and the BLM team for coordinating and hosting yesterday's PA meeting. I have a couple of points to make.

First, regarding SHPO's recommendation that USFWS should perhaps be removed as a signatory and identified instead as an invited signatory: USFWS does not agree with the recommendation. USFWS is the jurisdictional land manager, a participating agency, and will be impacted by BLM's Section 106 decisionmaking regarding the identification and treatment of cultural resources within USFWS's jurisdiction, NAGPRA responsibilities, and the long-term preservation (ie, curation) of any cultural resources collections recovered as a result of actions caused by oil and gas leasing, exploration, and operations. USFWS must be retained as a full signatory to the PA.

Second, regarding establishing BLM and USFWS responsibilities for ARPA permitting, NAGPRA, and collections management: USFWS believes these are matters to be decided solely between BLM and USFWS. SHPO and ACHP have no jurisdiction regarding federal stewardship responsibilities. It is suggested that BLM and USFWS meet soon to establish our agency's roles.

Thank you for your attention to this.

Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399

--

Joe Keeney  
Archaeologist  
BLM Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709  
907 474 2312  
[jkeeney@blm.gov](mailto:jkeeney@blm.gov)

**To:** Tina Racy[tina\_racy@fws.gov]  
**Cc:** Murphy, Karen[karen\_a\_murphy@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]  
**From:** Leonard, Paul  
**Sent:** 2018-12-21T19:53:18-05:00  
**Importance:** Normal  
**Subject:** Re: Snow monitoring IAA with USGS  
**Received:** 2018-12-21T19:53:49-05:00  
[IAA Urban SOW.docx](#)  
[IAA Urban Budget.docx](#)  
[IAA Urban PPR.pdf](#)  
[IAA. Urban 3-2366.pdf](#)

Hi Tina,  
Please find attached IAA forms and let me know if you have any questions. Thanks so much for your help!

Happy Holidays!

Cheers,  
Paul

On Fri, Dec 21, 2018 at 11:34 AM Murphy, Karen <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)> wrote:

Paul,  
Please use the following cost code, as discussed, for the IAA agreement with USGS related to the snow monitoring work. I'm expecting this to be approximately \$90,000.00. Please make sure to use the 189 code so it comes from our carryover funds.

FF07S00000 FXSC141007ANWR0 189

Thanks for your work on this!

Happy Holidays,  
Karen

*Karen A Murphy*  
*Science Applications*  
*907-786-3501*  
*[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)*

--

Paul Leonard, PhD  
Science Coordinator  
[Arctic LCC](#)  
101 12th Ave. Room 216  
Fairbanks, AK 99701  
(907) 456-0445

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Greg Siekaniec  
**Sent:** 2019-01-03T12:43:05-05:00  
**Importance:** Normal  
**Subject:** Re: Question  
**Received:** 2019-01-03T12:43:06-05:00

Thank you

Sent from my iPhone

On Jan 3, 2019, at 8:40 AM, Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

We are convening at 10 :)

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
[907.786.3532](tel:907.786.3532) (office)  
[907.227.2942](tel:907.227.2942) (mobile)

On Jan 3, 2019, at 08:38, Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)> wrote:

As you can see the information is wanted quickly.  
Greg

Sent from my iPhone

Begin forwarded message:

**From:** Jim Kurth <[jim\\_kurth@fws.gov](mailto:jim_kurth@fws.gov)>  
**Date:** January 3, 2019 at 3:56:05 AM AKST  
**To:** Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>  
**Subject:** Question

We are looking at the potential to bring back some employees using carryover funds to accomplish critical work on the SOI priorities (blue sheets)). How many staff would it take to continue our work our Arctic Refuge seismic and lease sale review?

Need your best estimate ASAP. Thanks.

Sent from my iPhone



**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Colligan, Mary  
**Sent:** 2019-01-03T15:29:34-05:00  
**Importance:** Normal  
**Subject:** document  
**Received:** 2019-01-03T15:29:50-05:00  
[Reactivation Scenarios.docx](#)

--

Mary Colligan  
Assistant Regional Director  
Fisheries and Ecological Services  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E. Tudor Road, MS-361  
Anchorage, AK 99503  
907-786-3505  
cell: 907-223-5945

**To:** Mary Colligan[mary\_colligan@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-01-03T16:40:04-05:00  
**Importance:** Normal  
**Subject:** Coastal Plain DEIS Review Furlough Callback plan 010319..docx  
**Received:** 2019-01-03T16:40:12-05:00  
Coastal Plain DEIS Review Furlough Callback plan 010319..docx.docx

Have a quick look and let me know what I am overlooking

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]  
**Cc:** Mary Colligan[mary\_colligan@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-01-03T16:53:29-05:00  
**Importance:** Normal  
**Subject:** Coastal Plain DEIS comment development during furlough  
**Received:** 2019-01-03T16:53:36-05:00  
Coastal Plain DEIS Review Furlough Callback plan 010319..docx

Hi Greg,

Attached is our proposal for moving FWS comments on the Coastal Plain DEIS. Let me know if we need to clarify anything.

I'll wait until we get the go ahead before reporting back for duty?

Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Jim Kurth[jim\_kurth@fws.gov]  
**Cc:** Mary Colligan[mary\_colligan@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]; Karen Clark[karen\_clark@fws.gov]  
**From:** Siekaniec, Greg  
**Sent:** 2019-01-03T17:55:49-05:00  
**Importance:** Normal  
**Subject:** Fwd: Reactivation Scenarios - MMPA & ESA Portion  
**Received:** 2019-01-03T17:56:26-05:00  
[Reactivation Scenarios.docx](#)

Jim,

Please see the attached from Mary Colligan concerning the MMPA and ESA needs for placing employees in an exempted status. We are proposing a staggered approach as not all employees are needed immediately. A core team to conduct initial work and then supported by adding additional staff as the effort develops.

If you need interpretation please let me know.

greg

----- Forwarded message -----

**From:** Colligan, Mary <mary\_colligan@fws.gov>  
**Date:** Thu, Jan 3, 2019 at 12:33 PM  
**Subject:** Reactivation Scenarios - MMPA & ESA Portion  
**To:** Gregory Siekaniec <greg\_siekaniec@fws.gov>  
**Cc:** Wendy Loya <wendy\_loya@fws.gov>

Greg I have attached the MMPA and ESA portion of the reactivation scenarios. Wendy is working on the EIS piece of the puzzle and will b sending that to you shortly.

--

Mary Colligan  
Assistant Regional Director  
Fisheries and Ecological Services  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E. Tudor Road, MS-361  
Anchorage, AK 99503  
907-786-3505  
cell: 907-223-5945

**To:** Jim Kurth[jim\_kurth@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]; Mary Colligan[mary\_colligan@fws.gov]; Lor, Socheata[socheata\_lor@fws.gov]  
**From:** Siekaniec, Greg  
**Sent:** 2019-01-03T18:03:59-05:00  
**Importance:** Normal  
**Subject:** Fwd: Coastal Plain DEIS comment development during furlough  
**Received:** 2019-01-03T18:04:36-05:00  
Coastal Plain DEIS Review Furlough Callback plan 010319(2).docx

Jim,

Please see the recommendation on how we would like to engage employees for the purpose of responding to the BLM EIS for Arctic National Wildlife Refuge Coastal Plain Oil and Gas Leasing. Again, this is a staggered approach using the core team to begin the process and engage subject matter experts as needed.

Please let us know if we need to provide interpretation or if this will suffice for the initial interest in placing employees in exempted status.

Greg

----- Forwarded message -----

**From:** Wendy Loya <wendy\_loya@fws.gov>  
**Date:** Thu, Jan 3, 2019 at 12:53 PM  
**Subject:** Coastal Plain DEIS comment development during furlough  
**To:** Greg Siekaniec <greg\_siekaniec@fws.gov>  
**Cc:** Mary Colligan <mary\_colligan@fws.gov>, Socheata Lor <socheata\_lor@fws.gov>

Hi Greg,

Attached is our proposal for moving FWS comments on the Coastal Plain DEIS. Let me know if we need to clarify anything.

I'll wait until we get the go ahead before reporting back for duty?

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

0000010632

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**To:** Angela Matz[angela\_matz@fws.gov]; Bill Leacock[william\_leacock@fws.gov]; Carl Johnson[carl\_johnson@fws.gov]; Catherine Collins[catherine\_collins@fws.gov]; Christopher Latty[christopher\_latty@fws.gov]; Christopher Putnam[christopher\_putnam@fws.gov]; Drew Crane[drew\_crane@fws.gov]; Edward Decleva[edward\_decleva@fws.gov]; Jennifer Reed[jennifer\_reed@fws.gov]; Joanna Fox[joanna\_fox@fws.gov]; John Trawicki[john\_trawicki@fws.gov]; Joshua Ream[joshua\_ream@fws.gov]; Joshua Rose[joshua\_rose@fws.gov]; Lynnda Kahn[lynda\_kahn@fws.gov]; Patrick O'Dell[patrick\_odell@fws.gov]; Paul Leonard[paul\_leonard@fws.gov]; Randy Brown[randy\_j\_brown@fws.gov]; Roger Kaye[roger\_kaye@fws.gov]; Ryan Wilson[ryan\_r\_wilson@fws.gov]; Sarah Conn[sarah\_conn@fws.gov]; Stephanie Brady[stephanie\_brady@fws.gov]; Stephen Arthur[stephen\_arthur@fws.gov]; Steve Berendzen[steve\_berendzen@fws.gov]; Tim Allen[tim\_allen@fws.gov]  
**Cc:** Greg Siekaniec[greg\_siekaniec@fws.gov]; Karen Clark[karen\_clark@fws.gov]; Doug Damberg[doug\_damberg@fws.gov]; Kenneth Stahlnecker[kenneth\_stahlnecker@fws.gov]; Mary Colligan[mary\_colligan@fws.gov]; Sara Boario[sara\_boario@fws.gov]; Amee Howard[amee\_howard@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]; Karen Murphy[karen\_a\_murphy@fws.gov]; Eric Taylor[eric\_taylor@fws.gov]; Bud Cribley[bud\_cribley@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-01-28T13:49:02-05:00  
**Importance:** Normal  
**Subject:** Moving ahead: Arctic Refuge Coastal Plain DEIS Review  
**Received:** 2019-01-28T13:49:29-05:00  
[2018 0618 FWS Coastal Plain Leasing EIS Scoping Comments \(sn\) RD .pdf](#)  
[FWS NPRA DEIS IAP Letter 2012.pdf](#)  
[20171030 USFWS Comment Letter Nanushuk POA Final signed.pdf](#)

Hi Everyone,

We'll get started on Wednesday 1/30 with our internal review of the Arctic Refuge DEIS. I'll send a meeting invite for 1pm Wednesday, and will follow up with those of you that can't make that time individually.

<https://eplanning.blm.gov/epl front office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=152110>

We anticipate that the comment deadline for the Draft EIS will be extended past Feb 11<sup>th</sup>, and I will let you know as soon as it is determined. Nevertheless, we'll move ahead with this priority task and try to pull together your comments in the next two weeks. I know this isn't the only thing waiting for you to work on, so talk to your supervisor about your to do list and we can work together to set realistic goals and deadlines for your contributions.

At this time, it appears that SAE has withdrawn their plan to do seismic this winter, so I believe the Draft Seismic EA will go back to the drawing board as revised plans are developed....so not on our immediate to do list!

Please continue to refer media inquiries to Sara Boario who is working with BLM's communication lead.

Below is our list of Subject Matter leads, so if you have comments regarding another resource, please work with the lead to incorporate them into that section. I'll reattach our

scoping letter and two example letters so you can understand the depth of our comments.

- ☐ I anticipate our comments will largely make the case for support for the Stipulations and Required Operating Procedures (ROPs) that help meet regulatory requirements and management purposes and suggestions on how to further improve any of those elements of the alternatives. Alternative D2 reflects most of what USFWS put forward at the Alternatives Workshop last July.
- ☐ Our reviews will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a “fatal flaw” in how the DEIS portrays or analyzes information, including impacts analyses, about the resources in our areas of expertise.
- ☐ Your reviews should be short narratives, see attached examples from our Ecological Services team.

Subject Matter leads:

Refuge Purposes: Steve, Joanna, Stephanie

Broader Regulatory FWS mission: Sarah Conn et al.

Subsistence: Carl Johnson & Josh Ream

Cultural Resource Sites: Ed Decleva

Air Quality: Catherine Collins and Tim Allen

Petroleum/Development: Pat O’dell

Compliance/Operations: Lynnda Kahn

Hazardous materials: Angela Matz

Visitor Use: Jen Reed

Wilderness: Roger Kaye

Wild & Scenic Rivers: Jen Reed

Soils, Vegetation, Wetlands and Permafrost: Josh Rose

Caribou: Steve Arthur

Terrestrial Mammals: Steve Arthur/Bill Leacock

Migratory Birds: Chris Latty

Polar Bears: Ryan Wilson and Christopher Putnam

Fish and Water Resources: Randy Brown and John Trawicki

Snow: Paul Leonard

Climate: Paul Leonard

Invasive Species: TBD

Cumulative Effects: Wendy Loya

Other topics: Wendy Loya

I look forward to working with you all again on this,

Sincerely,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator



US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Mary Colligan[mary\_colligan@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-01-28T13:54:54-05:00  
**Importance:** Normal  
**Subject:** RE: Seismic EA?  
**Received:** 2019-01-28T13:55:01-05:00

I am looking into that, left message with Shelly Jones at BLM Fairbanks who is the lead. Nicole who leads the DEIS did not know that SAE had indicated they would not go out this year. Will let you know as soon as I hear anything.

Steve Berendzen said the locals are saying it is a really bad snow year, worse than normal. Hope we can work with UAF or USGS to make sure we document annual conditions from here on.

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Colligan, Mary <mary\_colligan@fws.gov>  
**Sent:** Monday, January 28, 2019 9:47 AM  
**To:** Wendy Loya <wendy\_loya@fws.gov>  
**Subject:** Seismic EA?

Wendy - Do you know what BLM is doing with the Seismic EA given it appears SAE's schedule has changed?

--

Mary Colligan  
Assistant Regional Director  
Fisheries and Ecological Services  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E. Tudor Road, MS-361  
Anchorage, AK 99503  
907-786-3505  
cell: 907-223-5945

**From:** Google Calendar  
**Location:** BLM-AK FDO Arctic Conference Room, BLM-AK FDO Bridge 20 (b) (5) CIP  
**Passcode:** (b) (5) CIP BLM-AK FDO Chandalar Conference Room  
**Importance:** Normal  
**Subject:** Declined: Coastal Plain Seismic EA-Status Check @ Tue Feb 19, 2019 3pm - 3:30pm (AKST) (wendy\_loya@fws.gov)  
**Start Date/Time:** 2019-02-19T19:00:00-05:00  
**End Date/Time:** 2019-02-19T19:30:00-05:00  
[invite.ics](#)

Paul Leonard has declined this invitation with this note:  
"Declined because I am out of office"

### Coastal Plain Seismic EA-Status Check

This is a standing meeting, so we can check in and discuss what is happening with the Seismic EA.

|          |                                                                                                                                                                          |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| When     | Tue Feb 19, 2019 3pm - 3:30pm Alaska Time                                                                                                                                |
| Where    | Anchorage<br>BLM AK FDO Arctic Conference Room, BLM AK FDO<br>Bridge 20 (b) (5) CIP Passcode (b) (5) CIP BLM AK FDO<br>Chandalar Conference Room ( <a href="#">map</a> ) |
| Calendar | wendy_loya@fws.gov                                                                                                                                                       |
| Who      |                                                                                                                                                                          |

- 
- 

wendy\_loya@fws.gov  
paul\_leonard@fws.gov

Invitation from [Google Calendar](#)

You are receiving this email at the account wendy\_loya@fws.gov because you are subscribed for invitation replies on calendar wendy\_loya@fws.gov.

To stop receiving these emails, please log in to <https://www.google.com/calendar/> and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to modify your RSVP response. [Learn More.](#)

**To:** Steve Berendzen[[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)]  
**From:** Wendy Loya  
**Sent:** 2019-01-28T19:03:43-05:00  
**Importance:** Normal  
**Subject:** FW: UPDATE: 1002 hearing schedule  
**Received:** 2019-01-28T19:03:51-05:00  
DEIS mtg calendar OPT 3.docx

Looks like next week is a go for public meetings, with comments due March 13<sup>th</sup>.

Steve A can make his travel plans, and I can come up Friday Feb 1<sup>st</sup> if you think that would be helpful to go through the Stips and ROPS

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Siekaniec, Greg <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>  
**Sent:** Monday, January 28, 2019 3:01 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Fwd: UPDATE: 1002 hearing schedule

----- Forwarded message -----

**From:** **Wackowski, Stephen** <[stephen\\_wackowski@ios.doi.gov](mailto:stephen_wackowski@ios.doi.gov)>  
**Date:** Mon, Jan 28, 2019 at 2:55 PM  
**Subject:** UPDATE: 1002 hearing schedule  
**To:** Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>

See attached. This should get announced tomorrow along with a comment deadline extension to 13 March.

Steve Wackowski  
Senior Adviser for Alaskan Affairs  
Department of the Interior  
4230 University Drive, Suite 300  
Anchorage, AK 99508  
907-271-5485

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Lemons, Patrick  
**Sent:** 2019-01-30T14:47:46-05:00  
**Importance:** Normal  
**Subject:** Re: Moving ahead: Arctic Refuge Coastal Plain DEIS Review  
**Received:** 2019-01-30T14:48:05-05:00

Great thanks. We'll see you then.

On Wed, Jan 30, 2019 at 10:40 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Please join, everyone welcome! 1pm in Mary Smith today

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Lemons, Patrick <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>  
**Sent:** Wednesday, January 30, 2019 10:30 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Fwd: Moving ahead: Arctic Refuge Coastal Plain DEIS Review

Hi Wendy,

Christopher is in Thailand until February 18th so if possible, I'd like to attend this meeting in case anything comes up MMPA wise. Would you mind me crashing your meeting? If not, do you have a location?

Thanks,  
Patrick

----- Forwarded message -----

From: **Wilson, Ryan** <[ryan\\_r\\_wilson@fws.gov](mailto:ryan_r_wilson@fws.gov)>  
Date: Mon, Jan 28, 2019 at 10:36 AM  
Subject: Fwd: Moving ahead: Arctic Refuge Coastal Plain DEIS Review  
To: Patrick Lemons <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>

----- Forwarded message -----

From: **Wendy Loya** <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
Date: Mon, Jan 28, 2019 at 9:49 AM  
Subject: Moving ahead: Arctic Refuge Coastal Plain DEIS Review  
To: Angela Matz <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)>, Bill Leacock <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>, Carl Johnson <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>, Catherine Collins <[catherine\\_collins@fws.gov](mailto:catherine_collins@fws.gov)>, Christopher Latty <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>, Christopher Putnam <[christopher\\_putnam@fws.gov](mailto:christopher_putnam@fws.gov)>, Drew Crane <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>, Edward Decleva <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>, Jennifer Reed <[jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)>, Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>, John Trawicki <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>, Joshua Ream <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>, Joshua Rose <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>, Lynnda Kahn <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>, Patrick O'Dell <[patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov)>, Paul Leonard <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)>, Randy Brown <[randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)>, Roger Kaye <[roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov)>, Ryan Wilson <[ryan\\_r\\_wilson@fws.gov](mailto:ryan_r_wilson@fws.gov)>, Sarah Conn <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>, Stephanie Brady <[stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov)>, Stephen Arthur <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Tim Allen <[tim\\_allen@fws.gov](mailto:tim_allen@fws.gov)>  
Cc: Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Doug Damberg <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>, Kenneth Stahlnecker <[kenneth\\_stahlnecker@fws.gov](mailto:kenneth_stahlnecker@fws.gov)>, Mary Colligan <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, Sara Boario <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>, Amee Howard <[amee\\_howard@fws.gov](mailto:amee_howard@fws.gov)>, Socheata Lor <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Karen Murphy <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)>, Eric Taylor <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>, Bud Cribley <[bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov)>

Hi Everyone,

We'll get started on Wednesday 1/30 with our internal review of the Arctic Refuge DEIS. I'll send a meeting invite for 1pm Wednesday, and will follow up with those of you that can't make that time individually.

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)

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Please continue to refer media inquiries to Sara Boario who is working with BLM's communication lead.

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- ☐ Your reviews should be short narratives, see attached examples from our Ecological Services team.

Subject Matter leads:

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Broader Regulatory FWS mission: Sarah Conn et al.

Subsistence: Carl Johnson & Josh Ream

Cultural Resource Sites: Ed Decleva

Air Quality: Catherine Collins and Tim Allen

Petroleum/Development: Pat O'dell

Compliance/Operations: Lynnda Kahn

Hazardous materials: Angela Matz

Visitor Use: Jen Reed

Wilderness: Roger Kaye

Wild & Scenic Rivers: Jen Reed

Soils, Vegetation, Wetlands and Permafrost: Josh Rose

Caribou: Steve Arthur

Terrestrial Mammals: Steve Arthur/Bill Leacock

Migratory Birds: Chris Latty

Polar Bears: Ryan Wilson and Christopher Putnam

Fish and Water Resources: Randy Brown and John Trawicki

Snow: Paul Leonard

Climate: Paul Leonard

Invasive Species: TBD

Cumulative Effects: Wendy Loya

Other topics: Wendy Loya

I look forward to working with you all again on this,

Sincerely,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator



US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

--

Ryan Wilson, Ph.D., Certified Wildlife Biologist ®

Marine Mammals Management, Polar Bears

U.S. Fish and Wildlife Service

1011 E. Tudor Rd., MS341

Anchorage, AK 99503

Phone: (907) 786-3830

Email: [ryan\\_r\\_wilson@fws.gov](mailto:ryan_r_wilson@fws.gov)

Fax: (907) 786-3816

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Patrick Lemons, Ph.D.

Chief, Marine Mammals Management

U.S. Fish and Wildlife Service

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Cell: 907-717-6787  
Fax: 907-786-3816  
e-mail: [patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)

**To:** William Leacock[william\_leacock@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-01-30T16:38:25-05:00  
**Importance:** Normal  
**Subject:** RE: Google Doc for comments: Arctic Refuge Coastal Plain DEIS Review  
**Received:** 2019-01-30T16:38:33-05:00

Steve and Joanna often set up VTC from Refuges conference room, so check in there, or there is a call in number in invite ☺

And copied here:

Instant Meeting Audio # (b) (5) CIP Instant Meeting Audio Participant Passcode: (b) (5) CIP

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Leacock, William <william\_leacock@fws.gov>  
**Sent:** Wednesday, January 30, 2019 12:35 PM  
**To:** Wendy Loya <wendy\_loya@fws.gov>  
**Subject:** Re: Google Doc for comments: Arctic Refuge Coastal Plain DEIS Review

Hello Wendy,

Excuse me, but how do folks outside Anchorage participate in the meeting. Is there some kind of link or do we call into to a number there?

Thanks,  
Bill

On Wed, Jan 30, 2019 at 12:18 PM Wendy Loya <wendy\_loya@fws.gov> wrote:  
Hi Everyone,

I will provide more guidance today at 1pm or please contact me by phone or email if you are not able to make today's meeting.

You can find a link to the Google Doc where we will gather your comments here:  
[https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp\\_sharing](https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp_sharing)

This is for internal FWS use only, and is a draft in progress, subject to review and revision. The document will be available to all Subject Matter Experts from 1/30/19 through 2/13/19. Please notify me if you wish to share it with other FWS staff.

Our comments are organized into two sections:

- ☐ Comments on the Alternatives in the Draft EIS including evaluation of stipulations and ROPs;
- ☐ Resource-specific comments from Service subject matter experts on the information and analyses presented in the Draft EIS

A couple helpful tips from our NEPA letter writing pros:

*Your comments should provide specific recommendations or corrections, and not just point out what is wrong or missing.*

*Please indicate what section your comment refers to (e.g. Stipulation 1, Alt B; Chapter 3.4.3).*

*Include full citations for any studies you refer to, and send PDF of publication to Wendy if available.*

The DEIS is available here:

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)

Talk to you soon!

Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

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**From:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Sent:** Monday, January 28, 2019 9:49 AM

**To:** 'Angela Matz' <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)>; 'Bill Leacock' <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>; 'Carl Johnson' <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>; 'Catherine Collins' <[catherine\\_collins@fws.gov](mailto:catherine_collins@fws.gov)>; 'Christopher Latty' <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>; 'Christopher Putnam' <[christopher\\_putnam@fws.gov](mailto:christopher_putnam@fws.gov)>; 'Drew Crane' <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>; 'Edward Decleva' <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>; 'Jennifer Reed' <[jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)>; 'Joanna Fox' <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>; 'John Trawicki' <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>; 'Joshua Ream' <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>; 'Joshua Rose' <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>; 'Lynnda Kahn' <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>; 'Patrick O'Dell' <[patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov)>; 'Paul Leonard' <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)>; 'Randy Brown' <[randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)>; 'Roger Kaye' <[roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov)>; 'Ryan Wilson' <[ryan\\_r\\_wilson@fws.gov](mailto:ryan_r_wilson@fws.gov)>; 'Sarah Conn' <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>; 'Stephanie Brady' <[stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov)>; 'Stephen Arthur' <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>; 'Steve Berendzen' <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>; 'Tim Allen'

---

<tim\_allen@fws.gov>  
**Cc:** 'Greg Siekaniec' <greg\_siekaniec@fws.gov>; 'Karen Clark' <karen\_clark@fws.gov>;  
'Doug Damberg' <doug\_damberg@fws.gov>; 'Kenneth Stahlnecker'  
<kenneth\_stahlnecker@fws.gov>; 'Mary Colligan' <mary\_colligan@fws.gov>; 'Sara Boario'  
<sara\_boario@fws.gov>; Amee Howard <amee\_howard@fws.gov>; 'Socheata Lor'  
<socheata\_lor@fws.gov>; 'Karen Murphy' <karen\_a\_murphy@fws.gov>; 'Eric Taylor'  
<eric\_taylor@fws.gov>; Bud Cribley (bud\_cribley@fws.gov) <bud\_cribley@fws.gov>  
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Snow: Paul Leonard

Climate: Paul Leonard

Invasive Species: TBD

Cumulative Effects: Wendy Loya

Other topics: Wendy Loya

I look forward to working with you all again on this,

Sincerely,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

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--

*William B. Leacock*

*Wildlife Biologist*

*Arctic National Wildlife Refuge*

*101 12th Avenue, Room 236*

*Fairbanks, AK 99701*

907-456-0519

**To:** Jennifer Reed[jennifer\_reed@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-01-30T19:06:25-05:00  
**Importance:** Normal  
**Subject:** Scoping comments from staff  
**Received:** 2019-01-30T19:06:43-05:00  
FWS Scoping Comments Coastal Plain EIS 060518.docx

Hey Jen,

Wanted to follow up on your request to have the full list of staff scoping comments from last June. I really couldn't remember what the difference between those submitted by staff and those approved for release by RDT. I am attaching it for your consideration. If after reviewing it for your section, and if you think it would be helpful for all of our subject matter experts, please let me know and I will share more broadly. I personally am not sure, and am only trying to minimize the number of documents that staff have to look to in evaluating the Draft EIS on a short timeline. I don't have any bias against sharing it other than trying to keep it simple. Look forward to your feedback!

Thank you, and it was nice to see you again via VTC! I will be in Fairbanks Friday if you want to chat.

Cheers,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)



**To:** greg\_siekaniec@fws.gov[greg\_siekaniec@fws.gov]; Karen Clark[karen\_clark@fws.gov]; Bud Cribley[bud\_cribley@fws.gov]; mary\_colligan@fws.gov[mary\_colligan@fws.gov]; socheata\_lor@fws.gov[socheata\_lor@fws.gov]; stephen\_arthur@fws.gov[stephen\_arthur@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-01-30T20:03:51-05:00  
**Importance:** Normal  
**Subject:** Fwd: PUBLIC MEETING DATES: Coastal Plain Oil and Gas Leasing Program Draft Environmental Impact Statement  
**Received:** 2019-01-30T20:03:54-05:00  
[ATT00001.htm](#)  
[Coastal Plain rescheduled meeting dates and comment extension BLM AK 19-02.pdf](#)

Begin forwarded message:

**From:** "Hayes, Miriam (Nicole)" <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>  
**Date:** January 30, 2019 at 15:32:14 AKST  
**To:** [fenton.rexford@north-slope.org](mailto:fenton.rexford@north-slope.org), [ida.angasan@ilisagvik.edu](mailto:ida.angasan@ilisagvik.edu), [judy.bittner@alaska.gov](mailto:judy.bittner@alaska.gov), "Meitl, Sarah J (DNR)" <[sarah.meitl@alaska.gov](mailto:sarah.meitl@alaska.gov)>, "Arlene Pitka" <[apitka@beavercouncil.org](mailto:apitka@beavercouncil.org)>" <[apitka@beavercouncil.org](mailto:apitka@beavercouncil.org)>, Charleen Fisher <[charleen.fisher@catg.org](mailto:charleen.fisher@catg.org)>, Charlene Stern <(b) (6)>, City of Kaktovik - City Clerk <[office@cityofkaktovik.org](mailto:office@cityofkaktovik.org)>, Edward Decleva <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>, Eugene Marino <[eugene\\_marino@fws.gov](mailto:eugene_marino@fws.gov)>, "Faith C Martineau (DNR)" <[faith.martineau@alaska.gov](mailto:faith.martineau@alaska.gov)>, Fannie Soplun <(b) (6)>, Jake Anders <[jake.anders@srbak.com](mailto:jake.anders@srbak.com)>, Joseph Keeney <[jkeeney@blm.gov](mailto:jkeeney@blm.gov)>, Kathy Ahgeak <[Kathy.Ahgeak@north-slope.org](mailto:Kathy.Ahgeak@north-slope.org)>, "Kevin S. Fisher" <[kevin.fisher@north-slope.org](mailto:kevin.fisher@north-slope.org)>, Matthew Rexford <(b) (6)>, "Nichelle (Shelly) Jones" <[njones@blm.gov](mailto:njones@blm.gov)>, patrick hanson <(b) (6)>, Paul Lawrence <[paul.lawrence@srbak.com](mailto:paul.lawrence@srbak.com)>, Rhonda Pitka <[rpitka@beavercouncil.org](mailto:rpitka@beavercouncil.org)>, "Robert (Bob) King" <[r2king@blm.gov](mailto:r2king@blm.gov)>, Sarah LaMarr <[slamarr@blm.gov](mailto:slamarr@blm.gov)>, Sarah Obed <[obeds@doyon.com](mailto:obeds@doyon.com)>, Stephen Braund <[stephen.braund@srbak.com](mailto:stephen.braund@srbak.com)>, Teresa Imm <[timmm@asrc.com](mailto:timmm@asrc.com)>, Tiffany Yatlin <(b) (6)>, Tom Lohman <(b) (6)>, Tom McCulloch <[tmcculloch@achp.gov](mailto:tmcculloch@achp.gov)>, Tommy Nageak <[Tommy.Nageak@north-slope.org](mailto:Tommy.Nageak@north-slope.org)>, Tonya Garnett <(b) (6)>, Tyler Janowski <[tjanowski@asrc.com](mailto:tjanowski@asrc.com)>, Molly Vaughan <[vaughan.molly@epa.gov](mailto:vaughan.molly@epa.gov)>, Myra Thumma <(b) (6)>, Casey Burns <[ctburns@blm.gov](mailto:ctburns@blm.gov)>, Catherine Hillis <[chillis@blm.gov](mailto:chillis@blm.gov)>, Cindy Hamfler <[chamfler@blm.gov](mailto:chamfler@blm.gov)>, Craig Perham <[craig.perham@boem.gov](mailto:craig.perham@boem.gov)>, Donna Wixon <[dwixon@blm.gov](mailto:dwixon@blm.gov)>, Erin Julianus <[ejulianus@blm.gov](mailto:ejulianus@blm.gov)>, James Lima <[james.lima@boem.gov](mailto:james.lima@boem.gov)>, Joseph Galluzzi <[jgalluzz@blm.gov](mailto:jgalluzz@blm.gov)>, "Kenneth (Alan) Peck" <[kpeck@blm.gov](mailto:kpeck@blm.gov)>, Krystal Debenham <[kdebenham@blm.gov](mailto:kdebenham@blm.gov)>, Matt Whitman <[mwhitman@blm.gov](mailto:mwhitman@blm.gov)>, Michael McCrum <[mmccrum@blm.gov](mailto:mmccrum@blm.gov)>, "Paul L Decker (DNR)" <[paul.decker@alaska.gov](mailto:paul.decker@alaska.gov)>, Randy Goodwin <[rgoodwin@blm.gov](mailto:rgoodwin@blm.gov)>, Robert Brumbaugh <[rbrumbau@blm.gov](mailto:rbrumbau@blm.gov)>, Sara Longan <[slongan@blm.gov](mailto:slongan@blm.gov)>, Scott Guyer <[sguyer@blm.gov](mailto:sguyer@blm.gov)>, "Steve S Masterman

(DNR)" <[steve.masterman@alaska.gov](mailto:steve.masterman@alaska.gov)>, Stewart Allen <[sdallen@blm.gov](mailto:sdallen@blm.gov)>, Thomas Bickauskas <[tbickaus@blm.gov](mailto:tbickaus@blm.gov)>, Timothy Vosburgh <[tvosburgh@blm.gov](mailto:tvosburgh@blm.gov)>, Arctic Village Council <[av\\_council@hotmail.com](mailto:av_council@hotmail.com)>, Victor Joseph <[victor.joseph@tananachiefs.org](mailto:victor.joseph@tananachiefs.org)>, [victoria@birchcreektribe.org](mailto:victoria@birchcreektribe.org), "Longan, Sara W (DNR)" <[sara.longan@alaska.gov](mailto:sara.longan@alaska.gov)>, (b) (6), oy Nageak <[rnageak@blm.gov](mailto:rnageak@blm.gov)>, Sarah Conn <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>, Serena Sweet <[ssweet@blm.gov](mailto:ssweet@blm.gov)>, Sheila Burke <[sheila.burke@north-slope.org](mailto:sheila.burke@north-slope.org)>, Sophie Tracey <[sophie.tracey@north-slope.org](mailto:sophie.tracey@north-slope.org)>, Susan Kittick-Atos <[Susan.Kittick-Atos@north-slope.org](mailto:Susan.Kittick-Atos@north-slope.org)>, Thomas Olemaun <(b) (6)>, "Thomas St. Clair" <[tstclair@blm.gov](mailto:tstclair@blm.gov)>, Timothy LaMarr <[tlamarr@blm.gov](mailto:tlamarr@blm.gov)>, Tom Nukapigak <(b) (6)>, Vanessa Rathbun <[vrathbun@blm.gov](mailto:vrathbun@blm.gov)>, Wayne Cary <[Wayne.Cary@north-slope.org](mailto:Wayne.Cary@north-slope.org)>, Wayne Svejnoha <[wsvejnoh@blm.gov](mailto:wsvejnoh@blm.gov)>, Wendy Brower <[wendy.brower@north-slope.org](mailto:wendy.brower@north-slope.org)>, WILLIAM HOPSON <(b) (6)>, "Winters, Jack F (DFG)" <[jack.winters@alaska.gov](mailto:jack.winters@alaska.gov)>, "Yoder, Sarah A (HSS)" <[sarah.yoder@alaska.gov](mailto:sarah.yoder@alaska.gov)>, Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, John Pearce <[jpearce@usgs.gov](mailto:jpearce@usgs.gov)>, John Trawicki <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>, Drew Crane <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>  
**Subject: PUBLIC MEETING DATES: Coastal Plain Oil and Gas Leasing Program Draft Environmental Impact Statement**

Dear Stakeholders:

Below is the public meeting schedule for the Draft EIS:

**Fairbanks: Monday, February 4**

Carlson Center, 2010 2<sup>nd</sup> Ave.

1:00pm – 7:00pm open house

Presentations at 2:00pm and 5:00pm

**Kaktovik: Tuesday, February 5**

6:00pm – 10:00pm, Harold Kaveolook School

**Utqiagvik: Wednesday, February 6**

5:00pm – 9:00pm, Iñupiat Heritage Center

**Fort Yukon: Thursday, February 7**

1:00pm – 3:00pm, Tribal Hall

**Arctic Village: Saturday, February 9**

10:00am – 2:00pm, Community Hall

**Venetie: Sunday, February 10**

10:00am – 2:00pm, Community Hall

**Anchorage: Monday, February 11**

Dena'ina Center, 600 W. 7<sup>th</sup> Ave.

1:00pm – 7:00pm open house

Presentations at 2:00pm and 5:00pm

**Washington, DC: Wednesday, February 13**

National Housing Center, 1201 15<sup>th</sup> St., NW.

2:00pm – 8:00pm open house

Presentations at 3:00pm and 6:00pm

I have also attached the press release announcing the meeting dates and locations, as well as a time extension to provide comment on the DEIS until March 13th, that was just published.

Please let me know if you have any questions.

Thank you,  
Nicole

**To:** Mitch Ellis[mitch\_ellis@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-01-31T15:03:12-05:00  
**Importance:** Normal  
**Subject:** FW: PUBLIC MEETING DATES: Coastal Plain Oil and Gas Leasing Program Draft Environmental Impact Statement  
**Received:** 2019-01-31T15:03:24-05:00  
Coastal Plain rescheduled meeting dates and comment extension BLM AK 19-02.pdf

Mark your calendar for Feb 13<sup>th</sup> ! We may ask you to represent FWS interests (that was Damberg's idea )

**Washington, DC: Wednesday, February 13**  
National Housing Center, 1201 15<sup>th</sup> St., NW.  
2:00pm 8:00pm open house  
Presentations at 3:00pm and 6:00pm

Hope all is well!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

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Please let me know if you have any questions.

Thank you,

Nicole

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Ellis, Mitch  
**Sent:** 2019-02-01T10:33:23-05:00  
**Importance:** Normal  
**Subject:** Re: FW: PUBLIC MEETING DATES: Coastal Plain Oil and Gas Leasing Program Draft Environmental Impact Statement  
**Received:** 2019-02-01T10:33:39-05:00

Good to see you still have your sense of humor! I'll be there, don't worry. In the back row!

---

Mitch Ellis  
Chief - Division of Natural Resources  
National Wildlife Refuge System  
US Fish and Wildlife Service  
(703)358-2660 wk  
(907)947-4416 mob

On Thu, Jan 31, 2019 at 3:03 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Mark your calendar for Feb 13<sup>th</sup> ! We may ask you to represent FWS interests (that was Damberg's idea )

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Hope all is well!

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

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I have also attached the press release announcing the meeting dates and locations, as well as a time extension to provide comment on the DEIS until March 13th, that was just published.

Please let me know if you have any questions.

Thank you,

Nicole



**To:** Bill Leacock[william\_leacock@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-01T18:55:39-05:00  
**Importance:** Normal  
**Subject:** Rapid response resource assessments for 1002  
**Received:** 2019-02-01T18:56:04-05:00  
Rapid-Response Resource Assessments and FWS Literature 0218.pdf

Hi Bill,

The attached document might help you get up to speed on our thoughts a year ago about science needs for the 1002 portion of the Arctic Refuge. Given that we completed these in 1 month and just after the coastal plain was opened for oil and gas, and we have learned quite a bit over the last year, nor did these go through peer review, they should be used as informative but not a final perspective.

There is also a bibliography of past FWS staff research publications.

Happy to discuss further.  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Leacock, William  
**Sent:** 2019-02-01T18:57:34-05:00  
**Importance:** Normal  
**Subject:** Re: Rapid response resource assessments for 1002  
**Received:** 2019-02-01T18:57:50-05:00

Many Thanks, Wendy.

On Fri, Feb 1, 2019 at 2:56 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Bill,

The attached document might help you get up to speed on our thoughts a year ago about science needs for the 1002 portion of the Arctic Refuge. Given that we completed these in 1 month and just after the coastal plain was opened for oil and gas, and we have learned quite a bit over the last year, nor did these go through peer review, they should be used as informative but not a final perspective.

There is also a bibliography of past FWS staff research publications.

Happy to discuss further.

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

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0000010661

*William B. Leacock*

*Wildlife Biologist  
Arctic National Wildlife Refuge  
101 12th Avenue, Room 236  
Fairbanks, AK 99701  
907-456-0519*

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]; Karen Clark[karen\_clark@fws.gov]; Bud Cribley[bud\_cribley@fws.gov]; Mary Colligan[mary\_colligan@fws.gov]; Patrick Lemons[patrick\_lemons@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]; Doug Damberg[doug\_damberg@fws.gov]; Sara Boario[sara\_boario@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-01T19:38:47-05:00  
**Importance:** Normal  
**Subject:** FW: information boards for open house (Coastal Plain)  
**Received:** 2019-02-01T19:39:21-05:00  
DEIS Public Review Mtgs Boards.pdf

Hi 1002 Leadership team,

FYI: Attached is a PDF from Nicole that shows the information that will be printed for the public meeting "information stations".

Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Hayes, Miriam (Nicole) <mnhayes@blm.gov>  
**Sent:** Friday, February 1, 2019 3:33 PM  
**To:** Wendy Loya <wendy\_loya@fws.gov>; Steve Berendzen <steve\_berendzen@fws.gov>; Stephen Arthur <stephen\_arthur@fws.gov>  
**Subject:** information boards for open house

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Kahn, Lynnda  
**Sent:** 2019-02-05T11:45:13-05:00  
**Importance:** Normal  
**Subject:** Re: Moving ahead: Arctic Refuge Coastal Plain DEIS Review  
**Received:** 2019-02-05T11:45:56-05:00

Okay. I'll take a look and see what I can do.

LYNNDA KAHN

Fish and Wildlife Biologist  
Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service  
P.O. Box 2139 | Soldotna, AK  
907.260.2818 - Office ><(((^>\_..^-..\_><(((^>\_..^-..\_><(((^>\_..^-..\_><(((^>

On Mon, Feb 4, 2019 at 2:19 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

I put you down for Compliance/Operations, which is kind of vague, but it would be good to have your perspective on how to ensure Stips and ROPS get applied with integrity, especially where it says that the Authorized Officer can make exceptions. How does that work on the Kenai and can this plan be strengthened? There are times when the science might support a different action, but it should be at the consensus of the land managers and affected parties. If you have expertise to consider Appendix B, the development scenario, that would also be an area we could use experienced eyes.

Thank you!

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**Subject:** Re: Moving ahead: Arctic Refuge Coastal Plain DEIS Review

Okay.

Let me know what you'd like me to help with at this point.

LYNNDA KAHN

## Fish and Wildlife Biologist

Kenai National Wildlife Refuge | U.S. Fish &amp; Wildlife Service

P.O. Box 2139 | Soldotna, AK

907.260.2818 - Office

On Mon, Feb 4, 2019 at 2:07 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Lynnda,

SAE has asked if they can go out in April, and the Marine Mammals Management team is working with SAE and the Department to determine if that can be permitted. Because SAE did not fly FLIR for den detection in December or January, the ITR that was submitted for polar bears would need to be revised. FLIR is not as effective after mid-February according to a report by the USGS for MMS from 2004 and could disturb emerging bears, so different mitigation would need to be applied. Stay tuned.

Dr. Wendy M. Loya

## Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

## Anchorage, Alaska

0000010665

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Kahn, Lynnda <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>  
**Sent:** Monday, February 4, 2019 12:00 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Re: Moving ahead: Arctic Refuge Coastal Plain DEIS Review

Wendy, I spoke to Pat O'dell late last week and he told me you'd mentioned that SAE and/or the Native consortium they're working with, withdrew their seismic exploration application.

Yet, I saw in the paper that there's still a chance they could move forward before May. Can you shed any light on this?

LYNNDA KAHN

Fish and Wildlife Biologist

Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service

P.O. Box 2139 | Soldotna, AK

907.260.2818 - Office

On Mon, Jan 28, 2019 at 10:43 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Absolutely!

Talk to you Thursday.

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

0000010666

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Kahn, Lynnda <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>  
**Sent:** Monday, January 28, 2019 10:38 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Re: Moving ahead: Arctic Refuge Coastal Plain DEIS Review

Hi Wendy, yes, it's good to be back.

Unfortunately I will be out of the office on Weds. so would it be possible to contact you Thursday to discuss next steps after the meeting?

LYNNDA KAHN

Fish and Wildlife Biologist

Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service

P.O. Box 2139 | Soldotna, AK

907.260.2818 - Office

On Mon, Jan 28, 2019 at 9:49 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Everyone,

We'll get started on Wednesday 1/30 with our internal review of the Arctic Refuge DEIS. I'll send a meeting invite for 1pm Wednesday, and will follow up with those of you that can't make that time individually.

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)



We anticipate that the comment deadline for the Draft EIS will be extended past Feb 11<sup>th</sup>, and I will let you know as soon as it is determined. Nevertheless, we'll move ahead with this priority task and try to pull together your comments in the next two weeks. I know this isn't the only thing waiting for you to work on, so talk to your supervisor about your to-do list and we can work together to set realistic goals and deadlines for your contributions.

At this time, it appears that SAE has withdrawn their plan to do seismic this winter, so I believe the Draft Seismic EA will go back to the drawing board as revised plans are developed....so not on our immediate to do list!

Please continue to refer media inquiries to Sara Boario who is working with BLM's communication lead.

Below is our list of Subject Matter leads, so if you have comments regarding another resource, please work with the lead to incorporate them into that section. I'll reattach our scoping letter and two example letters so you can understand the depth of our comments.

- ☐ I anticipate our comments will largely make the case for support for the Stipulations and Required Operating Procedures (ROPs) that help meet regulatory requirements and management purposes and suggestions on how to further improve any of those elements of the alternatives. Alternative D2 reflects most of what USFWS put forward at the Alternatives Workshop last July.
- ☐ Our reviews will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a "fatal flaw" in how the DEIS portrays or analyzes information, including impacts analyses, about the resources in our areas of expertise.
- ☐ Your reviews should be short narratives, see attached examples from our Ecological Services team.

Subject Matter leads:

Refuge Purposes: Steve, Joanna, Stephanie

Broader Regulatory FWS mission: Sarah Conn et al.

Subsistence: Carl Johnson & Josh Ream

Cultural Resource Sites: Ed Decleva  
Air Quality: Catherine Collins and Tim Allen  
Petroleum/Development: Pat O'dell  
Compliance/Operations: Lynnda Kahn  
Hazardous materials: Angela Matz  
Visitor Use: Jen Reed  
Wilderness: Roger Kaye  
Wild & Scenic Rivers: Jen Reed  
Soils, Vegetation, Wetlands and Permafrost: Josh Rose  
Caribou: Steve Arthur  
Terrestrial Mammals: Steve Arthur/Bill Leacock  
Migratory Birds: Chris Latty  
Polar Bears: Ryan Wilson and Christopher Putnam  
Fish and Water Resources: Randy Brown and John Trawicki  
Snow: Paul Leonard  
Climate: Paul Leonard  
Invasive Species: TBD  
Cumulative Effects: Wendy Loya  
Other topics: Wendy Loya

I look forward to working with you all again on this,

Sincerely,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Boario, Sara  
**Sent:** 2019-02-05T14:52:29-05:00  
**Importance:** Normal  
**Subject:** Re: Time Sensitive: reporter follow-up questions on Arctic issues  
**Received:** 2019-02-05T14:52:46-05:00  
[Facebook Logo for Email Signature Block.png](#)  
[twitter-icon Signature Block.jpg](#)

thanks!

On Tue, Feb 5, 2019 at 10:50 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

I think we can share what we funded last year and we have not made funding decisions for 2019, so that is easy.

I'll pull this together and send to you two and can stop by this afternoon to talk through it.

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Boario, Sara <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>  
**Sent:** Tuesday, February 5, 2019 10:34 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Cc:** Andrea Medeiros <[andrea\\_medeiros@fws.gov](mailto:andrea_medeiros@fws.gov)>  
**Subject:** Fwd: Time Sensitive: reporter follow-up questions on Arctic issues

Hi Wendy -

I know you have a heck of a busy month in front of you, but was wondering if you could send the list of prioritized research for Arctic Refuge (what you have; guessing

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specific to 10-02; we can get broader refuge info if needed) to me and Andrea...if you have time to chat at all this afternoon that would be helpful too.

thx

sb

----- Forwarded message -----

From: **Shire, Gavin** <[gavin\\_shire@fws.gov](mailto:gavin_shire@fws.gov)>

Date: Tue, Feb 5, 2019 at 10:12 AM

Subject: Re: Time Sensitive: reporter follow-up questions on Arctic issues

To: Boario, Sara <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>

Cc: Wackowski, Stephen <[stephen\\_wackowski@ios.doi.gov](mailto:stephen_wackowski@ios.doi.gov)>, Barbara Wainman <[barbara\\_wainman@fws.gov](mailto:barbara_wainman@fws.gov)>, Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Berendzen, Steve <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Andrea Medeiros <[andrea\\_medeiros@fws.gov](mailto:andrea_medeiros@fws.gov)>

Russell has requested draft responses to these additional questions so that he can run them by Todd et al for approval. Please send to me ASAP. Thanks,

G

Gavin Shire

Chief of Public Affairs

U.S. Fish and Wildlife Service

MS: EA

5275 Leesburg Pike

Falls Church, VA 22041-3803

703-358-2649 (o)

703-346-9123 (c)

[gavin\\_shire@fws.gov](mailto:gavin_shire@fws.gov)

On Mon, Feb 4, 2019 at 4:29 PM Boario, Sara <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)> wrote:

Steve, Gavin -

Early last week, Steve Berendzen, manager at Arctic NWR, received an inquiry from a reporter named Adam Federman with [Type Investigations](#) re: Arctic infrastructure projects. He passed that along to us, and Andrea coordinated the response below with Gavin and DOI-EA. He now has additional requests and questions - bottom of this email - and will be attending some of the public meetings over the next week+ (didn't specify which ones). I know you (Steve W) and Joe have been handling much of the press on these issues and wanted you to have a heads up. Please let us know how you would like to proceed and/or what additional information you require. -- Sara

**Question:** I'm doing some background reporting on oil and gas exploration in ANWR and was hoping to get some more information on the \$4 million FWS grant the refuge received last year. Do you have any material on how this money was allocated and which projects are currently moving forward? Is there a list? Or documentation?

**Answer:** Steve let me know you were looking for some information regarding a one-time appropriation of \$4 million we received for some Arctic National Wildlife Refuge capitol improvement and deferred maintenance projects. The Service is planning to utilize these appropriations to complete improvements to and construction of seasonal housing and storage facilities in Kaktovik, Galbraith Lake, and Arctic Village to support refuge management activities. To date, approximately \$100,000 has been obligated for planning and design.

Additional Questions:

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0000010673

find time to talk then.

- If there's any material regarding the infrastructure projects or scientific research ventures that I'd be able to look at that would be great.
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- would you also be able to tell me what the refuge's annual operating budget is and perhaps what it has been in recent past years? Many thanks.
- My main interest is to better understand the key priorities for refuge research moving forward and to get a sense of what the refuge objectives are in terms of stewarding the natural landscape.

--

Sara D. Boario

Assistant Regional Director-External Affairs

U.S. Fish and Wildlife Service, Alaska Region

Anchorage, Alaska

907-786-3431



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Sara D. Boario

Assistant Regional Director-External Affairs

U.S. Fish and Wildlife Service, Alaska Region

Anchorage, Alaska

907-786-3431



--

Sara D. Boario  
Assistant Regional Director External Affairs  
U.S. Fish and Wildlife Service, Alaska Region  
Anchorage, Alaska  
907 786 3431





**To:** Sara Boario[sara\_boario@fws.gov]  
**Cc:** Andrea Medeiros[andrea\_medeiros@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-05T16:42:24-05:00  
**Importance:** Normal  
**Subject:** RE: Time Sensitive: reporter follow-up questions on Arctic issues  
**Received:** 2019-02-05T16:42:36-05:00  
2018 Arctic Refuge Coastal Plain Research Plan 090518.pdf

Hi Sara and Andrea,

Attached is a PDF of the research that USFWS provided funding for in FY 2018. Many of these projects will be initiated in 2019 as that will provide the first summer field season since funding.

Let me know if you have any questions. I did not include the dollar amounts as I do not have the final values, but this represents science investment from nearly every division.

I am headed up to your floor shortly to catch up with folks and will stop in to see if you have questions, but feel free to call me anytime this afternoon. I am here till 4 and by cell after that.

Thanks!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Boario, Sara <sara\_boario@fws.gov>  
**Sent:** Tuesday, February 5, 2019 10:34 AM  
**To:** Wendy Loya <wendy\_loya@fws.gov>  
**Cc:** Andrea Medeiros <andrea\_medeiros@fws.gov>  
**Subject:** Fwd: Time Sensitive: reporter follow-up questions on Arctic issues

Hi Wendy -

I know you have a heck of a busy month in front of you, but was wondering if you could send the list of prioritized research for Arctic Refuge (what you have; guessing specific to 10-02; we can get broader refuge info if needed) to me and Andrea...if you have time to chat at all this afternoon that would be helpful too.

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Date: Tue, Feb 5, 2019 at 10:12 AM

Subject: Re: Time Sensitive: reporter follow-up questions on Arctic issues

To: Boario, Sara <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>

Cc: Wackowski, Stephen <[stephen\\_wackowski@ios.doi.gov](mailto:stephen_wackowski@ios.doi.gov)>, Barbara Wainman <[barbara\\_wainman@fws.gov](mailto:barbara_wainman@fws.gov)>, Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Berendzen, Steve <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Andrea Medeiros <[andrea\\_medeiros@fws.gov](mailto:andrea_medeiros@fws.gov)>

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G

Gavin Shire  
Chief of Public Affairs  
U.S. Fish and Wildlife Service  
MS: EA  
5275 Leesburg Pike  
Falls Church, VA 22041-3803  
703-358-2649 (o)  
703-346-9123 (c)  
[gavin\\_shire@fws.gov](mailto:gavin_shire@fws.gov)

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capitol improvement and deferred maintenance projects. The Service is planning to utilize these appropriations to complete improvements to and construction of seasonal housing and storage facilities in Kaktovik, Galbraith Lake, and Arctic Village to support refuge management activities. To date, approximately \$100,000 has been obligated for planning and design.

Additional Questions:

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Sara D. Boario  
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Anchorage, Alaska  
907-786-3431



--

Sara D. Boario  
Assistant Regional Director-External Affairs  
U.S. Fish and Wildlife Service, Alaska Region  
Anchorage, Alaska  
907-786-3431



**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Andrea Medeiros[andrea\_medeiros@fws.gov]  
**From:** Boario, Sara  
**Sent:** 2019-02-06T13:05:31-05:00  
**Importance:** Normal  
**Subject:** Re: Time Sensitive: reporter follow-up questions on Arctic issues  
**Received:** 2019-02-06T13:05:50-05:00  
[Facebook Logo for Email Signature Block.png](#)  
[twitter-icon Signature Block.jpg](#)

any chance to connect this morning? thanks for the background!

sb

On Tue, Feb 5, 2019 at 12:42 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Sara and Andrea,

Attached is a PDF of the research that USFWS provided funding for in FY 2018. Many of these projects will be initiated in 2019 as that will provide the first summer field season since funding.

Let me know if you have any questions. I did not include the dollar amounts as I do not have the final values, but this represents science investment from nearly every division.

I am headed up to your floor shortly to catch up with folks and will stop in to see if you have questions, but feel free to call me anytime this afternoon. I am here till 4 and by cell after that.

Thanks!

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

0000010679

907.227.2942 (mobile)

**From:** Boario, Sara <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>  
**Sent:** Tuesday, February 5, 2019 10:34 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Cc:** Andrea Medeiros <[andrea\\_medeiros@fws.gov](mailto:andrea_medeiros@fws.gov)>  
**Subject:** Fwd: Time Sensitive: reporter follow-up questions on Arctic issues

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**Date:** Tue, Feb 5, 2019 at 10:12 AM  
**Subject:** Re: Time Sensitive: reporter follow-up questions on Arctic issues  
**To:** Boario, Sara <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>  
**Cc:** Wackowski, Stephen <[stephen\\_wackowski@ios.doi.gov](mailto:stephen_wackowski@ios.doi.gov)>, Barbara Wainman <[barbara\\_wainman@fws.gov](mailto:barbara_wainman@fws.gov)>, Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Berendzen, Steve <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Andrea Medeiros <[andrea\\_medeiros@fws.gov](mailto:andrea_medeiros@fws.gov)>

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0000010680

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Anchorage, Alaska

907-786-3431



--

Sara D. Boario

Assistant Regional Director External Affairs

U.S. Fish and Wildlife Service, Alaska Region

Anchorage, Alaska

907 786 3431





**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Socheata Lor[socheata\_lor@fws.gov]  
**From:** Boario, Sara  
**Sent:** 2019-02-06T14:03:01-05:00  
**Importance:** Normal  
**Subject:** Re: FW: Draft statement for reporter regarding research in Arctic  
**Received:** 2019-02-06T14:03:19-05:00  
[twitter-icon Signature Block.jpg](#)  
[Facebook Logo for Email Signature Block.png](#)

hahaha, nice catch! glad your eyes are not yet burned out from EIS comments ;-)

thanks!

sb

On Wed, Feb 6, 2019 at 9:52 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Didn't reply all

---

**From:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Sent:** Wednesday, February 6, 2019 9:52 AM  
**To:** Andrea Medeiros <[andrea\\_medeiros@fws.gov](mailto:andrea_medeiros@fws.gov)>  
**Subject:** RE: Draft statement for reporter regarding research in Arctic

Content looks good, think there is a misplaced semicolon ;)

...ensuring our understanding of caribou calving is up to date; and improving our...

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Medeiros, Andrea <[andrea\\_medeiros@fws.gov](mailto:andrea_medeiros@fws.gov)>  
**Sent:** Wednesday, February 6, 2019 9:49 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Cc:** Sara Boario <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>; Socheata Lor <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>  
**Subject:** Draft statement for reporter regarding research in Arctic

Wendy, here is the draft statement. Please let us know what you think:

We are working to identify the information needed for decision making as we move through various steps in the oil and gas development process — planning, seismic exploration, leasing, and development. In 2018 we invested approximately 1 million dollars in priority research, including: collaborating with USGS to better understand polar bear populations and denning on the refuge; ensuring our understanding of caribou calving is up to date; and improving our understanding of how snow depth and density varies across the refuge to minimize impacts to vegetation, permafrost, and winter fish and wildlife habitat associated with potential exploration and development. We are currently in the planning process for identifying priority research for 2019.

---

Andrea Medeiros

U.S. Fish and Wildlife Service,

Alaska Region, External Affairs **tEAm**

Public Affairs Specialist

(907) 786-3695

Mobile: (907) 227-4788

Connect with us:

0000010685



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Sara D. Boario  
Assistant Regional Director External Affairs  
U.S. Fish and Wildlife Service, Alaska Region  
Anchorage, Alaska  
907 786 3431



**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Kahn, Lynnda  
**Sent:** 2019-02-06T18:14:08-05:00  
**Importance:** Normal  
**Subject:** Re: Moving ahead: Arctic Refuge Coastal Plain DEIS Review  
**Received:** 2019-02-06T18:14:53-05:00

Hi Wendy, Greg and Karen came down here today and Greg brought up the Arctic leasing and seismic efforts. He told us this afternoon that USFWS told SAE that we could not approve work for this winter due to the timing involved and the bear denning issues. He said HQ agreed with us. So based on what he just told us, it appears no seismic work will occur this winter.....that is, of course, as of this moment.

LYNNDA KAH

Fish and Wildlife Biologist  
Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service  
P.O. Box 2139 | Soldotna, AK  
907.260.2818 - Office ><(((°>\_..~\_..><(((°>\_..~\_..><(((°>\_..~\_..><(((°>

On Mon, Feb 4, 2019 at 2:07 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Lynnda,

SAE has asked if they can go out in April, and the Marine Mammals Management team is working with SAE and the Department to determine if that can be permitted. Because SAE did not fly FLIR for den detection in December or January, the ITR that was submitted for polar bears would need to be revised. FLIR is not as effective after mid-February according to a report by the USGS for MMS from 2004 and could disturb emerging bears, so different mitigation would need to be applied. Stay tuned.

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**Subject:** Re: Moving ahead: Arctic Refuge Coastal Plain DEIS Review

Wendy, I spoke to Pat O'dell late last week and he told me you'd mentioned that SAE and/or the Native consortium they're working with, withdrew their seismic exploration application.

Yet, I saw in the paper that there's still a chance they could move forward before May. Can you shed any light on this?

LYNNDA KAHN

## Fish and Wildlife Biologist

Kenai National Wildlife Refuge | U.S. Fish &amp; Wildlife Service

P.O. Box 2139 | Soldotna, AK

907.260.2818 - Office ><(((('°>...><(((('°>...><(((('°>...><(((('°>...

On Mon, Jan 28, 2019 at 10:43 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Absolutely!

Talk to you Thursday.

Dr. Wendy M. Loya

## Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

## Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Kahn, Lynnda <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>  
**Sent:** Monday, January 28, 2019 10:38 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Re: Moving ahead: Arctic Refuge Coastal Plain DEIS Review

Hi Wendy, yes, it's good to be back.

Unfortunately I will be out of the office on Weds. so would it be possible to contact you Thursday to discuss next steps after the meeting?

LYNNDA KAHN

Fish and Wildlife Biologist

Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service

P.O. Box 2139 | Soldotna, AK

907.260.2818 - Office ><(((('°>\_..\_~\_..\_><(((('°>\_..\_~\_..\_><(((('°>\_..\_~\_..\_><(((('°>

On Mon, Jan 28, 2019 at 9:49 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Everyone,

We'll get started on Wednesday 1/30 with our internal review of the Arctic Refuge DEIS. I'll send a meeting invite for 1pm Wednesday, and will follow up with those of you that can't make that time individually.

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)

We anticipate that the comment deadline for the Draft EIS will be extended past Feb 11<sup>th</sup>, and I will let you know as soon as it is determined. Nevertheless, we'll move ahead with this priority task and try to pull together your comments in the next two weeks. I know this

isn't the only thing waiting for you to work on, so talk to your supervisor about your to-do list and we can work together to set realistic goals and deadlines for your contributions.

At this time, it appears that SAE has withdrawn their plan to do seismic this winter, so I believe the Draft Seismic EA will go back to the drawing board as revised plans are developed....so not on our immediate to do list!

Please continue to refer media inquiries to Sara Boario who is working with BLM's communication lead.

Below is our list of Subject Matter leads, so if you have comments regarding another resource, please work with the lead to incorporate them into that section. I'll reattach our scoping letter and two example letters so you can understand the depth of our comments.

- ☐ I anticipate our comments will largely make the case for support for the Stipulations and Required Operating Procedures (ROPs) that help meet regulatory requirements and management purposes and suggestions on how to further improve any of those elements of the alternatives. Alternative D2 reflects most of what USFWS put forward at the Alternatives Workshop last July.
- ☐ Our reviews will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a "fatal flaw" in how the DEIS portrays or analyzes information, including impacts analyses, about the resources in our areas of expertise.
- ☐ Your reviews should be short narratives, see attached examples from our Ecological Services team.

Subject Matter leads:

Refuge Purposes: Steve, Joanna, Stephanie

Broader Regulatory FWS mission: Sarah Conn et al.

Subsistence: Carl Johnson & Josh Ream

Cultural Resource Sites: Ed Decleva

Air Quality: Catherine Collins and Tim Allen

Petroleum/Development: Pat O'dell

Compliance/Operations: Lynnda Kahn

Hazardous materials: Angela Matz

Visitor Use: Jen Reed

Wilderness: Roger Kaye

Wild & Scenic Rivers: Jen Reed

Soils, Vegetation, Wetlands and Permafrost: Josh Rose

Caribou: Steve Arthur

Terrestrial Mammals: Steve Arthur/Bill Leacock

Migratory Birds: Chris Latty

Polar Bears: Ryan Wilson and Christopher Putnam

Fish and Water Resources: Randy Brown and John Trawicki

Snow: Paul Leonard

Climate: Paul Leonard

Invasive Species: TBD

Cumulative Effects: Wendy Loya

Other topics: Wendy Loya

I look forward to working with you all again on this,

Sincerely,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska



907.786.3532 (office)

907.227.2942 (mobile)

**To:** Joshua Rose[Joshua\_Rose@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]  
**From:** Trawicki, John  
**Sent:** 2019-02-07T16:45:42-05:00  
**Importance:** Normal  
**Subject:** Fwd: Info to aid in ESA/MMPA review  
**Received:** 2019-02-07T16:46:23-05:00

Josh-

Not sure when you joined the call today, but Mary wanted to make the project descriptions would be available soon for ESA review. I asked Drew to provide questions or information he would need to make a determination. Provided below.

I also spoke with Ed Decleva to what he would need for his review. He said he provided that to you in December.

If ESA consultation is required for a project it will need to start soon.

john t

----- Forwarded message -----

**From:** Crane, Drew <drew\_crane@fws.gov>  
**Date:** Thu, Feb 7, 2019 at 12:21 PM  
**Subject:** Info to aid in ESA/MMPA review  
**To:** John Trawicki <john\_trawicki@fws.gov>

Hi John,

If a request for information will be going out related to proposed activities in the 1002 Area/Arctic Refuge this year, could you include the following information needs? These will help with our review on whether additional consultation under ESA and/or MMPA will be needed.

- Temporal information - what time of year will the project take place, as specific as possible (i.e. May 1 to July 31...)
- Spatial information - where will the activity take place in the Refuge (i.e. sampling at these coordinates, or this many miles from the coast...specific as possible)
- Access - how will access to research areas be accomplished (helicopter, fixed wing, boats daily transits, what routes will they fly/boat...)
- Type of activity - what will the work involve (field sampling, erecting equipment that will remain on site, how big of a crew, field camps...)

Those are really the basic needs and should give us good place to start our review for any additional regulatory requirements.

Thanks!

Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

--

John Trawicki  
Water Resources Branch Chief  
National Wildlife Refuge System, Alaska  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
Work: (907) 786-3474  
Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"  
George Bernard Shaw

**To:** Stephen Arthur[stephen\_arthur@fws.gov]; Bill Leacock[william\_leacock@fws.gov]; Ryan Wilson[ryan\_r\_wilson@fws.gov]; Paul Leonard[paul\_leonard@fws.gov]  
**Cc:** Steve Berendzen[steve\_berendzen@fws.gov]; Joanna Fox[joanna\_fox@fws.gov]; Joshua Rose[joshua\_rose@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-07T18:07:03-05:00  
**Importance:** Normal  
**Subject:** Porcupine Caribou Vulnerability Analysis by Russell and Gunn 2019  
**Received:** 2019-02-07T18:07:55-05:00  
[Russell and Gunn 2019 PCH vulnerability 1002 Final.pdf](#)

FYI, attached 2019 report to the Canadian Government titled: Vulnerability analysis of the Porcupine Caribou Herd to potential development of the 1002 lands in the Arctic National Wildlife Refuge, Alaska

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Kahn, Lynnda  
**Sent:** 2019-02-07T18:16:02-05:00  
**Importance:** Normal  
**Subject:** Conditions that may apply  
**Received:** 2019-02-07T18:16:47-05:00  
[Some Special Conditions that May Apply.docx](#)  
[Final Seismic Survey SUP Special Conditions 7 10 13.docx](#)

Wendy, I'm attaching a couple of things, for what it's worth, that might be able to be used as stips or required operating procedures.....  
Even though 2nd attachment is for seismic activities, some could be used for development activities.

LYNNDA KAHN

Fish and Wildlife Biologist  
Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service  
P.O. Box 2139 | Soldotna, AK  
907.260.2818 - Office ><(((0>\_..\_..><(((0>\_..\_..><(((0>\_..\_..><(((0>

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Kahn, Lynnda  
**Sent:** 2019-02-07T18:56:31-05:00  
**Importance:** Normal  
**Subject:** Re:  
**Received:** 2019-02-07T18:57:14-05:00

Well, my role in oil and gas activities here is referenced as either the Refuge Authorized Officer or Representative. BLM refers to us as the Surface Manager and yes, we work collaboratively on matters affecting the surface estate.

Peppered throughout BLMs conditions of approval which are attached to any authorization issued by them, the Kenai NWR is referenced. Here are a few examples:

- "BLM, with concurrence of the Kenai NWR, reserves the right to refuse any uncertified fill material from being brought into the Refuge."
- "BLM and Kenai NWR will require additional grading if found unsatisfactory upon inspections following operations."
- "The Kenai National Wildlife Refuge requires, at a minimum, that a temporary barricade or other non-hazardous barrier be installed around dry hazardous materials as a deterrent for wildlife. If at any time it is observed that wildlife are interacting with the materials or equipment, the Refuge and BLM shall be notified immediately, action taken as directed, and precautions instituted to prevent further interaction."
- "Following the completion of the well, all material/equipment stored on Pad 4 and ancillary pads shall be removed unless extension is approved by the BLM and Kenai National Wildlife Refuge. The area shall be cleared of any secondary containment walls and other debris. Hilcorp shall restore Pad 4 to its original condition, including but not limited to replacing wellheads and silos, removal of drilling materials and equipment, spreading and/or grading excess gravel. The BLM and Kenai National Wildlife Refuge will conduct inspections and evaluate the condition of Pad 4 following completion operations."

LYNNDA KAHN

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On Thu, Feb 7, 2019 at 2:14 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Lynnda,

I am sorry I haven't had a chance to return your call, but we would be grateful for whatever review and comments you feel are constructive in our review of the Arctic Refuge DEIS. I am not personally

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familiar with the EID you mention below, but welcome your thoughts! One of the other topics that you could likely help us clarify is the role of the USFWS in decisionmaking. The DEIS states that the USFWS will be consulted on many decisions, so how do we describe that as the land manager, we might be a co-lead in decisions affecting natural resources which the refuge has management authority over but which BLM brings the oil and gas /impacts analysis expertise? I think you have described a good collaborative relationship with BLM for the Kenai NWR.

Thanks, if you want to chat I can make time Friday?

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Kahn, Lynnda <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>  
**Sent:** Thursday, February 7, 2019 2:05 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:**

Has anyone up there looked at the EIS for the SHADURA NATURAL GAS DEVELOPMENT PROJECT, Kenai NWR to see if there's anything in there that can be used in the Coastal Plain EIS review?

LYNNDA ><(((0>\_..`~`~\_><(((0>\_..`~`~\_><(((0>\_..`~`~\_><(((0>

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Leacock, William  
**Sent:** 2019-02-07T19:12:35-05:00  
**Importance:** Normal  
**Subject:** Re: Porcupine Caribou Vulnerability Analysis by Russell and Gunn 2019  
**Received:** 2019-02-07T19:12:46-05:00

Thank you, Wendy.  
WBL

On Thu, Feb 7, 2019 at 2:07 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

FYI, attached 2019 report to the Canadian Government titled: Vulnerability analysis of the Porcupine Caribou Herd to potential development of the 1002 lands in the Arctic National Wildlife Refuge, Alaska

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

--

*William B. Leacock*

*Wildlife Biologist  
Arctic National Wildlife Refuge  
101 12th Avenue, Room 236  
Fairbanks, AK 99701  
907-456-0519*



**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Kahn, Lynnda  
**Sent:** 2019-02-07T19:12:38-05:00  
**Importance:** Normal  
**Subject:** Re:  
**Received:** 2019-02-07T19:13:20-05:00

I'm looking at Table 2-2 Lease stipulations, ROPs, and Lease Notice by Alternative and will have a few comments to you by next week.

LYNNDA KAHN

Fish and Wildlife Biologist  
Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service  
P.O. Box 2139 | Soldotna, AK  
907.260.2818 - Office ><(((('>\_..^-..\_><(((('>\_..^-..\_><(((('>\_..^-..\_><(((('>

On Thu, Feb 7, 2019 at 2:14 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Lynnda,

I am sorry I haven't had a chance to return your call, but we would be grateful for whatever review and comments you feel are constructive in our review of the Arctic Refuge DEIS. I am not personally familiar with the EID you mention below, but welcome your thoughts! One of the other topics that you could likely help us clarify is the role of the USFWS in decisionmaking. The DEIS states that the USFWS will be consulted on many decisions, so how do we describe that as the land manager, we might be a co-lead in decisions affecting natural resources which the refuge has management authority over but which BLM brings the oil and gas /impacts analysis expertise? I think you have described a good collaborative relationship with BLM for the Kenai NWR.

Thanks, if you want to chat I can make time Friday?

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

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907.786.3532 (office)

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**From:** Kahn, Lynnda <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>  
**Sent:** Thursday, February 7, 2019 2:05 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:**

Has anyone up there looked at the EIS for the SHADURA NATURAL GAS DEVELOPMENT PROJECT, Kenai NWR to see if there's anything in there that can be used in the Coastal Plain EIS review?

LYNNDA ><(((0>\_..\_><(((0>\_..\_><(((0>\_..\_><(((0>

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Kahn, Lynnda  
**Sent:** 2019-02-07T19:38:33-05:00  
**Importance:** Normal  
**Subject:** Re:  
**Received:** 2019-02-07T19:39:12-05:00

Yes, let's talk tomorrow, preferably before noon. Thanks Wendy.

LYNNDA KAHN

Fish and Wildlife Biologist  
Kenai National Wildlife Refuge | U.S. Fish & Wildlife Service  
P.O. Box 2139 | Soldotna, AK  
907.260.2818 - Office ><(((('>\_..`~`\_..><(((('>\_..`~`\_..><(((('>\_..`~`\_..><(((('>

On Thu, Feb 7, 2019 at 2:14 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Lynnda,

I am sorry I haven't had a chance to return your call, but we would be grateful for whatever review and comments you feel are constructive in our review of the Arctic Refuge DEIS. I am not personally familiar with the EID you mention below, but welcome your thoughts! One of the other topics that you could likely help us clarify is the role of the USFWS in decisionmaking. The DEIS states that the USFWS will be consulted on many decisions, so how do we describe that as the land manager, we might be a co-lead in decisions affecting natural resources which the refuge has management authority over but which BLM brings the oil and gas /impacts analysis expertise? I think you have described a good collaborative relationship with BLM for the Kenai NWR.

Thanks, if you want to chat I can make time Friday?

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

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Anchorage, Alaska

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**From:** Kahn, Lynnda <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>  
**Sent:** Thursday, February 7, 2019 2:05 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:**

Has anyone up there looked at the EIS for the SHADURA NATURAL GAS DEVELOPMENT PROJECT, Kenai NWR to see if there's anything in there that can be used in the Coastal Plain EIS review?

LYNNDA ><(((0>\_..\_><(((0>\_..\_><(((0>\_..\_><(((0>

**To:** Heather Johnson[heatherjohnson@usgs.gov]; John Pearce[jpearce@usgs.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-07T20:15:26-05:00  
**Importance:** Normal  
**Subject:** FW: Porcupine Caribou Vulnerability Analysis by Russell and Gunn 2019  
**Received:** 2019-02-07T20:16:29-05:00  
Russell and Gunn 2019 PCH vulnerability 1002 Final.pdf

Not sure if this has crossed your desks yet.

FYI, attached 2019 report to the Canadian Government titled: Vulnerability analysis of the Porcupine Caribou Herd to potential development of the 1002 lands in the Arctic National Wildlife Refuge, Alaska

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Catherine Coon[catherine.coon@boem.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-07T20:33:46-05:00  
**Importance:** Normal  
**Subject:** Coordinating research activities in eastern Southern Beaufort Sea  
**Received:** 2019-02-07T20:33:55-05:00

Hey Cathy,

FWS knows it is important to coordinate research in and near the Arctic NWR, as well as across the north slope and Beaufort sea, in order to minimize impacts on wildlife and subsistence users. We are working closely with researchers funded through USFWS and USGS to coordinate logistics, especially those projects that could affect Kaktovik residents. Josh Rose, the Arctic Refuge Acting Oil and Gas Coordinator, is working to move most helicopter activity to Kavik Camp to the west of the Refuge. I wanted to check in with BOEM on what work you all may have near the Arctic Refuge in 2019, and incorporate that into our project tracking if not also collaborative research logistics.

You guys seem to be pros at project tracking, so maybe there is a website that would give us relevant information, but grateful if you are someone on your team can help me gather information from BOEM. Feel free to call for clarification or however works best for you!

Thank you!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Trawicki, John[john\_trawicki@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Mayer, Tim  
**Sent:** 2019-02-08T11:47:40-05:00  
**Importance:** Normal  
**Subject:** Re: Comments?  
**Received:** 2019-02-08T11:47:56-05:00

Thanks John, not too much in this document on water but water availability seems to be a big issue for oil development at ANWR. Not much quantitative info on quantities available or needed in the DEIS either. I think that is shortcoming that I will comment on.

Tim Mayer, Ph.D.  
Supervisory Hydrologist  
Water Resources Branch  
US Fish and Wildlife Service  
911 NE 11th Ave  
Portland, OR 97232-4181  
503 231-2395 (office)  
503 799-8100 (cell)

On Fri, Feb 8, 2019 at 8:32 AM Trawicki, John <john\_trawicki@fws.gov> wrote:

United States Fish & Wildlife Service. (2001). Potential impacts of proposed oil and gas development on the Arctic Refuge's Coastal Plain

[https://www.fws.gov/uploadedFiles/Region\\_7/NWRS/Zone\\_1/Arctic/PDF/arctic\\_oilandgas\\_impact.pdf](https://www.fws.gov/uploadedFiles/Region_7/NWRS/Zone_1/Arctic/PDF/arctic_oilandgas_impact.pdf)

On Fri, Feb 8, 2019 at 6:00 AM Mayer, Tim <tim\_mayer@fws.gov> wrote:

John/Wendy,

Do you have this reference? The web site doesn't seem to work anymore. I'm curious what we said about impacts in 2001. John, were you involved in writing this?

United States Fish & Wildlife Service. (2001). Potential impacts of proposed oil and gas development on the Arctic Refuge's Coastal Plain. <http://www.arctic.wildlife.org/fws/issues1.html>

Tim Mayer, Ph.D.  
Supervisory Hydrologist  
Water Resources Branch  
US Fish and Wildlife Service  
911 NE 11th Ave  
Portland, OR 97232-4181  
503 231-2395 (office)

503 799-8100 (cell)

On Thu, Feb 7, 2019 at 9:08 AM Trawicki, John <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)> wrote:

Good morning Tim-

The short answer is the Service provided comments as a cooperating agency on the cooperator draft in August and we are preparing agency comments on the draft that is available to the public now.

The longer answer is the Service established resources assessment teams over a year ago to assess the state of information/knowledge/science on the coastal plain and the north slope. These short reports were provided to BLM to assist them in writing the EIS. The teams also provided comments at a cooperator scoping meeting, and reviewed and provided fairly substantial comments on the cooperator draft. The teams are in the process of reviewing the draft EIS. The resource assessment reports are also being used to prioritize and guide data collection and research activities to better inform on the ground activities.

Our comments on this draft have not been compiled yet. Service comments need to be specific and include a resolution. If you have comments please provide to me and I will get them to the appropriate resource team lead for their review/consolidation.

If you have additional questions please contact Wendy Loya, she is the Service lead for the EIS.

And yes you can submit comments personally.

On Thu, Feb 7, 2019 at 7:13 AM Mayer, Tim <[tim\\_mayer@fws.gov](mailto:tim_mayer@fws.gov)> wrote:

John,

Did FWS comment on the Arctic drilling? Did you guys comment on hydrology/WQ impacts? If so, can I see your comments? I'm curious to read them. I may submit my own comments personally.

Tim

Tim Mayer, Ph.D.  
Supervisory Hydrologist  
Water Resources Branch  
US Fish and Wildlife Service  
911 NE 11th Ave  
Portland, OR 97232-4181

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National Wildlife Refuge System, Alaska  
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Anchorage, AK 99503  
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Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"  
George Bernard Shaw

--

John Trawicki  
Water Resources Branch Chief  
National Wildlife Refuge System, Alaska  
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1011 E. Tudor Road  
Anchorage, AK 99503  
Work: (907) 786-3474  
Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"  
George Bernard Shaw

**To:** Edward Decleva[edward\_decleva@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-08T12:58:16-05:00  
**Importance:** Normal  
**Subject:** RE: Due Weds Feb 13th: Arctic Refuge Coastal Plain DEIS Review comments  
**Received:** 2019-02-08T12:58:24-05:00

Thanks Ed! As we go through comments after the 13<sup>th</sup>, I'll be in touch if we have any questions!

Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Decleva, Edward <edward\_decleva@fws.gov>  
**Sent:** Friday, February 8, 2019 8:50 AM  
**To:** Wendy Loya <wendy\_loya@fws.gov>  
**Subject:** Re: Due Weds Feb 13th: Arctic Refuge Coastal Plain DEIS Review comments

Hi Wendy,

I have finished my review of the Cultural Resources section and related components of the DEIS and noted no substantive concerns. Therefore, I have no comments. I did provide a note in the section meant for me on the FWS Comments Coastal Plain Draft EIS 013019 Google Drive document indicating that I have no comments.

Incidentally, I have not heard from Joe Keeney regarding scheduling of the NHPA Section 106 PA since his email to us on Jan 30. I will keep you posted as it develops.

Please let me know if you have any questions or need any additional information from me regarding my review of the DEIS.

Thank you,  
Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

edward\_decleva@fws.gov  
907-786-3399

On Thu, Feb 7, 2019 at 2:01 PM Wendy Loya <wendy\_loya@fws.gov> wrote:

Hi 1002 team,

Just a quick check in on the 1002 program...

1. A reminder that the deadline for your review and comments for of the Draft EIS is close of business next Wednesday February 13<sup>th</sup>. This is for internal FWS use only, and is a draft in progress, subject to review and revision. The document will be available to all Subject Matter Experts from 1/30/19 through 2/13/19. Please notify me if you wish to share it with other FWS staff. You can enter your comments in the google doc:

[https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp\\_sharing](https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp_sharing)

2. There is increasing attention on the program with the public meetings and DEIS comment period, so a reminder that all media inquiries should go to Sara Boario. It is our normal protocol to have a regional point of contact on major projects, and Sara and her team work closely with FWS HQ and DOI on this one.

3. At this time, DOI representatives have announced that there will not be seismic exploration this winter on the Arctic NWR Coastal Plain.

4. The public meetings in Anchorage and DC will now follow a similar format as in the villages, with the opportunity for public testimony. More on the format can be found at the BLM ePlanning website. The Anchorage meeting will be Monday at the Dena'ina Center.  
[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152113](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152113)

Thank you, please don't hesitate to contact me with any questions!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

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**From:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Sent:** Wednesday, January 30, 2019 12:18 PM

**To:** 'Angela Matz' <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)>; 'Bill Leacock' <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>; 'Carl Johnson' <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>; 'Catherine Collins' <[catherine\\_collins@fws.gov](mailto:catherine_collins@fws.gov)>; 'Christopher Latty' <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>; 'Christopher Putnam' <[christopher\\_putnam@fws.gov](mailto:christopher_putnam@fws.gov)>; 'Drew Crane' <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>; 'Edward Decleva' <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>; 'Jennifer Reed' <[jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)>; 'Joanna Fox'

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<joanna\_fox@fws.gov>; 'John Trawicki' <john\_trawicki@fws.gov>; 'Joshua Ream' <joshua\_ream@fws.gov>; 'Joshua Rose' <joshua\_rose@fws.gov>; 'Lynnda Kahn' <lynnda\_kahn@fws.gov>; 'Patrick O'Dell' <patrick\_odell@fws.gov>; 'Paul Leonard' <paul\_leonard@fws.gov>; 'Randy Brown' <randy\_j\_brown@fws.gov>; 'Roger Kaye' <roger\_kaye@fws.gov>; 'Ryan Wilson' <ryan\_r\_wilson@fws.gov>; 'Sarah Conn' <sarah\_conn@fws.gov>; 'Stephanie Brady' <stephanie\_brady@fws.gov>; 'Stephen Arthur' <stephen\_arthur@fws.gov>; 'Steve Berendzen' <steve\_berendzen@fws.gov>; 'Tim Allen' <tim\_allen@fws.gov>

**Cc:** 'Greg Siekaniec' <greg\_siekaniec@fws.gov>; 'Karen Clark' <karen\_clark@fws.gov>; 'Doug Damberg' <doug\_damberg@fws.gov>; 'Kenneth Stahlnecker' <kenneth\_stahlnecker@fws.gov>; 'Mary Colligan' <mary\_colligan@fws.gov>; 'Sara Boario' <sara\_boario@fws.gov>; 'Amea Howard' <amea\_howard@fws.gov>; 'Socheata Lor' <socheata\_lor@fws.gov>; 'Karen Murphy' <karen\_a\_murphy@fws.gov>; 'Eric Taylor' <eric\_taylor@fws.gov>; 'Bud Cribley (bud\_cribley@fws.gov)' <bud\_cribley@fws.gov>; Patrick Lemons <patrick\_lemons@fws.gov>

**Subject:** Google Doc for comments: Arctic Refuge Coastal Plain DEIS Review

Hi Everyone,

I will provide more guidance today at 1pm or please contact me by phone or email if you are not able to make today's meeting.

You can find a link to the Google Doc where we will gather your comments here:  
[https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp\\_sharing](https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp_sharing)

This is for internal FWS use only, and is a draft in progress, subject to review and revision. The document will be available to all Subject Matter Experts from 1/30/19 through 2/13/19. Please notify me if you wish to share it with other FWS staff.

Our comments are organized into two sections:

- ☐ Comments on the Alternatives in the Draft EIS including evaluation of stipulations and ROPs;
- ☐ Resource-specific comments from Service subject matter experts on the information and analyses presented in the Draft EIS

A couple helpful tips from our NEPA letter writing pros:

*Your comments should provide specific recommendations or corrections, and not just point out what is wrong or missing.*

*Please indicate what section your comment refers to (e.g. Stipulation 1, Alt B; Chapter 3.4.3).*

*Include full citations for any studies you refer to, and send PDF of publication to Wendy if available.*

The DEIS is available here:

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)

Talk to you soon!

Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

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**From:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Sent:** Monday, January 28, 2019 9:49 AM

**To:** 'Angela Matz' <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)>; 'Bill Leacock' <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>; 'Carl Johnson' <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>; 'Catherine Collins' <[catherine\\_collins@fws.gov](mailto:catherine_collins@fws.gov)>; 'Christopher Latty' <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>; 'Christopher Putnam' <[christopher\\_putnam@fws.gov](mailto:christopher_putnam@fws.gov)>; 'Drew Crane' <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>; 'Edward Decleva' <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>; 'Jennifer Reed' <[jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)>; 'Joanna Fox' <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>; 'John Trawicki' <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>; 'Joshua Ream' <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>; 'Joshua Rose' <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>; 'Lynnda Kahn' <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>; 'Patrick O'Dell' <[patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov)>; 'Paul Leonard' <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)>; 'Randy Brown' <[randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)>; 'Roger Kaye' <[roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov)>; 'Ryan Wilson' <[ryan\\_r\\_wilson@fws.gov](mailto:ryan_r_wilson@fws.gov)>; 'Sarah Conn' <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>; 'Stephanie Brady' <[stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov)>; 'Stephen Arthur' <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>; 'Steve Berendzen' <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>; 'Tim Allen' <[tim\\_allen@fws.gov](mailto:tim_allen@fws.gov)>

**Cc:** 'Greg Siekaniec' <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>; 'Karen Clark' <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>; 'Doug Damberg' <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>; 'Kenneth Stahlnecker' <[kenneth\\_stahlnecker@fws.gov](mailto:kenneth_stahlnecker@fws.gov)>; 'Mary Colligan' <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>; 'Sara Boario' <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>; 'Amea Howard' <[amea\\_howard@fws.gov](mailto:amea_howard@fws.gov)>; 'Socheata Lor' <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>; 'Karen Murphy' <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)>; 'Eric Taylor' <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>; 'Bud Cribley' <[bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov)>

**Subject:** Moving ahead: Arctic Refuge Coastal Plain DEIS Review

Hi Everyone,

We'll get started on Wednesday 1/30 with our internal review of the Arctic Refuge DEIS. I'll send a meeting invite for 1pm Wednesday, and will follow up with those of you that can't make that time individually.

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)

We anticipate that the comment deadline for the Draft EIS will be extended past Feb 11<sup>th</sup>, and I will let you know as soon as it is determined. Nevertheless, we'll move ahead with this priority task and try to pull together your comments in the next two weeks. I know this isn't the only thing waiting for you to work on, so talk to your supervisor about your to-do list and we can work together to set realistic goals and deadlines for your contributions.

At this time, it appears that SAE has withdrawn their plan to do seismic this winter, so I believe the Draft Seismic EA will go back to the drawing board as revised plans are developed....so not on our immediate to do list!

Please continue to refer media inquiries to Sara Boario who is working with BLM's communication lead.

Below is our list of Subject Matter leads, so if you have comments regarding another resource, please work with the lead to incorporate them into that section. I'll reattach our scoping letter and two example letters so you can understand the depth of our comments.

- ☐ I anticipate our comments will largely make the case for support for the Stipulations and Required Operating Procedures (ROPs) that help meet regulatory requirements and management purposes and suggestions on how to further improve any of those elements of the alternatives. Alternative D2 reflects most of what USFWS put forward at the Alternatives Workshop last July.
- ☐ Our reviews will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a "fatal flaw" in how the DEIS portrays or analyzes information, including impacts analyses, about the resources in our areas of expertise.
- ☐ Your reviews should be short narratives, see attached examples from our Ecological Services team.

Subject Matter leads:

Refuge Purposes: Steve, Joanna, Stephanie  
Broader Regulatory FWS mission: Sarah Conn et al.  
Subsistence: Carl Johnson & Josh Ream  
Cultural Resource Sites: Ed Decleva  
Air Quality: Catherine Collins and Tim Allen  
Petroleum/Development: Pat O'dell  
Compliance/Operations: Lynnda Kahn  
Hazardous materials: Angela Matz  
Visitor Use: Jen Reed  
Wilderness: Roger Kaye  
Wild & Scenic Rivers: Jen Reed  
Soils, Vegetation, Wetlands and Permafrost: Josh Rose  
Caribou: Steve Arthur  
Terrestrial Mammals: Steve Arthur/Bill Leacock

Migratory Birds: Chris Latty  
Polar Bears: Ryan Wilson and Christopher Putnam  
Fish and Water Resources: Randy Brown and John Trawicki  
Snow: Paul Leonard  
Climate: Paul Leonard  
Invasive Species: TBD  
Cumulative Effects: Wendy Loya  
Other topics: Wendy Loya

I look forward to working with you all again on this,  
Sincerely,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** sara\_boario@fws.gov[sara\_boario@fws.gov];  
greg\_siekaniec@fws.gov[greg\_siekaniec@fws.gov]; Wendy\_loya@fws.gov[Wendy\_loya@fws.gov]  
**From:** Cynthia Jacobson  
**Sent:** 2019-02-09T15:06:23-05:00  
**Importance:** Normal  
**Subject:** Fwd: [EXTERNAL] Permafrost - ALASKA - oil industries - 1002 Zone  
**Received:** 2019-02-09T15:06:29-05:00

Suggestions on a response? Thanks!

Sent from my iPad

Begin forwarded message:

**From:** Marion BOXHO <[marion.boxho@student.ihecs.be](mailto:marion.boxho@student.ihecs.be)>  
**Date:** February 9, 2019 at 10:59:54 AM MST  
**To:** "[cynthia\\_jacobson@fws.gov](mailto:cynthia_jacobson@fws.gov)" <[cynthia\\_jacobson@fws.gov](mailto:cynthia_jacobson@fws.gov)>  
**Subject:** [EXTERNAL] Permafrost - ALASKA - oil industries - 1002 Zone

Dear Chair of the Conservation of Arctic Flora and Fauna,

Dear Mrs Jacobson

We are Belgian journalists who are realizing  
a video report about the recent decision of the Trump Administration to go drilling in the  
1002 Zone inside the Arctic National Wildlife Refuge.

Through our investigation, we would like to investigate this case and confront people's  
different views : the ones who are pro- and those who are against the drilling into  
the 1002 Zone. We saw that you have already made researches about the  
consequences of the climate changes in the Arctic.

We would like to know more about the environmental issues which could be generated if  
the exploitation is accepted within the 1002 zone, which shelters a particularly  
preponderant fauna and flora. This subject is so important to us that we would  
really love to get high-value expertise about the situation like yours.

We are having a two-week-trip to the USA during the summer time (July-August /  
depending our meetings organization). If you do agree, we would be  
delighted to plan one with you. We are really convinced that your view is an add-  
value to our project and an opportunity to better inform the general public about  
this complex topic in an easy and understandable way.



If you think it's possible to get in touch with you, could you please propose us a "call-time" via the phone/Skype or even another way you prefer, thus, we could make you understand what we expect from the interview and help you better realizing how this topic is important to us.

We would really like to thank you in advance for the attention you'll pay on our demand.

We are looking forward from hearing to you,

Good regards,

Marion Boxho

Obtenez [Outlook pour iOS](#)

**To:** Lor, Socheata[socheata\_lor@fws.gov]; Leonetti, Crystal[crystal\_leonetti@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]; Sara Boario[sara\_boario@fws.gov]  
**From:** Howard, Amee  
**Sent:** 2019-02-11T12:51:26-05:00  
**Importance:** Normal  
**Subject:** Re: [Due 2/12, COB] Briefing materials for 2/14 Arctic NWR and the related EIS  
**Received:** 2019-02-11T12:51:44-05:00  
10.30.18 Arctic NWR Briefing Paper R11 Final.docx

Hi Soch,

We may need Crystal to assist with the 3-4 sentences since it is regarding Tribal Consultation. Roslyn's directions are very unclear. I have attached the most recent BP that I have (from 10/30/18), if you have something more current, send it to me and I can work on updating it.

Go Go FWS Team!

Thanks so much!  
Amee

On Mon, Feb 11, 2019 at 8:20 AM Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)> wrote:

Good morning!

I'm not sure who has this task? Amee, do you have sufficient info. for 3 4 sentences? I can't tell if we need to update the full BP? You and I tackle this so Wendy can stay focus on comments?

Soch

~~~~~

*Socheata Lor, Ph.D.
Deputy Assistant Regional Director Region 7
National Wildlife Refuge System
U.S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, AK 99503
Office: 907.786.3420
Cell: 907.891.6194*

~~~~~

On Mon, Feb 11, 2019 at 6:31 AM Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)> wrote:

Good Morning,  
Please see the request for a briefing statement on Arctic NWR EIS.  
Greg

Sent from my iPhone

Begin forwarded message:

0000010717

**From:** "Sellars, Roslyn" <roslyn\_sellars@fws.gov>  
**Date:** February 11, 2019 at 5:56:24 AM AKST  
**To:** "Siekaniec, Greg" <greg\_siekaniec@fws.gov>, Cynthia T Martinez  
<Cynthia\_Martinez@fws.gov>  
**Cc:** Melissa Beaumont <melissa\_beaumont@fws.gov>, Charisa Morris  
<charisa\_morris@fws.gov>, Karen Clark <karen\_clark@fws.gov>, Shaun  
Sanchez <shaun\_sanchez@fws.gov>, Scott Aikin <scott\_aikin@fws.gov>  
**Subject:** [Due 2/12, COB] Briefing materials for 2/14 Arctic NWR and the related  
EIS

Briefing materials are requested for the (2/14, 9am) meeting with Andrea Travnicek re: Arctic NWR and the related EIS.

Margaret Everson received an invite from Andrea Travnicek for a Government-to-Government meeting with The Venetie Village Council, The Arctic Village Council and the Native Village of Venetie Tribal Government re: potential Leasing of land for oil and gas development within the Arctic National Wildlife Refuge and the related EIS.

### **Reminders**

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- If the meeting is with an **external** party (e.g., partners, industry, states, staff within the Offices of the Secretary, Deputy Secretary, and Assistant Secretary for Fish and Wildlife and Parks, etc.)

All briefing materials (i.e., meeting descriptions and briefing papers) will be due **5 days** in advance of the meeting **or ASAP for impromptu meetings**.

To expedite the scheduling of your meeting, please attach or include your required briefing materials to your emailed meeting request.

If you are invited to a scheduled meeting with external parties, you may also forward the required briefing materials to me as soon as the meeting appears on your calendar.

Please continue to send non-meeting related briefing materials to Charisa Morris and Melissa Beaumont.

NOTE: PLEASE REPLY TO ALL ADDRESSEES ON THIS EMAIL  
WHEN SENDING YOUR BRIEFING MATERIALS.

Note: Please copy Ms. Ionie Spence at [ionie\\_spence@fws.gov](mailto:ionie_spence@fws.gov) on  
emails related to scheduling, travel and administrative matters.

Roslyn Sellars

Executive Assistant| Office of the Director | U.S. Fish and Wildlife Service  
1849 C Street NW | Room 3356 | Washington, DC| 202-208-  
4545| <https://www.fws.gov>

--

*Amea Howard*

*Congressional and State Liaison*

U.S. Fish & Wildlife Service

Anchorage, Alaska

Office: (907)786-3509

Mobile: (907)229-8575

**To:** Paul Leonard[paul\_leonard@fws.gov]  
**Cc:** Steve Berendzen[steve\_berendzen@fws.gov]; Greg Siekaniec[greg\_siekaniec@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-11T13:42:51-05:00  
**Importance:** Normal  
**Subject:** Visibility Analysis for review before sharing with 1002 team  
**Received:** 2019-02-11T13:43:33-05:00  
Stuart Smith Comments on Draft EIS for Coastal Plain Oil and Gas Leasing program 2019 01 11.pdf

Hi Paul,

The attached Visibility Analysis was shared with BLM and FWS by an independent GIS analyst. I know you began to work on something similar last summer. Would you have time to review the attached summary/report and let me know if the methodology and results look to be the best available science and something that FWS can discuss with BLM or refer to in our comments on the Draft EIS?

It would be great to have your feedback by Wednesday COB or as soon after as you feel you can evaluate it (let me know) so we can work with other 1002 IDT members to incorporate into their comments, if appropriate.

Thank you,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** [stu@truenorthgis.net](mailto:stu@truenorthgis.net) <[stu@truenorthgis.net](mailto:stu@truenorthgis.net)>  
**Sent:** Sunday, February 10, 2019 2:00 PM  
**To:** [greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov); [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov); [wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)  
**Subject:** [EXTERNAL] Arctic Refuge EIS comments

Hello Greg, Steve, and Wendy.

My name is Stuart Smith, and I recently provided comments to the BLM regarding the Coastal Plain oil and gas leasing EIS. My comments involved the extensive use of GIS visibility analysis to determine the extent and severity of the visual impacts that oil and gas development would have on the area's aesthetic, wilderness, and recreational values. The DEIS failed to include such analysis.

I am sending you this letter to ensure that my analyses are brought to your attention since management of the Arctic Refuge falls under USFWS purview. Additionally, I want to make sure that my results are available to inform any comments that USFWS may have regarding the DEIS.

Attached is my comment letter, which also includes links to the source data and GIS output resulting from my analyses. Please feel free to use the letter and linked resources in any way you feel useful. Additionally, please feel free to contact me with any questions or comments you may have.

Best regards,

Stu Smith  
(360) 951-5131  
[stu@truenorthgis.net](mailto:stu@truenorthgis.net)

**To:** Leonetti, Crystal[crystal\_leonetti@fws.gov]  
**Cc:** Lor, Socheata[socheata\_lor@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]; Sara Boario[sara\_boario@fws.gov]  
**From:** Howard, Amee  
**Sent:** 2019-02-11T13:43:43-05:00  
**Importance:** Normal  
**Subject:** Re: [Due 2/12, COB] Briefing materials for 2/14 Arctic NWR and the related EIS  
**Received:** 2019-02-11T13:44:02-05:00

Thank you Crystal!!

On Mon, Feb 11, 2019 at 9:37 AM Leonetti, Crystal <crystal\_leonetti@fws.gov> wrote:

Amee/Soch,

It's unclear what the 3-4 sentences are supposed to be about, but I suspect it would be a description of the nature of the meeting. Copying Steve B. so he can double check my work. Here is my stab at it:

The Venetie Village Council, The Arctic Village Council and the Native Village of Venetie Tribal Government are federally recognized tribes of Gwich'in Athabascan peoples with traditional territories encompassing approximately the southern 2/3 of the Arctic National Wildlife Refuge and lands adjacent to its boundaries to the south and west. All three have had decades long relations with the U.S. Fish and Wildlife Service on a government to government basis, with ongoing and regular consultations in the villages of Arctic Village and Venetie on issues ranging from wildlife population status and migration pattern changes to hunting regulations. The Gwich'in people have expressed to the USFWS that beyond these 3 tribes, their territory reaches 100 miles south of Venetie and 400 miles east into Canada with relations in 11 other villages, and have been given the duty by their elders to protect the health of the land and wildlife, especially the caribou which is a primary source of sustenance. It is likely for this meeting that they will oppose any oil and gas development or exploration in the Arctic National Wildlife Refuge.

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<[Cynthia\\_Martinez@fws.gov](mailto:Cynthia_Martinez@fws.gov)>  
**Cc:** Melissa Beaumont <[melissa\\_beaumont@fws.gov](mailto:melissa_beaumont@fws.gov)>, Charisa Morris  
<[charisa\\_morris@fws.gov](mailto:charisa_morris@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Shaun  
Sanchez <[shaun\\_sanchez@fws.gov](mailto:shaun_sanchez@fws.gov)>, Scott Aikin <[scott\\_aikin@fws.gov](mailto:scott_aikin@fws.gov)>  
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0000010723



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Roslyn Sellars  
Executive Assistant| Office of the Director | U.S. Fish and Wildlife Service  
1849 C Street NW | Room 3356 | Washington, DC| 202-208-4545| <https://www.fws.gov>

--

*Amee Howard*

*Congressional and State Liaison*  
U.S. Fish & Wildlife Service  
Anchorage, Alaska  
Office: (907)786-3509  
Mobile: (907)229-8575

--

*Crystal (Ciisquq) Leonetti, Yupik*  
Alaska Native Affairs Specialist  
Alaska Region - R7 External Affairs **tEAm**  
U.S. Fish & Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503

Direct: 907-786-3868

Mobile: 907-230-8419

“Consultation is a process that aims to create effective collaboration with Indian tribes and to inform Federal decision makers. Consultation is built upon government to government exchange of information and promotes enhanced communication that emphasizes trust, respect, and shared responsibility. Communication will be open and transparent without compromising the rights of Indian tribes or the government to government consultation process.” S.O. 3317 (Department of the Interior Policy on Consultation with Indian Tribes)

--

*Amea Howard*  
*Congressional and State Liaison*  
U.S. Fish & Wildlife Service  
Anchorage, Alaska  
Office: (907)786-3509  
Mobile: (907)229-8575

**To:** Crystal Leonetti[crystal\_leonetti@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-11T13:54:32-05:00  
**Importance:** Normal  
**Subject:** RE: [Due 2/12, COB] Briefing materials for 2/14 Arctic NWR and the related EIS  
**Received:** 2019-02-11T13:54:39-05:00

Thank you, this looks helpful and likely relevant to the request!

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Leonetti, Crystal <crystal\_leonetti@fws.gov>  
**Sent:** Monday, February 11, 2019 9:37 AM  
**To:** Howard, Amee <amee\_howard@fws.gov>  
**Cc:** Lor, Socheata <socheata\_lor@fws.gov>; Wendy Loya <wendy\_loya@fws.gov>; Sara Boario <sara\_boario@fws.gov>  
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Deputy Assistant Regional Director Region 7

National Wildlife Refuge System

U.S. Fish and Wildlife Service

1011 E. Tudor Road

Anchorage, AK 99503

Office: 907.786.3420

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On Mon, Feb 11, 2019 at 6:31 AM Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)> wrote:

Good Morning,

Please see the request for a briefing statement on Arctic NWR EIS.

Greg

Sent from my iPhone

Begin forwarded message:

**From:** "Sellars, Roslyn" <[roslyn\\_sellars@fws.gov](mailto:roslyn_sellars@fws.gov)>

**Date:** February 11, 2019 at 5:56:24 AM AKST

**To:** "Siekaniec, Greg" <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Cynthia T Martinez  
<[Cynthia\\_Martinez@fws.gov](mailto:Cynthia_Martinez@fws.gov)>

**Cc:** Melissa Beaumont <[melissa\\_beaumont@fws.gov](mailto:melissa_beaumont@fws.gov)>, Charisa Morris  
<[charisa\\_morris@fws.gov](mailto:charisa_morris@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Shaun  
Sanchez <[shaun\\_sanchez@fws.gov](mailto:shaun_sanchez@fws.gov)>, Scott Aikin <[scott\\_aikin@fws.gov](mailto:scott_aikin@fws.gov)>

**Subject:** [Due 2/12, COB] Briefing materials for 2/14 Arctic NWR and the related  
EIS

Briefing materials are requested for the (2/14, 9am) meeting with

0000010727

Andrea Travnicek re: Arctic NWR and the related EIS.

Margaret Everson received an invite from Andrea Travnicek for a Government-to-Government meeting with The Venetie Village Council, The Arctic Village Council and the Native Village of Venetie Tribal Government re: potential Leasing of land for oil and gas development within the Arctic National Wildlife Refuge and the related EIS.

### **Reminders**

We will need a 3-4 sentence description for **all** meetings you request. In addition to the 3-4 sentence description, a briefing paper **will be required** for the following types of meetings.

- If a decision is an expected outcome of an internal (FWS staff only) meeting.
- If the meeting is with an external party (e.g., partners, industry, states, staff within the Offices of the Secretary, Deputy Secretary, and Assistant Secretary for Fish and Wildlife and Parks, etc.)

All briefing materials (i.e., meeting descriptions and briefing papers) will be due **5 days** in advance of the meeting **or ASAP for impromptu meetings**.

To expedite the scheduling of your meeting, please attach or include your required briefing materials to your emailed meeting request.

If you are invited to a scheduled meeting with external parties, you may also forward the required briefing materials to me as soon as the meeting appears on your calendar.

Please continue to send non-meeting related briefing materials to Charisa Morris and Melissa Beaumont.

**NOTE: PLEASE REPLY TO ALL ADDRESSEES ON THIS EMAIL WHEN SENDING YOUR BRIEFING MATERIALS.**

**Note: Please copy Ms. Ionie Spence at [ionie\\_spence@fws.gov](mailto:ionie_spence@fws.gov) on emails related to scheduling, travel and administrative matters.**

Roslyn Sellars

Executive Assistant| Office of the Director | U.S. Fish and Wildlife Service

1849 C Street NW | Room 3356 | Washington, DC| 202-208-4545| <https://www.fws.gov>

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*Amee Howard*

*Congressional and State Liaison*

U.S. Fish & Wildlife Service

Anchorage, Alaska

Office: (907)786-3509

Mobile: (907)229-8575

--

*Crystal (Ciisquq) Leonetti, Yupik*

Alaska Native Affairs Specialist

Alaska Region - R7 External Affairs **tEAm**

U.S. Fish & Wildlife Service

1011 E. Tudor Road

Anchorage, AK 99503

Direct: 907-786-3868

Mobile: 907-230-8419

“Consultation is a process that aims to create effective collaboration with Indian tribes and to inform Federal decision makers. Consultation is built upon government to government exchange of information and promotes enhanced communication that emphasizes trust, respect, and shared responsibility. Communication will be open and transparent without compromising the rights of Indian tribes or the government to government consultation process.” S.O. 3317 (Department of the Interior Policy on Consultation with Indian Tribes)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Kahn, Lynnda  
**Sent:** 2019-02-11T16:15:23-05:00  
**Importance:** Normal  
**Subject:** Fwd: Yukon Gov Oil & Gas Mgmt Branch Seismic BMPs  
**Received:** 2019-02-11T16:16:13-05:00  
[bmp\\_seismic\\_Yukon\\_Gov\\_Oil\\_Gas\\_Mgmt\\_Branch.pdf](#)

For anyone interested. Just wasn't sure who that might be up there.

LYNNDA

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]; Karen Clark[karen\_clark@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-11T19:39:26-05:00  
**Importance:** Normal  
**Subject:** Seismic White Paper  
**Received:** 2019-02-11T19:40:00-05:00  
[WalkerDA2019 seismic exploration whitepaper.pdf](#)

Here is the PDF of the Walker et al. paper.

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)



**To:** Wendy Loya[wendy\_loya@fws.gov]; Steve Berendzen[steve\_berendzen@fws.gov]; Joanna Fox[joanna\_fox@fws.gov]  
**From:** Kaye, Roger  
**Sent:** 2019-02-11T20:37:33-05:00  
**Importance:** Normal  
**Subject:** 1002 Comments  
**Received:** 2019-02-11T20:37:50-05:00  
FWS Comments Coastal Plain Draft EIS 013019.docx

Hi. Attached are my contributions to the FWS Comments on the Coastal Plain Draft EIS

|  |                                                                                                                                                                                                                 |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Roger Kaye</b><br>Arctic National Wildlife Refuge<br>101 12th Ave, Room 236<br>Fairbanks, AK 99701<br>Anchorage, AK 99503<br>#: 907 456 0405   e: <a href="mailto:Roger_Kaye@fws.gov">Roger_Kaye@fws.gov</a> |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Steve Berendzen[steve\_berendzen@fws.gov]; Greg Siekaniec[greg\_siekaniec@fws.gov]  
**From:** Leonard, Paul  
**Sent:** 2019-02-12T00:17:44-05:00  
**Importance:** Normal  
**Subject:** Re: Visibility Analysis for review before sharing with 1002 team  
**Received:** 2019-02-12T00:18:48-05:00

Hi Wendy,  
Thanks for passing this along.  
I've completed my review and happy to discuss tomorrow.

Cheers,  
Paul

On Mon, Feb 11, 2019 at 9:43 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Paul,

The attached Visibility Analysis was shared with BLM and FWS by an independent GIS analyst. I know you began to work on something similar last summer. Would you have time to review the attached summary/report and let me know if the methodology and results look to be the best available science and something that FWS can discuss with BLM or refer to in our comments on the Draft EIS?

It would be great to have your feedback by Wednesday COB or as soon after as you feel you can evaluate it (let me know) so we can work with other 1002 IDT members to incorporate into their comments, if appropriate.

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

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**From:** [stu@truenorthgis.net](mailto:stu@truenorthgis.net) <[stu@truenorthgis.net](mailto:stu@truenorthgis.net)>  
**Sent:** Sunday, February 10, 2019 2:00 PM  
**To:** [greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov); [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov); [wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)  
**Subject:** [EXTERNAL] Arctic Refuge EIS comments

Hello Greg, Steve, and Wendy.

My name is Stuart Smith, and I recently provided comments to the BLM regarding the Coastal Plain oil and gas leasing EIS. My comments involved the extensive use of GIS visibility analysis to determine the extent and severity of the visual impacts that oil and gas development would have on the area's aesthetic, wilderness, and recreational values. The DEIS failed to include such analysis.

I am sending you this letter to ensure that my analyses are brought to your attention since management of the Arctic Refuge falls under USFWS purview. Additionally, I want to make sure that my results are available to inform any comments that USFWS may have regarding the DEIS.

Attached is my comment letter, which also includes links to the source data and GIS output resulting from my analyses. Please feel free to use the letter and linked resources in any way you feel useful. Additionally, please feel free to contact me with any questions or comments you may have.

Best regards,

Stu Smith  
(360) 951-5131  
[stu@truenorthgis.net](mailto:stu@truenorthgis.net)

--

Paul Leonard, PhD  
Science Coordinator  
[Arctic LCC](#)  
101 12th Ave. Room 216  
Fairbanks, AK 99701  
(907) 456-0445

0000010734

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Johnson, Carl  
**Sent:** 2019-02-13T16:37:50-05:00  
**Importance:** Normal  
**Subject:** Re: Due Weds Feb 13th: Arctic Refuge Coastal Plain DEIS Review comments  
**Received:** 2019-02-13T16:38:09-05:00

Wendy,

I have been swamped with the work necessary to get our Regional Advisory Council meetings rescheduled and covering all related preparations. The first time I have had a chance to look at this is today, and I don't think I can offer any meaningful review or comment in the next four hours. This is something that needs weeks of time to meaningfully review, and it has not been available.

Carl Johnson, J.D.  
Supervisory Program Analyst  
Office of Subsistence Management  
1011 E. Tudor Road,  
Anchorage, AK 99503  
(907) 786-3676

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On Wed, Feb 13, 2019 at 12:18 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Carl,

I am sorry for your frustration, it is a complex document. We were not looking for the fine level detail of examination done on the preliminary draft, so it is not necessary to verify what changes were made per your previous recommendations as BLM had to balance multiple cooperating agency, solicitor and internal reviews; we are looking for constructive comments on how well the alternatives (especially the language in the Stipulations and Required Operating Procedures) might support the subsistence purpose of the Refuge, and any concerns regarding the subsistence section of Chapter 3 or the Sec 810 analysis. I can see that Josh Ream has been in the google doc, and hope that we can provide any necessary feedback that will help FWS meet its mission for the Refuge with your and Josh's help.

Thank you,

Wendy

Dr. Wendy M. Loya

0000010735

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

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**From:** Johnson, Carl <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>  
**Sent:** Wednesday, February 13, 2019 12:13 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Re: Due Weds Feb 13th: Arctic Refuge Coastal Plain DEIS Review comments

Wendy,

Upon reviewing the document, I cannot make any meaningful contribution. The format is confusing, and I cannot find any trace of any comments I previously made in order to determine if they have been addressed. I lack a comparison document that identifies what my comments were, nor can I find where they would be in the present layout.

To be more specific, the one paragraph in the document entitled "Subsistence and Section 810 Analysis" bears no relationship to any comments I made previously. I know that I made for more comments than can be found in that one paragraph. I did a search of the word "subsistence" and found no other place where any of my prior comments can be related. You said my comments had been "sanitized," but I can find no trace of them anywhere. And I do not have the time to start from square one and take an entirely new look at the document.

Carl Johnson, J.D.

Supervisory Program Analyst

Office of Subsistence Management

1011 E. Tudor Road,

Anchorage, AK 99503

(907) 786-3676

0000010736

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On Thu, Feb 7, 2019 at 2:01 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi 1002 team,

Just a quick check in on the 1002 program...

1. A reminder that the deadline for your review and comments for of the Draft EIS is close of business next Wednesday February 13<sup>th</sup>. This is for internal FWS use only, and is a draft in progress, subject to review and revision. The document will be available to all Subject Matter Experts from 1/30/19 through 2/13/19. Please notify me if you wish to share it with other FWS staff. You can enter your comments in the google doc:

[https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp\\_sharing](https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp_sharing)

2. There is increasing attention on the program with the public meetings and DEIS comment period, so a reminder that all media inquiries should go to Sara Boario. It is our normal protocol to have a regional point of contact on major projects, and Sara and her team work closely with FWS HQ and DOI on this one.

3. At this time, DOI representatives have announced that there will not be seismic exploration this winter on the Arctic NWR Coastal Plain.

4. The public meetings in Anchorage and DC will now follow a similar format as in the villages, with the opportunity for public testimony. More on the format can be found at the BLM ePlanning website. The Anchorage meeting will be Monday at the Dena'ina Center. [https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152113](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152113)

Thank you, please don't hesitate to contact me with any questions!

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

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**From:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Sent:** Wednesday, January 30, 2019 12:18 PM

**To:** 'Angela Matz' <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)>; 'Bill Leacock' <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>; 'Carl Johnson' <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>; 'Catherine Collins' <[catherine\\_collins@fws.gov](mailto:catherine_collins@fws.gov)>; 'Christopher Latty' <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>; 'Christopher Putnam' <[christopher\\_putnam@fws.gov](mailto:christopher_putnam@fws.gov)>; 'Drew Crane' <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>; 'Edward Decleva' <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>; 'Jennifer Reed' <[jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)>; 'Joanna Fox' <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>; 'John Trawicki' <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>; 'Joshua Ream' <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>; 'Joshua Rose' <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>; 'Lynnda Kahn' <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>; 'Patrick O'Dell' <[patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov)>; 'Paul Leonard' <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)>; 'Randy Brown' <[randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)>; 'Roger Kaye' <[roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov)>; 'Ryan Wilson' <[ryan\\_r\\_wilson@fws.gov](mailto:ryan_r_wilson@fws.gov)>; 'Sarah Conn' <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>; 'Stephanie Brady' <[stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov)>; 'Stephen Arthur' <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>; 'Steve Berendzen' <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>; 'Tim Allen' <[tim\\_allen@fws.gov](mailto:tim_allen@fws.gov)>

**Cc:** 'Greg Siekaniec' <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>; 'Karen Clark' <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>; 'Doug Damberg' <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>; 'Kenneth Stahlnecker' <[kenneth\\_stahlnecker@fws.gov](mailto:kenneth_stahlnecker@fws.gov)>; 'Mary Colligan' <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>; 'Sara Boario' <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>; 'Amea Howard' <[amea\\_howard@fws.gov](mailto:amea_howard@fws.gov)>; 'Socheata Lor' <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>; 'Karen Murphy' <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)>; 'Eric Taylor' <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>; 'Bud Cribley' <[bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov)>; Patrick Lemons <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>

**Subject:** Google Doc for comments: Arctic Refuge Coastal Plain DEIS Review

Hi Everyone,

I will provide more guidance today at 1pm or please contact me by phone or email if you are not able to make today's meeting.

0000010738

You can find a link to the Google Doc where we will gather your comments here:

[https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp\\_sharing](https://docs.google.com/document/d/1ggSwT1iOdwaGSVKVKZ5ilZfvDhH82uzbbf-ccR0btEE/edit?usp_sharing)

This is for internal FWS use only, and is a draft in progress, subject to review and revision.  
The document will be available to all Subject Matter Experts from 1/30/19 through 2/13/19.  
Please notify me if you wish to share it with other FWS staff.

Our comments are organized into two sections:

- ☐ Comments on the Alternatives in the Draft EIS including evaluation of stipulations and ROPs;
- ☐ Resource-specific comments from Service subject matter experts on the information and analyses presented in the Draft EIS

A couple helpful tips from our NEPA letter writing pros:

*Your comments should provide specific recommendations or corrections, and not just point out what is wrong or missing.*

*Please indicate what section your comment refers to (e.g. Stipulation 1, Alt B; Chapter 3.4.3).*

*Include full citations for any studies you refer to, and send PDF of publication to Wendy if available.*

The DEIS is available here:

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)

Talk to you soon!

Wendy



Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

---

**From:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Sent:** Monday, January 28, 2019 9:49 AM

**To:** 'Angela Matz' <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)>; 'Bill Leacock' <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>; 'Carl Johnson' <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>; 'Catherine Collins' <[catherine\\_collins@fws.gov](mailto:catherine_collins@fws.gov)>; 'Christopher Latty' <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>; 'Christopher Putnam' <[christopher\\_putnam@fws.gov](mailto:christopher_putnam@fws.gov)>; 'Drew Crane' <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>; 'Edward Decleva' <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>; 'Jennifer Reed' <[jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)>; 'Joanna Fox' <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>; 'John Trawicki' <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>; 'Joshua Ream' <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>; 'Joshua Rose' <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>; 'Lynnda Kahn' <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>; 'Patrick O'Dell' <[patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov)>; 'Paul Leonard' <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)>; 'Randy Brown' <[randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)>; 'Roger Kaye' <[roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov)>; 'Ryan Wilson' <[ryan\\_r\\_wilson@fws.gov](mailto:ryan_r_wilson@fws.gov)>; 'Sarah Conn' <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>; 'Stephanie Brady' <[stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov)>; 'Stephen Arthur' <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>; 'Steve Berendzen' <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>; 'Tim Allen' <[tim\\_allen@fws.gov](mailto:tim_allen@fws.gov)>

**Cc:** 'Greg Siekaniec' <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>; 'Karen Clark' <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>; 'Doug Damberg' <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>; 'Kenneth Stahlnecker' <[kenneth\\_stahlnecker@fws.gov](mailto:kenneth_stahlnecker@fws.gov)>; 'Mary Colligan' <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>; 'Sara Boario' <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>; Ameer Howard <[amee\\_howard@fws.gov](mailto:amee_howard@fws.gov)>; 'Socheata Lor' <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>; 'Karen Murphy' <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)>; 'Eric Taylor' <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>; Bud Cribley <[bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov)>

**Subject:** Moving ahead: Arctic Refuge Coastal Plain DEIS Review

Hi Everyone,

We'll get started on Wednesday 1/30 with our internal review of the Arctic Refuge DEIS. I'll send a meeting invite for 1pm Wednesday, and will follow up with those of you that can't make that time individually.

0000010740

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)

We anticipate that the comment deadline for the Draft EIS will be extended past Feb 11<sup>th</sup>, and I will let you know as soon as it is determined. Nevertheless, we'll move ahead with this priority task and try to pull together your comments in the next two weeks. I know this isn't the only thing waiting for you to work on, so talk to your supervisor about your to-do list and we can work together to set realistic goals and deadlines for your contributions.

At this time, it appears that SAE has withdrawn their plan to do seismic this winter, so I believe the Draft Seismic EA will go back to the drawing board as revised plans are developed....so not on our immediate to do list!

Please continue to refer media inquiries to Sara Boario who is working with BLM's communication lead.

Below is our list of Subject Matter leads, so if you have comments regarding another resource, please work with the lead to incorporate them into that section. I'll reattach our scoping letter and two example letters so you can understand the depth of our comments.

- ☐ I anticipate our comments will largely make the case for support for the Stipulations and Required Operating Procedures (ROPs) that help meet regulatory requirements and management purposes and suggestions on how to further improve any of those elements of the alternatives. Alternative D2 reflects most of what USFWS put forward at the Alternatives Workshop last July.
- ☐ Our reviews will not go down in the weeds of making editorial suggestions, and only provide recommended revisions where there is a "fatal flaw" in how the DEIS portrays or analyzes information, including impacts analyses, about the resources in our areas of expertise.
- ☐ Your reviews should be short narratives, see attached examples from our Ecological Services team.

Subject Matter leads:

Refuge Purposes: Steve, Joanna, Stephanie

Broader Regulatory FWS mission: Sarah Conn et al.

Subsistence: Carl Johnson & Josh Ream  
Cultural Resource Sites: Ed Decleva  
Air Quality: Catherine Collins and Tim Allen  
Petroleum/Development: Pat O'dell  
Compliance/Operations: Lynnda Kahn  
Hazardous materials: Angela Matz  
Visitor Use: Jen Reed  
Wilderness: Roger Kaye  
Wild & Scenic Rivers: Jen Reed  
Soils, Vegetation, Wetlands and Permafrost: Josh Rose  
Caribou: Steve Arthur  
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Invasive Species: TBD  
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Other topics: Wendy Loya

I look forward to working with you all again on this,

Sincerely,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**To:** Catherine Collins[catherine\_collins@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-13T17:52:44-05:00  
**Importance:** Normal  
**Subject:** RE: Google Doc for comments: Arctic Refuge Coastal Plain DEIS Review  
**Received:** 2019-02-13T17:52:47-05:00

Thank you! Drew Crane or I will be in touch next week if we need your help clarifying any of the comments or pulling out major themes.

Thank you,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Collins, Catherine <catherine\_collins@fws.gov>  
**Sent:** Wednesday, February 13, 2019 1:25 PM  
**To:** Wendy Loya <wendy\_loya@fws.gov>  
**Subject:** Re: Google Doc for comments: Arctic Refuge Coastal Plain DEIS Review

Hi Wendy,

Thanks for calling back today. I have finished the air comments on the DEIS and incorporated those into the Google Doc.

Please let me know if you have any questions or require further clarification.

Thanks for coordinating all of this work!

Catherine Collins, Environmental Engineer  
U.S. Fish and Wildlife Service  
Branch of Air and Water Quality Resources  
7333 W. Jefferson Ave., Suite 375  
Lakewood, CO 80235-2034  
303-914-3807  
(303) 969-5444 fax  
[Catherine\\_Collins@fws.gov](mailto:Catherine_Collins@fws.gov)

On Wed, Jan 30, 2019 at 2:18 PM Wendy Loya <wendy\_loya@fws.gov> wrote:  
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I will provide more guidance today at 1pm or please contact me by phone or email if you are not able to make today's meeting.

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This is for internal FWS use only, and is a draft in progress, subject to review and revision. The document will be available to all Subject Matter Experts from 1/30/19 through 2/13/19. Please notify me if you wish to share it with other FWS staff.

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Talk to you soon!  
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907.227.2942 (mobile)

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**From:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Sent:** Monday, January 28, 2019 9:49 AM

**To:** 'Angela Matz' <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)>; 'Bill Leacock' <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>; 'Carl Johnson' <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>; 'Catherine Collins' <[catherine\\_collins@fws.gov](mailto:catherine_collins@fws.gov)>; 'Christopher Latty' <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>; 'Christopher Putnam'

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<christopher\_putnam@fws.gov>; 'Drew Crane' <drew\_crane@fws.gov>; 'Edward Decleva' <edward\_decleva@fws.gov>; 'Jennifer Reed' <jennifer\_reed@fws.gov>; 'Joanna Fox' <joanna\_fox@fws.gov>; 'John Trawicki' <john\_trawicki@fws.gov>; 'Joshua Ream' <joshua\_ream@fws.gov>; 'Joshua Rose' <joshua\_rose@fws.gov>; 'Lynnda Kahn' <lynnda\_kahn@fws.gov>; 'Patrick O'Dell' <patrick\_odell@fws.gov>; 'Paul Leonard' <paul\_leonard@fws.gov>; 'Randy Brown' <randy\_j\_brown@fws.gov>; 'Roger Kaye' <roger\_kaye@fws.gov>; 'Ryan Wilson' <ryan\_r\_wilson@fws.gov>; 'Sarah Conn' <sarah\_conn@fws.gov>; 'Stephanie Brady' <stephanie\_brady@fws.gov>; 'Stephen Arthur' <stephen\_arthur@fws.gov>; 'Steve Berendzen' <steve\_berendzen@fws.gov>; 'Tim Allen' <tim\_allen@fws.gov>

**Cc:** 'Greg Siekaniec' <greg\_siekaniec@fws.gov>; 'Karen Clark' <karen\_clark@fws.gov>; 'Doug Damberg' <doug\_damberg@fws.gov>; 'Kenneth Stahlnecker' <kenneth\_stahlnecker@fws.gov>; 'Mary Colligan' <mary\_colligan@fws.gov>; 'Sara Boario' <sara\_boario@fws.gov>; Ameer Howard <ameer\_howard@fws.gov>; 'Socheata Lor' <socheata\_lor@fws.gov>; 'Karen Murphy' <karen\_a\_murphy@fws.gov>; 'Eric Taylor' <eric\_taylor@fws.gov>; Bud Cribley (bud\_cribley@fws.gov) <bud\_cribley@fws.gov>

**Subject:** Moving ahead: Arctic Refuge Coastal Plain DEIS Review

Hi Everyone,

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management purposes and suggestions on how to further improve any of those elements of the alternatives. Alternative D2 reflects most of what USFWS put forward at the Alternatives Workshop last July.

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Broader Regulatory FWS mission: Sarah Conn et al.  
Subsistence: Carl Johnson & Josh Ream  
Cultural Resource Sites: Ed Decleva  
Air Quality: Catherine Collins and Tim Allen  
Petroleum/Development: Pat O’dell  
Compliance/Operations: Lynnda Kahn  
Hazardous materials: Angela Matz  
Visitor Use: Jen Reed  
Wilderness: Roger Kaye  
Wild & Scenic Rivers: Jen Reed  
Soils, Vegetation, Wetlands and Permafrost: Josh Rose  
Caribou: Steve Arthur  
Terrestrial Mammals: Steve Arthur/Bill Leacock  
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Other topics: Wendy Loya

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Sincerely,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)



**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Reed, Jennifer  
**Sent:** 2019-02-13T20:36:34-05:00  
**Importance:** Normal  
**Subject:** References for WSR comments  
**Received:** 2019-02-13T20:37:08-05:00  
[1999 IWSRCC Study Process Technical Report.pdf](#)  
[1982 National Wild and Scenic Rivers System Guidelines.pdf](#)  
[2015 CCP WSR Review.pdf](#)

Hi Wendy,  
I've done all I can before our internal deadline to submit comments. Here are my references.

Have a good evening!

**Jennifer J. Reed**

Arctic National Wildlife Refuge Public Use Manager

101 12th Ave, Rm 236

Fairbanks, AK 99701

Telephone: (907) 455 1835

Fax: (907) 456 0428

Interagency Visitor Use Management Council USFWS Representative

Interagency Wild & Scenic River Coordinating Council USFWS Representative

Make Your Splash!

*NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties.*

**To:** Joshua Ream[joshua\_ream@fws.gov]  
**Cc:** Robbin Lavine[robbin\_lavine@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-14T12:12:20-05:00  
**Importance:** Normal  
**Subject:** FW: Google Doc for comments: Arctic Refuge Coastal Plain DEIS Review  
**Received:** 2019-02-14T12:12:31-05:00

Hi Josh,

Thanks for the email, I am teleworking this morning!

The link to Vol II of the DEIS is here: [https://eplanning.blm.gov/epl-front-office/projects/nepa/102555/164449/200586/Coastal Plain Draft EIS Volume 2.pdf](https://eplanning.blm.gov/epl-front-office/projects/nepa/102555/164449/200586/Coastal%20Plain%20Draft%20EIS%20Volume%202.pdf)

Appendix E has the 810 analysis. I recognize this is a new process for you, and unfortunately because of so many retirements this past year, Refugees has lost their more experienced subsistence/810 experts. Anything you can provide will be helpful, and I will be in and free from 12 onward if you want to talk. It isn't intended to be the fine-scale editing we did for the first draft, this is more about the big picture, which makes it harder and easier ☺ If you look at it and it is outside your expertise at this time, that is a valid response.

Again, thank you for your help!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
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---

**From:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Sent:** Wednesday, January 30, 2019 12:18 PM  
**To:** 'Angela Matz' <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)>; 'Bill Leacock' <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>; 'Carl Johnson' <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>; 'Catherine Collins' <[catherine\\_collins@fws.gov](mailto:catherine_collins@fws.gov)>; 'Christopher Latty' <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>; 'Christopher Putnam' <[christopher\\_putnam@fws.gov](mailto:christopher_putnam@fws.gov)>; 'Drew Crane' <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>; 'Edward Decleva' <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>; 'Jennifer Reed' <[jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)>; 'Joanna Fox' <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>; 'John Trawicki' <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>; 'Joshua Ream' <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>; 'Joshua Rose' <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>; 'Lynnda Kahn' <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>; 'Patrick O'Dell' <[patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov)>; 'Paul Leonard' <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)>; 'Randy Brown' <[randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)>; 'Roger Kaye' <[roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov)>; 'Ryan Wilson' <[ryan\\_r\\_wilson@fws.gov](mailto:ryan_r_wilson@fws.gov)>; 'Sarah Conn' <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>; 'Stephanie Brady' <[stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov)>; 'Stephen Arthur' <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>; 'Steve Berendzen' <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>; 'Tim Allen' <[tim\\_allen@fws.gov](mailto:tim_allen@fws.gov)>  
**Cc:** 'Greg Siekaniec' <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>; 'Karen Clark' <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>; 'Doug Damberg' <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>; 'Kenneth Stahlnecker' <[kenneth\\_stahlnecker@fws.gov](mailto:kenneth_stahlnecker@fws.gov)>; 'Mary Colligan'

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<mary\_colligan@fws.gov>; 'Sara Boario' <sara\_boario@fws.gov>; 'Amee Howard' <amee\_howard@fws.gov>; 'Socheata Lor' <socheata\_lor@fws.gov>; 'Karen Murphy' <karen\_a\_murphy@fws.gov>; 'Eric Taylor' <eric\_taylor@fws.gov>; 'Bud Cribley' <bud\_cribley@fws.gov>; 'Patrick Lemons' <patrick\_lemons@fws.gov>

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 Wendy

Dr. Wendy M. Loya  
 Arctic Program Coordinator  
 US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Diane Granfors[diane\_granfors@fws.gov]; Karen Murphy[karen\_a\_murphy@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]; Doug Damberg[doug\_damberg@fws.gov]  
**From:** Rose, Joshua  
**Sent:** 2019-02-14T13:45:47-05:00  
**Importance:** Normal  
**Subject:** Re: extra funding need for landcover project  
**Received:** 2019-02-14T13:45:59-05:00

Wendy,  
1 pm works for me.

Thanks,  
Josh

On Thu, Feb 14, 2019 at 9:41 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Diane,

Thanks for this update. Let me talk with Josh Rose about the status of coordinated logistics with this project and the others that he is working on, to make sure that conversation has been had before we move further.

Josh, can we chat this afternoon after 1pm?

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Granfors, Diane <[diane\\_granfors@fws.gov](mailto:diane_granfors@fws.gov)>  
**Sent:** Thursday, February 14, 2019 9:32 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>; Karen Murphy <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)>  
**Cc:** Socheata Lor <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>; Doug Damberg <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>  
**Subject:** extra funding need for landcover project

Wendy and Karen -

Please find attached a request for \$102k in funding needed for the landcover project due to the loss of Kaktovik as a base camp. I was on a phone call with them a few days ago and they looked and less expensive options but they would not produce a quality product. National I&M covered the original \$335k for the project. Can Science Apps cover the extra needed or how should this be taken care of?

thank you!

Diane

--

Diane Granfors

Refuge Inventory and Monitoring Coordinator

1011 East Tudor Rd., MS 211

Anchorage, AK 99503

907-786-3429

[diane\\_granfors@fws.gov](mailto:diane_granfors@fws.gov)

*Collaborative ecosystem science to inform National Wildlife*

*Refuge System conservation decisions in Alaska.*



PRIMR <https://ecos.fws.gov/primr/>

ServCat <https://ecos.fws.gov/ServCat/>

Communicating I&M

--

Joshua Rose  
Acting Oil and Gas Coordinator  
Arctic National Wildlife Refuge  
101 12th Ave., Rm 236  
Fairbanks, AK 99701  
phone: (907) 456-0409

**To:** Keeney, Joseph[jkeeney@blm.gov]  
**Cc:** LaMarr, Sarah[slamarr@blm.gov]; Nichelle (Shelly) Jones[njones@blm.gov]; Edward Decleva[edward\_decleva@fws.gov]; King, Robert (Bob)[r2king@blm.gov]; Wendy Loya[Wendy\_loya@fws.gov]  
**From:** Steve Berendzen  
**Sent:** 2019-02-14T17:02:46-05:00  
**Importance:** Normal  
**Subject:** Re: Another shot at a meeting  
**Received:** 2019-02-14T17:02:54-05:00

Sure, Joe - I understand. Several of them have been in Anchorage & DC at the meetings this week. I'm sure they've been busy

Sent from my iPhone

On Feb 14, 2019, at 1:26 PM, Keeney, Joseph <jkeeney@blm.gov> wrote:

Hi Steve,

It would be ideal to coordinate with you and Erin. The hangup right now is that nobody from AV or Venetie or even their lawyers has responded to my several attempts so far to reschedule the trips. I'm assuming they are busy with all the rounds being made, so I figured I would try again next week. If I go out there to do the consultation work, a bunch of things need to be set up and planned ahead of time, and I can't plan it without them.

On Thu, Feb 14, 2019 at 12:06 PM Steve Berendzen <steve\_berendzen@fws.gov> wrote:

Joe & Ed, I'd like to join you if I can, and I've been directed by Wackowski to go back to Arctic Village & Venetie soon to explain the EIS to the high school students. As an afterthought, he directed me to take Erin Julianus also. No idea if we could coordinate one of your meetings with this, but I'd like to try. The last week of February is the most open for me at this time

Sent from my iPhone

On Feb 14, 2019, at 7:05 AM, Decleva, Edward <edward\_decleva@fws.gov> wrote:

Hi Joe,

No worries, I know you all are busy.

With the exception of the 20th and 21st, I'm available most of the next two weeks. But please note that my days conclude by 2 PM.

You can include Steve Berendzen if you wish, and I agree that his input would be valuable. But if he's unavailable, my Regional Director has given his approval for me to attend as the sole USFWS rep.

Thank you,  
Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399

On Wed, Feb 13, 2019 at 5:18 PM Keeney, Joseph <[jkeeney@blm.gov](mailto:jkeeney@blm.gov)> wrote:

Hi Ed,  
Sorry things didn't work out to put together a meeting last week.  
We have been pretty tied up and I'll be tied up the rest of this week.  
Assuming we don't close shop again after the 15th, what is your  
schedule looking like for next week or two?

Note that my manager mentioned including Steve, who might have some valuable  
input on the BLM/USFWS roles in future Coastal Plain Section  
106.

Best,  
Joe

--

Joe Keeney  
Archaeologist  
BLM Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709  
907 474 2312  
[jkeeney@blm.gov](mailto:jkeeney@blm.gov)

--

Joe Keeney  
Archaeologist  
BLM Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709  
907 474 2312  
[jkeeney@blm.gov](mailto:jkeeney@blm.gov)

**To:** Joshua Rose[joshua\_rose@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-14T17:04:06-05:00  
**Importance:** Normal  
**Subject:** FW: extra funding need for landcover project  
**Received:** 2019-02-14T17:04:16-05:00  
Land Cover Map for Arctic NWR Amendment Request.pdf

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Granfors, Diane <diane\_granfors@fws.gov>  
**Sent:** Thursday, February 14, 2019 9:32 AM  
**To:** Wendy Loya <wendy\_loya@fws.gov>; Karen Murphy <karen\_a\_murphy@fws.gov>  
**Cc:** Socheata Lor <socheata\_lor@fws.gov>; Doug Damberg <doug\_damberg@fws.gov>  
**Subject:** extra funding need for landcover project

Wendy and Karen -

Please find attached a request for \$102k in funding needed for the landcover project due to the loss of Kaktovik as a base camp. I was on a phone call with them a few days ago and they looked and less expensive options but they would not produce a quality product. National I&M covered the original \$335k for the project. Can Science Apps cover the extra needed or how should this be taken care of?

thank you!  
Diane

--

Diane Granfors  
Refuge Inventory and Monitoring Coordinator  
1011 East Tudor Rd., MS 211  
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907-786-3429  
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*Collaborative ecosystem science to inform National Wildlife  
Refuge System conservation decisions in Alaska.*

PRIMR <https://ecos.fws.gov/primr/>  
ServCat <https://ecos.fws.gov/ServCat/>  
Communicating I&M

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Rose, Joshua  
**Sent:** 2019-02-14T17:19:09-05:00  
**Importance:** Normal  
**Subject:** Fwd: [EXTERNAL] Another comment on EIS  
**Received:** 2019-02-14T17:19:27-05:00

There will be a total of three emails I am forwarding from Janet

----- Forwarded message -----

**From:** Jorgensons (b) (6) [redacted] [mailto: ]  
**Date:** Wed, Feb 13, 2019 at 11:16 AM  
**Subject:** [EXTERNAL] Another comment on EIS  
**To:** <joshua\_rose@fws.gov>, Leonard, Paul <paul\_leonard@fws.gov>

I think more information from the seismic EA should be included in the EIS, particularly since the EA has not come out and we don't know if it ever will come out before the EIS process is complete. For just one example, the EIS gives information on number of acres expected to be impacted during construction on page B-22. It would be easy to pick that same kind of information out of the EA, to give number of miles of trail or of acres impacted during seismic exploration. I didn't read the whole EIS so may have missed something, but I don't see that it gives much information about the scope of the seismic exploration. There could be a map, acre and trail-mileage estimates, etc. Janet

--

Joshua Rose  
Acting Oil and Gas Coordinator  
Arctic National Wildlife Refuge  
101 12th Ave., Rm 236  
Fairbanks, AK 99701  
phone: (907) 456-0409

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Rose, Joshua  
**Sent:** 2019-02-14T17:19:23-05:00  
**Importance:** Normal  
**Subject:** Fwd: [EXTERNAL] Photo on cover of EIS  
**Received:** 2019-02-14T17:19:36-05:00

----- Forwarded message -----

From: **Jorgensons** (b) (6) >  
Date: Wed, Feb 13, 2019 at 11:06 AM  
Subject: [EXTERNAL] Photo on cover of EIS  
To: <joshua\_rose@fws.gov>, <paul\_leonard@fws.gov>

For the USGS photo used on the cover of the EIS, I think the second sentence in the caption should be removed. Torre and I are pretty sure there is no oil seep visible in the photo. If there's one there at all it must be in the background of photo, where river meets the hill, and not actually visible in the photo. So why should be it mentioned in the caption, which will make most people think that the willows in foreground are dead due to oil? It is an early season photo and we think willows just haven't greened up yet, probably due to recent melting of augeis that was covering them.

Could you ask someone to say where in the photo an oil seep is visible? Janet

This is the caption: Northward view in central coastal plain area near the Sadlerochit River showing gently rolling topography typical of the area. Natural oil indications are visible of an oil seep that occurs along the coast (Barter Island). Photo by David Houseknecht (USGS).

--

Joshua Rose  
Acting Oil and Gas Coordinator  
Arctic National Wildlife Refuge  
101 12th Ave., Rm 236  
Fairbanks, AK 99701  
phone: (907) 456-0409

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Rose, Joshua  
**Sent:** 2019-02-14T17:19:35-05:00  
**Importance:** Normal  
**Subject:** Fwd: [EXTERNAL] Some comments on EIS  
**Received:** 2019-02-14T17:19:52-05:00

----- Forwarded message -----

From: **Jorgensons** (b) (6) >  
Date: Wed, Feb 13, 2019 at 10:05 AM  
Subject: [EXTERNAL] Some comments on EIS  
To: <joshua\_rose@fws.gov>

Hi Josh, of course I can't resist a few comments! Call if you want to discuss this, Janet

For the veg section in appendix J:

The type descriptions on page J-2 are very incomplete. Within each of the 4 types described, not all subtypes (eg those show on the tables) are described. I think the descriptions should be about twice as long as they are and should include some ecological info, for example 'commonly occurs of low-centered polygons', or 'with lots of permafrost features such as frost boils'. Look at the veg type descriptions in the Arctic Refuge CCP for ideas.

Tables J-1 to J-7 need to be redone. Right now the land cover types are in alphabetical order, which makes no sense. They need to be rearranged to make ecological sense. The table needs to be arranged in a hierarchy, with types divided into shrub-dominated, moist herbaceous, wet herbaceous, and other (barren, sparse and water). That's how Viereck's veg of Alaska and all veg classifications are done. For example, under wet herbaceous meadow would be listed 3 types: 'herbaceous (wet), herbaceous (marsh), and herbaceous (wet-marsh)'. I prefer to list the most common one first. Then on page J-2, under the heading 'wet herbaceous meadow', all 3 types would be described, with the most common one described first. Right now, that paragraph on page J-2 describes only the 2 types that cover <1% of the study area. The third type that fits in this category (herbaceous (wet)), which covers 16% of the area as mapped, is currently not described. It includes large areas of wet tundra that are not in lakes or on edges of lakes or coast. It should be described first and then the other 2 less common ones described.

Similarly, the category 'moist herbaceous meadow' includes moist tussock sedge tundra (26% of area) and 'herbaceous (mesic)', (31% of area). In the description on page J-2, the first 2

sentences describe the herbaceous (mesic), but most readers would not know that. Given that the type covers almost 1/3<sup>rd</sup> of the study area, it should be described in more detail.

Vegetation info in appendix F, section F.4.12: Info in the “Impact Indicator” column is treated differently than in other sections. It is not consistent with how the same problem of quantifying habitat changes is dealt with for other items, such as bird or caribou habitat. Tables starting on page F-19 repeatedly state that “no indicator available to assess possible plant community changes”. Compare that wording to the wording under bird habitat on page F-26. It is the same issue with difficulty quantifying habitat changes, but they use completely different wording there. For example “habitat affected (qualitative)”, “describe extent of effect in qualitative terms”, “potential impacts on bird populations”. And then treated differently again for caribou habitat, such as “qualitative assessment”. These should be rewritten and standardized. In addition, I still don’t see why they need to say “no indicator available”. Plant community composition can be quantified with field work. Indicators could be developed.

--

Joshua Rose  
Acting Oil and Gas Coordinator  
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phone: (907) 456-0409



**To:** Lor, Socheata[socheata\_lor@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-14T17:55:23-05:00  
**Importance:** Normal  
**Subject:** Re: Help with Arctic Refuge Coastal Plain Draft EIS  
**Received:** 2019-02-14T17:55:29-05:00

I think Josh Ream and Vince will do as good of a job as we can at this point. If it doesn't come together by next Tuesday, we'll declare an emergency:)

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

On Feb 14, 2019, at 13:53, Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)> wrote:

Do you still need Brian McCaffery?  
My day has been back to back meetings, so I haven't reached out to Stephanie.

Soch

~~~~~  
Socheata Lor, Ph.D.
Acting Assistant Regional Director Region 7
National Wildlife Refuge System
U.S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, AK 99503
Office: 907.786.3420
Cell: 907.891.6194
~~~~~

On Thu, Feb 14, 2019 at 1:30 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Vince,

Thank you so much for your willingness to help us review the Draft EIS subsistence sections. Josh Ream from the Office of Subsistence Management will also take a look at it.

I think Josh Rose has explained what we are looking for, which is mostly the high level view of whether the Sec 810 analysis in Appendix E and also the background and analysis in Section 3.4.3 is adequate for conveying the way that subsistence occurs in the Refuge. Fortunately, these sections were prepared by a contractor familiar with north slope subsistence use and worked on the Pt. Thomson EIS which described Kaktovik subsistence use and underwent public review, so ensuring it captures the effects on subsistence users beyond the Coastal Plain/1002 area might be newer analysis.

Don't hesitate to contact me if you have any questions!

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**To:** Stephen Arthur[[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)]  
**From:** Wendy Loya  
**Sent:** 2019-02-14T18:35:53-05:00  
**Importance:** Normal  
**Subject:** RE: If you need more time on DEIS comments...  
**Received:** 2019-02-14T18:36:01-05:00

Thanks! Either Drew or I will be in touch with any questions as we work through the document ☺

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Arthur, Stephen <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>  
**Sent:** Thursday, February 14, 2019 2:34 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Re: If you need more time on DEIS comments...

I have finished (mostly) commenting on the EIS. If I think of anything else I'll let you know.

Steve

Stephen M. Arthur, Ph.D.  
*Supervisory Wildlife Biologist  
Arctic National Wildlife Refuge  
101 12th Ave., Room 236  
Fairbanks, AK 99701  
(907)455-1830*

On Wed, Feb 13, 2019 at 3:03 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:  
No problem! Thank you so much and we will try to wait until Friday or Tuesday to look at the sections you were lead on.

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Arthur, Stephen <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>  
**Sent:** Wednesday, February 13, 2019 3:01 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Re: If you need more time on DEIS comments...

Hi Wendy,

I'm working on it now, but probably won't finish tonight. If I could continue this tomorrow that would be great.

Steve

Stephen M. Arthur, Ph.D.

*Supervisory Wildlife Biologist  
Arctic National Wildlife Refuge  
101 12th Ave., Room 236  
Fairbanks, AK 99701  
(907)455-1830*

On Wed, Feb 13, 2019 at 2:12 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Steve,

Given your travel schedule for the public meetings, do you need more time than today's deadline for adding your comments into the Google doc? It is easy to extend through Friday (or Monday if you preferred to work over weekend/holiday). The caribou stips and ROP are probably the most important thing to pin down as what goes in the Final EIS will not only be one of the management alternatives, but also likely be the basis for all future revisions.

Let me know what your plans are for finishing, email or call 907-786-3532.

Thanks,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Ream, Joshua  
**Sent:** 2019-02-14T19:32:04-05:00  
**Importance:** Normal  
**Subject:** Re: Section 810 Review for 1002 dEIS  
**Received:** 2019-02-14T19:32:16-05:00

Thanks Wendy. I will do integrate these comments into the google document first thing tomorrow morning. All existing comments seem to be regarding Chapter 3, so I will be sure to clearly delineate that mine are in reference to the 810 Appendix E.

Josh

On Thu, Feb 14, 2019 at 3:08 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Josh,

A quick response is that yes, please put these into the google doc, it is still open for staff edits and will be all day tomorrow. The subsistence section is at the top of Section 2 on page 24. Put in everything you would like to be considered, and your points on caribou seem worth discussion

Thank you, very very much.

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Ream, Joshua <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>  
**Sent:** Thursday, February 14, 2019 3:04 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Section 810 Review for 1002 dEIS

Wendy,

I've read the entire Section 810 component of the dEIS on the 1002. Did you want comments sent directly to you or incorporated in the broader google doc? As with Chapter 3 of the larger document, I am pleased with the depth and breadth of analysis, and with the extensive lease stipulations and required operating procedures that have been developed. As mentioned previously, it was nice to see our previous comments incorporated into Chapter 3, word for word in some instances.

There are several points in the 810 regarding caribou that I would ask for some clearer language on, or at least expansion of cited sources. First, those sections referencing the short and long-term effects of development and aircraft activity on caribou migration. Most of my knowledge is in dealing with the Western Arctic Caribou Herd (WACH) but I would think that in many respects similar principles would apply to the Porcupine Caribou Herd. The 810 seems to suggest that caribou response to aircraft are minimal:

In general, caribou responses to aircraft adhering to effective stipulation measures tend to be short-lived (Fullman et al. 2017).

In reality, the jury is still out on this point and Fullman et al. (2017) has been frequently mischaracterized in the literature. These authors used a limited dataset on take-offs and landings and did not consider flight altitude and patterns near the herd, distance from lead caribou, private aircraft, disturbance near narrow mountain corridors or any number of potentially important factors. They do however indicate that their results are limited to movements within the Noatak River valley. I would say that this paper does not lend itself to the broad application suggested in the 810. Additionally, it should be highlighted that the short-term effects of aircraft activity on caribou movements and resultant hunter success may be critical to subsistence opportunity and food security.

Regarding habituation of caribou to aircraft, the 810 states the following:

Low-level flights or maneuvering in the presence of unhabituated caribou can elicit increased speed and abrupt direction change. Alternatively, caribou can become habituated to aircraft, particularly when aircraft pilots maintain altitudes

greater than 500 feet above ground level and do not haze or harass the caribou (Valkenburg and Davis 1983).

Habituation and avoidance behavior may take quite some time and this should be pointed out in the 810. A recent OSM analysis included the following:

Studies [of caribou] have also reported reduction in the use of areas within 5 km from infrastructure and human activity (including aircraft) by 50–95% for weeks, months, or years (Vistnes and Nellemann 2008, Flydal et al. 2002).

Flydal K, P. Jordhoy, C. Nellemann, E. Reimers, O. Strand, and I Vistnes. 2002. Rapport fra REIN-posjektet. The Research Council of Norway.

Vistnes, I. and C. Nellemann. 2008. The matter of spatial and temporal scales: a review of reindeer and caribou response to human activity. *Polar Biology*, 31(4):399-407.

Regarding habitat loss, E.3.22 indicated that "Caribou abundance or availability and the subsistence use thereof would not likely be affected as a result of direct habitat loss." I am not sure that this takes into account "accessibility" which is a real issue for people within the range of the WACH and presumably the PCH. Large scale herd deflection or changes in migration routes that take caribou further from villages, or even small scale changes that take caribou into mountainous areas rather than river valleys, makes them far less accessible to people. Hunters must often travel farther and more frequently to meet their needs, spending more money on fuel and other resources. The 810 does suggest that lease stipulations and ROPs will help mitigate these effects on caribou availability for Kaktovik residents, but I do not know that we can really say with certainty how herd migration will be affected and what the response of these animals will be. Caribou migration patterns are very complex and the Fullman paper, though a useful starting point, should not be considered definitive evidence of minimal effect.

Lastly, I would like to see additional language that speaks to opportunities for a meaningful subsistence experience that provides the cultural sustenance, not just the nutritional value expected of these activities. Chapter 3 speaks to avoidance behaviors by both people and animals and this should be in the 810 too. Noise pollution has been documented to be a concern among hunters in the Northwest Arctic, and is considered to degrade a meaningful subsistence experience. Halas

(2015) speaks to many factors affecting the subsistence experience and has not been cited in the dEIS or associated 810:

Halas, Gabriela. *Caribou migration, subsistence hunting, and user group conflicts in northwest Alaska: a traditional knowledge perspective*. University of Alaska Fairbanks, 2015.

I hope that these comments are helpful at this point, if for nothing else to suggest additional citations on these issues. I spoke to Vince Mathews today and he is looking at other aspects of the 810 for which he has more knowledge.

Please let me know if you want me to incorporate any of these points into the google doc, or if there is any other way that I can be of assistance. Thank-you for all of your help and patience!

Joshua Ream

--

Joshua T. Ream, Ph.D.

(Xíxch'i Toowóo)

Cultural Anthropologist

United States Fish and Wildlife Service

Office of Subsistence Management

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[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov) (Email)

[www.doi.gov/subsistence](http://www.doi.gov/subsistence) (Web)

--

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Cultural Anthropologist

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[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov) (Email)

[www.doi.gov/subsistence](http://www.doi.gov/subsistence) (Web)

**To:** Ream, Joshua[joshua\_ream@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-15T12:44:22-05:00  
**Importance:** Normal  
**Subject:** Re: Section 810 Review for 1002 dEIS  
**Received:** 2019-02-15T12:44:29-05:00

Thank you so much for fitting this in and sharing your expertise. If we have questions, either Drew or I will be in touch next week.  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

On Feb 15, 2019, at 08:34, Ream, Joshua <joshua\_ream@fws.gov> wrote:

Good morning Wendy. I have now uploaded all of my comments with specific sections and page numbers to the google document. Please let me know if I can be of further assistance!  
Joshua Ream

On Thu, Feb 14, 2019 at 3:08 PM Wendy Loya <wendy\_loya@fws.gov> wrote:

Josh,

A quick response is that yes, please put these into the google doc, it is still open for staff edits and will be all day tomorrow. The subsistence section is at the top of Section 2 on page 24. Put in everything you would like to be considered, and your points on caribou seem worth discussion

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Dr. Wendy M. Loya  
Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Ream, Joshua <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>

**Sent:** Thursday, February 14, 2019 3:04 PM

**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Subject:** Section 810 Review for 1002 dEIS

Wendy,

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In general, caribou responses to aircraft adhering to effective stipulation measures tend to be short-lived (Fullman et al. 2017).

In reality, the jury is still out on this point and Fullman et al. (2017) has been frequently mischaracterized in the literature. These authors used a

limited dataset on take-offs and landings and did not consider flight altitude and patterns near the herd, distance from lead caribou, private aircraft, disturbance near narrow mountain corridors or any number of potentially important factors. They do however indicate that their results are limited to movements within the Noatak River valley. I would say that this paper does not lend itself to the broad application suggested in the 810. Additionally, it should be highlighted that the short-term effects of aircraft activity on caribou movements and resultant hunter success may be critical to subsistence opportunity and food security.

Regarding habituation of caribou to aircraft, the 810 states the following:

Low-level flights or maneuvering in the presence of unhabituated caribou can elicit increased speed and abrupt direction change. Alternatively, caribou can become habituated to aircraft, particularly when aircraft pilots maintain altitudes greater than 500 feet above ground level and do not haze or harass the caribou (Valkenburg and Davis 1983).

Habituation and avoidance behavior may take quite some time and this should be pointed out in the 810. A recent OSM analysis included the following:

Studies [of caribou] have also reported reduction in the use of areas within 5 km from infrastructure and human activity (including aircraft) by 50-95% for weeks, months, or years (Vistnes and Nellemann 2008, Flydal et al. 2002).

Flydal K, P. Jordhoy, C. Nellemann, E. Reimers, O. Strand, and I Vistnes. 2002. Rapport fra REIN-posjektet. The Research Council of Norway.

Vistnes, I. and C. Nellemann. 2008. The matter of spatial and temporal scales: a review of reindeer and caribou response to human activity. *Polar Biology*, 31(4):399-407.

Regarding habitat loss, E.3.22 indicated that "Caribou abundance or availability and the subsistence use thereof would not likely be affected as a result of direct habitat loss." I am not sure that this takes into account "accessibility" which is a real issue for people within the range of the WACH and presumably the PCH. Large scale herd deflection or changes in migration routes that take caribou further from villages, or even small scale changes that take caribou into mountainous areas rather than river valleys, makes them far less accessible to people. Hunters must often travel farther and more frequently to meet their needs, spending more money on fuel and other resources. The 810 does suggest that lease stipulations and ROPs will help mitigate these effects on caribou availability for Kaktovik residents, but I do not know that we can really say with certainty how herd migration will be affected and what the response of these animals will be. Caribou migration patterns are very complex and the Fullman paper, though a useful starting point, should not be considered definitive evidence of minimal effect.

Lastly, I would like to see additional language that speaks to opportunities for a meaningful subsistence experience that provides the cultural sustenance, not just the nutritional value expected of these activities. Chapter 3 speaks to avoidance behaviors by both people and animals and this should be in the 810 too. Noise pollution has been documented to be a concern among hunters in the Northwest Arctic, and is considered to degrade a meaningful subsistence experience. Halas (2015) speaks to many factors affecting the subsistence experience and has not been cited in the dEIS or associated 810:

Halas, Gabriela. *Caribou migration, subsistence hunting, and user group conflicts in northwest Alaska: a traditional knowledge perspective*. University of Alaska Fairbanks, 2015.

I hope that these comments are helpful at this point, if for nothing else to suggest additional citations on these issues. I spoke to Vince Mathews today and he is looking at other aspects of the 810 for which he has more knowledge.

Please let me know if you want me to incorporate any of these points into the google doc, or if there is any other way that I can be of assistance. Thank-you for all of your help and patience!

Joshua Ream

--

Joshua T. Ream, Ph.D.

(Xíxch'i Toowóo)

Cultural Anthropologist

United States Fish and Wildlife Service

Office of Subsistence Management

1011 East Tudor Road, MS 121

Anchorage, Alaska 99503 6199

(907) 786 3839 (Direct)

(907) 786 3898 (Fax)

[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov) (Email)

[www.doi.gov/subsistence](http://www.doi.gov/subsistence) (Web)

--

Joshua T. Ream, Ph.D.

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Office of Subsistence Management

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[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov) (Email)

[www.doi.gov/subsistence](http://www.doi.gov/subsistence) (Web)

**To:** Keeney, Joseph[jkeeney@blm.gov]  
**Cc:** Decleva, Edward[edward\_decleva@fws.gov]; Nichelle (Shelly) Jones[njones@blm.gov]; King, Robert (Bob)[r2king@blm.gov]; Steve Berendzen[steve\_berendzen@fws.gov]; Wendy Loya[Wendy\_loya@fws.gov]  
**From:** LaMarr, Sarah  
**Sent:** 2019-02-15T21:36:53-05:00  
**Importance:** Normal  
**Subject:** Re: Another shot at a meeting  
**Received:** 2019-02-15T21:37:08-05:00

I am SO sorry but could we start the meeting at 12:30? I have another meeting at 1:30. If we can't move it, that's fine, I'll just have to leave early. Again, sorry!

Sarah La Marr  
Bureau of Land Management  
Arctic District Office  
Fairbanks, Alaska  
907-474-2334 (desk)  
406-565-3567 (cell)  
[slamarr@blm.gov](mailto:slamarr@blm.gov)

On Thu, Feb 14, 2019 at 5:00 PM Keeney, Joseph <[jkeeney@blm.gov](mailto:jkeeney@blm.gov)> wrote:

Alright, we will shoot for Friday, Feb. 22 at 1:00. Bob will be on leave until the 20th, so he should be able to join, but this is unconfirmed.  
We can keep that penciled in and maybe shift it if need be after Bob returns and can't join.

On Thu, Feb 14, 2019 at 3:18 PM LaMarr, Sarah <[slamarr@blm.gov](mailto:slamarr@blm.gov)> wrote:

Works for me!  
Sarah La Marr  
Bureau of Land Management  
Arctic District Office  
Fairbanks, Alaska  
907-474-2334 (desk)  
406-565-3567 (cell)  
[slamarr@blm.gov](mailto:slamarr@blm.gov)

On Thu, Feb 14, 2019 at 11:32 AM Keeney, Joseph <[jkeeney@blm.gov](mailto:jkeeney@blm.gov)> wrote:

Hi Ed,  
What do you think about next Friday, say around 1:00-2:00? I'd prefer to schedule two hours, but that's the best fit I'm seeing with others' schedules without going out further.

Bob, Shelly, and Sarah, does this work for you?

Steve, do you want to participate in this meeting, and if so, would this work for you? We will be discussing BLM/USFWS roles in future Coastal Plain Section 106 surrounding oil and gas development, sort of the nuts and bolts of what the two agencies are responsible for (e.g., when permitting archaeological surveys, managing resulting artifact inventories, etc.).

Best,  
Joe

On Thu, Feb 14, 2019 at 6:05 AM Decleva, Edward <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)> wrote:

Hi Joe,

No worries, I know you all are busy.

With the exception of the 20th and 21st, I'm available most of the next two weeks. But please note that my days conclude by 2 PM.

You can include Steve Berendzen if you wish, and I agree that his input would be valuable. But if he's unavailable, my Regional Director has given his approval for me to attend as the sole USFWS rep.

Thank you,  
Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399

On Wed, Feb 13, 2019 at 5:18 PM Keeney, Joseph <[jkeeney@blm.gov](mailto:jkeeney@blm.gov)> wrote:

Hi Ed,

Sorry things didn't work out to put together a meeting last week. We have been pretty tied up and I'll be tied up the rest of this week. Assuming we don't close shop again after the 15th, what is your schedule looking like for next week or two?

Note that my manager mentioned including Steve, who might have some valuable input on the BLM/USFWS roles in future Coastal Plain Section 106.

Best,  
Joe

--

Joe Keeney  
Archaeologist  
BLM Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709



907 474 2312  
[jkeeney@blm.gov](mailto:jkeeney@blm.gov)

--

Joe Keeney  
Archaeologist  
BLM Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709  
907 474 2312  
[jkeeney@blm.gov](mailto:jkeeney@blm.gov)

--

Joe Keeney  
Archaeologist  
BLM Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709  
907 474 2312  
[jkeeney@blm.gov](mailto:jkeeney@blm.gov)

**To:** Roger Kaye[roger\_kaye@fws.gov]; Jennifer Reed[jennifer\_reed@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]; Steve Berendzen[steve\_berendzen@fws.gov]  
**From:** Leonard, Paul  
**Sent:** 2019-02-16T13:55:12-05:00  
**Importance:** Normal  
**Subject:** Update on Viewsheds  
**Received:** 2019-02-16T13:55:51-05:00  
[Stuart Smith Viewshed Analysis 2019.pdf](#)  
[Viewshed Alternatives Reanalysis.docx](#)

I just wanted to let you guys know that I've put together a document with the TrueNorth GIS viewshed data reanalyzed within the context of the DEIS. I attempted to clarify what we can and cannot interpret from the reanalysis with bullets and a short summary. Perhaps the most useful part of the analysis deals with moving from one alternative to another (See page 2).

I'll be out next week but if you have questions, I will be able to check emails regularly towards the end of next week.

Spatial data can be found here:

R:\GIS\_Projects\Arctic\Area1002\DEIS\_Alternatives

Cheers,  
Paul

--

Paul Leonard, PhD  
Science Coordinator  
[Arctic LCC](#)  
101 12th Ave. Room 216  
Fairbanks, AK 99701  
(907) 456-0445

**To:** Roger Kaye[roger\_kaye@fws.gov]; Jennifer Reed[jennifer\_reed@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]; Steve Berendzen[steve\_berendzen@fws.gov]  
**From:** Leonard, Paul  
**Sent:** 2019-02-16T14:03:01-05:00  
**Importance:** Normal  
**Subject:** Re: Update on Viewsheds  
**Received:** 2019-02-16T14:03:33-05:00  
[Viewshed Alternatives Reanalysis UPDATE.docx](#)

Hello again,

I apologize for this but I just realized that I made a rather troubling typo (using Alternative A where it should have read Alternative B in the relative difference from moving between alternatives)

Please use this version of the document!

On Sat, Feb 16, 2019 at 9:55 AM Leonard, Paul <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)> wrote:

I just wanted to let you guys know that I've put together a document with the TrueNorth GIS viewshed data reanalyzed within the context of the DEIS. I attempted to clarify what we can and cannot interpret from the reanalysis with bullets and a short summary. Perhaps the most useful part of the analysis deals with moving from one alternative to another (See page 2).

I'll be out next week but if you have questions, I will be able to check emails regularly towards the end of next week.

Spatial data can be found here:

R:\GIS\_Projects\Arctic\Area1002\DEIS\_Alternatives

Cheers,  
Paul

--

Paul Leonard, PhD  
Science Coordinator  
[Arctic LCC](#)  
101 12th Ave. Room 216  
Fairbanks, AK 99701  
(907) 456-0445

--

Paul Leonard, PhD  
Science Coordinator  
[Arctic LCC](#)  
101 12th Ave. Room 216  
Fairbanks, AK 99701

(907) 456-0445

**From:** wendy\_loya@fws.gov

**Location:** BLM-AK FDO Arctic Conference Room, BLM-AK FDO Bridge 20 (b) (5) CIP

**Passcode:** (b) (5) CIP BLM-AK FDO Chandalar Conference Room

**Importance:** High

**Subject:** Canceled: Coastal Plain Seismic EA-Status Check

**Start Date/Time:** 2019-02-19T19:00:00-05:00

**End Date/Time:** 2019-02-19T19:30:00-05:00

This is a standing meeting, so we can check in and discuss what is happening with the Seismic EA.

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Socheata Lor[socheata\_lor@fws.gov]; John Trawicki[john\_trawicki@fws.gov]; Mary Colligan[mary\_colligan@fws.gov]; Eric Taylor[eric\_taylor@fws.gov]; Patrick Lemons[patrick\_lemons@fws.gov]; Drew Crane[drew\_crane@fws.gov]; Greg Siekaniec[greg\_siekaniec@fws.gov]; Karen Clark[karen\_clark@fws.gov]  
**From:** Murphy, Karen  
**Sent:** 2019-02-19T13:06:47-05:00  
**Importance:** Normal  
**Subject:** Re: Rapid response: Arctic Coastal Plain studies funding needs for 2019  
**Received:** 2019-02-19T13:07:06-05:00

Wendy,  
I am not available Wednesday afternoon until after 3:00pm, but if everyone else is available you can fill me in on the details.

Karen

*Karen A Murphy  
Science Applications  
907-786-3501  
[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)*

On Tue, Feb 19, 2019 at 9:03 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi 1002 ARDs/POCs,

There is a budget request from HQ for money needed for Arctic Coastal Plain studies, that should be completed by Friday according, to Chris Nolan. With the shutdown and DEIS review, we have not advanced the integrated science planning we had hoped to accomplish by this time, so I would like to make a plan for having NWRS, ES and MBM ARDs or POCs bring their ideas for funding needs for 2019 to the table in a meeting.

**Can we talk about this Wednesday at 1pm and then have a follow up conversation if needed Thursday afternoon?** We should work off the Frankensheet of needed studies from last year, but also recognize as we have learned more there may be other projects we want to add. From our conversations last fall, it seemed like polar bear information needs topped the list for near term data gaps/decision-making, and snow, water and continuing and/or increasing migratory bird surveys were also priorities. We have received a request for more money for the vegetation mapping due to elevated logistics costs. The other item on the short list from 2018 which we did not initiate was subsistence harvest monitoring.

So, have a look at the google doc and please work with your 1002 Subject Matter Experts to bring forward your highest priority needs, and we'll evaluate those through the timeline of potential actions set forth in the DEIS for 2019. The original request form HQ is at the bottom.

[https://docs.google.com/spreadsheets/d/1q3C0tmgDjmYoZjIS2FEg4ulZd4ye0CObCsCmknPMEXs/edit?usp\\_sharing](https://docs.google.com/spreadsheets/d/1q3C0tmgDjmYoZjIS2FEg4ulZd4ye0CObCsCmknPMEXs/edit?usp_sharing)

**Please let me know if Wednesday at 1pm will not work, and I will work to find another time ASAP.**

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>

**Sent:** Tuesday, February 19, 2019 7:53 AM

**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>; John Trawicki <[John\\_Trawicki@fws.gov](mailto:John_Trawicki@fws.gov)>

**Subject:** Fwd: Arctic studies

Wendy and John,

Do you have the information on studies from last year and needs for FY19?

Let's talk today?

Soch

0000010786

~~~~~

Socheata Lor, Ph.D.

Acting Assistant Regional Director Region 7

National Wildlife Refuge System

U.S. Fish and Wildlife Service

1011 E. Tudor Road

Anchorage, AK 99503

Office: 907.786.3420

Cell: 907.891.6194

~~~~~

----- Forwarded message -----

From: **Greg Siekaniec** <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>

Date: Tue, Feb 19, 2019 at 7:43 AM

Subject: Fwd: Arctic studies

To: <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Karen Clark  
<[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>

Do we have a sense of where we are with studies per last years funds and what is need to follow?

Thanks,

Greg

Sent from my iPhone

Begin forwarded message:

**From:** "Nolin, Chris" <[chris\\_nolin@fws.gov](mailto:chris_nolin@fws.gov)>

0000010787



**Date:** February 19, 2019 at 7:02:55 AM AKST

**To:** Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark  
<[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>

**Subject:** Arctic studies

Hi folks,

How much funding do you need from the '19 enacted to pay for continuation of the Arctic studies that were initially funded in the '18 spend plan? And can you provide an update on where we are on the ones underway?

This is for our spend plan approval meeting with David Bernhardt.

Thanks!

--

Chris Nolin

Budget Officer

US Fish & Wildlife Service

703-358-2343 desk

240-305-0490 cell

U.S. Fish and Wildlife Service Headquarters

3W019

MS: BMO  
5275 Leesburg Pike

Falls Church, VA 22041-3803

0000010788

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Taylor, Eric  
**Sent:** 2019-02-19T13:10:15-05:00  
**Importance:** Normal  
**Subject:** Re: Rapid response: Arctic Coastal Plain studies funding needs for 2019  
**Received:** 2019-02-19T13:10:34-05:00

Hi Wendy for whatever reason, I do not have access to these documents. Eric

On Tue, Feb 19, 2019 at 9:03 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi 1002 ARDs/POCs,

There is a budget request from HQ for money needed for Arctic Coastal Plain studies, that should be completed by Friday according, to Chris Nolan. With the shutdown and DEIS review, we have not advanced the integrated science planning we had hoped to accomplish by this time, so I would like to make a plan for having NWRS, ES and MBM ARDs or POCs bring their ideas for funding needs for 2019 to the table in a meeting.

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**Please let me know if Wednesday at 1pm will not work, and I will work to find another time ASAP.**

Thank you,

0000010789

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>  
**Sent:** Tuesday, February 19, 2019 7:53 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>; John Trawicki <[John\\_Trawicki@fws.gov](mailto:John_Trawicki@fws.gov)>  
**Subject:** Fwd: Arctic studies

Wendy and John,

Do you have the information on studies from last year and needs for FY19?

Let's talk today?

Soch

~~~~~

Socheata Lor, Ph.D.

Acting Assistant Regional Director Region 7

National Wildlife Refuge System

U.S. Fish and Wildlife Service

1011 E. Tudor Road

0000010790

Anchorage, AK 99503

Office: 907.786.3420

Cell: 907.891.6194

~~~~~

----- Forwarded message -----

From: **Greg Siekaniec** <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>

Date: Tue, Feb 19, 2019 at 7:43 AM

Subject: Fwd: Arctic studies

To: <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Karen Clark  
<[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>

Do we have a sense of where we are with studies per last years funds and what is need to follow?

Thanks,

Greg

Sent from my iPhone

Begin forwarded message:

**From:** "Nolin, Chris" <[chris\\_nolin@fws.gov](mailto:chris_nolin@fws.gov)>

**Date:** February 19, 2019 at 7:02:55 AM AKST

**To:** Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark  
<[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>

**Subject:** Arctic studies

Hi folks,

How much funding do you need from the '19 enacted to pay for continuation of the Arctic studies that were initially funded in the '18 spend plan? And can you

0000010791

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Thanks!

--

Chris Nolin

Budget Officer

US Fish & Wildlife Service

703-358-2343 desk

240-305-0490 cell

U.S. Fish and Wildlife Service Headquarters

3W019

MS: BMO  
5275 Leesburg Pike

Falls Church, VA 22041-3803

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Joshua Rose[joshua\_rose@fws.gov]; Joshua Ream[joshua\_ream@fws.gov]  
**From:** Mathews, Vince  
**Sent:** 2019-02-19T13:43:37-05:00  
**Importance:** Normal  
**Subject:** Re: Help with Arctic Refuge Coastal Plain Draft EIS  
**Received:** 2019-02-19T13:43:54-05:00

Thanks and Josh put me on the straight and narrow a few minutes ago.

On Tue, Feb 19, 2019 at 9:33 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Vince,

The Subsistence and Section 810 comments start on page 25 of the google doc. You can see what Josh Ream has entered, and add your comments before or after his!

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Mathews, Vince <[vince\\_mathews@fws.gov](mailto:vince_mathews@fws.gov)>  
**Sent:** Tuesday, February 19, 2019 6:43 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Cc:** Joshua Rose <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>; Joshua Ream <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>  
**Subject:** Re: Help with Arctic Refuge Coastal Plain Draft EIS

Wendy and JR,

What document should I be editing and commenting on? The 810 appendix of the Draft EIS needs some editing but I cannot use Word editing feature with the online DEIS. Should I be editing the FWS Comments Coastal Plain Draft EIS 013019 and add its edits from the DEIS to it?

Please advise and I will continue to review the 810 appendix via printed hard copy.

Thanks

On Thu, Feb 14, 2019 at 1:30 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Vince,

Thank you so much for your willingness to help us review the Draft EIS subsistence sections. Josh Ream from the Office of Subsistence Management will also take a look at it.

I think Josh Rose has explained what we are looking for, which is mostly the high level view of whether the Sec 810 analysis in Appendix E and also the background and analysis in Section 3.4.3 is adequate for conveying the way that subsistence occurs in the Refuge. Fortunately, these sections were prepared by a contractor familiar with north slope subsistence use and worked on the Pt. Thomson EIS which described Kaktovik subsistence use and underwent public review, so ensuring it captures the effects on subsistence users beyond the Coastal Plain/1002 area might be a newer analysis.

Don't hesitate to contact me if you have any questions!

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

--

Vince Mathews, Refuge Subsistence Specialist for Arctic, Kanuti, &Yukon Flats National Wildlife Refuges.

Office: 907 455 1823

Cell: 907 947 9309

FAX: 907-456-0447

Email Address: [vince\\_mathews@fws.gov](mailto:vince_mathews@fws.gov)

[www.facebook.com/Kanuti.Refuge](http://www.facebook.com/Kanuti.Refuge)

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[www.facebook.com/arcticnationalwildliferefuge](http://www.facebook.com/arcticnationalwildliferefuge)

*“LEADERS BECOME GREAT, NOT BECAUSE OF THEIR POWER, BUT BECAUSE OF THEIR ABILITY TO EMPOWER OTHER.”* John Maxwell

--

Vince Mathews, Refuge Subsistence Specialist for Arctic, Kanuti, &Yukon Flats National Wildlife Refuges.

Office: 907 455 1823

Cell: 907 947 9309

FAX: 907-456-0447

Email Address: [vince\\_mathews@fws.gov](mailto:vince_mathews@fws.gov)

[www.facebook.com/Kanuti.Refuge](http://www.facebook.com/Kanuti.Refuge)

[www.facebook.com/YukonFlatsNationalWildlifeRefuge](http://www.facebook.com/YukonFlatsNationalWildlifeRefuge)

[www.facebook.com/arcticnationalwildliferefuge](http://www.facebook.com/arcticnationalwildliferefuge)



*“LEADERS BECOME GREAT, NOT BECAUSE OF THEIR POWER, BUT  
BECAUSE OF THEIR ABILITY TO EMPOWER OTHER.”* John Maxwell

**To:** Erik Osnas[erik\_osnas@fws.gov]; Eric Taylor[eric\_taylor@fws.gov]  
**Cc:** Joshua Bradley[joshua\_bradley@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]; Diane Granfors[diane\_granfors@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-19T16:48:14-05:00  
**Importance:** Normal  
**Subject:** RE: 1002 data management  
**Received:** 2019-02-19T16:48:17-05:00

Thanks Erik for this.

I agree 100%, and would love for the data managers in the region to think of how we could do this well for the 1002 area moving forward. I am sorry there is not more time, but it would be great to have a healthy budget request for implementing a system for data management for the diverse FWS programs and also thinking about integrating external data. I started with this idea for Arctic Program last year but it turned into the regional approach that Karen Murphy has pitched, for good reason. Is there a way to hire someone in a division that can help cross programmatically for 1002?

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Osnas, Erik <erik\_osnas@fws.gov>  
**Sent:** Tuesday, February 19, 2019 12:39 PM  
**To:** Wendy Loya <wendy\_loya@fws.gov>; Eric Taylor <eric\_taylor@fws.gov>  
**Cc:** Richard Lanctot <richard\_lanctot@fws.gov>; Julian Fischer <julian\_fischer@fws.gov>; Michael Swaim <michael\_swaim@fws.gov>; Kathy Kuletz <kathy\_kuletz@fws.gov>; Robert Kaler <robert\_kaler@fws.gov>; Elizabeth Labunski <elizabeth\_labunski@fws.gov>; Jim Johnson <jim\_a\_johnson@fws.gov>; Jordan Muir <jordan\_muir@fws.gov>; Charles Frost <charles\_frost@fws.gov>; Tamara Zeller <tamara\_zeller@fws.gov>; Cheryl Graves <cheryl\_graves@fws.gov>; Christopher Latty <christopher\_latty@fws.gov>  
**Subject:** Re: 1002 Arctic Refuge Resource Assessment Table Evolving "Frankensheet" - Invitation to edit

Hi All,

The instructions are still not that clear to me, and I understand that a rapid response is needed, so I will just make it here in this email (and leave it to the ARDs to take it or leave it). The total cost is \$175K. How much of this is for data management? A rule of thumb that is used sometimes is that 30% of a budget should be planned for data management (probably not accurate, but I am sure the % is > 0%). So that would be \$52.5K for data management, annually. Given the state of data management in MBM and other programs in R7, I suspect little or no thought has been given to data management for this request. Wouldn't it be appropriate to add a line requesting \$\$ for data management? I hope the plan is not to allow data management to the individual PIs or programs, expecting them to "manage data" without any additional help or over site or training in how to manage data professionally and

responsibly. Data management must be given some thought (and resources!) by managers and supervisors. [I write this knowing that there is at least one highly skilled data manager working on this. I suspect he could use some help.]

Erik

Erik Osnas  
Supervisory Wildlife Biologist (Biometrician)  
Division of Migratory Bird Management, Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road, MS 201  
Anchorage, Alaska 99503 6199  
907 786 3853 (office)  
907 312 3504 (cell)  
[erik\\_osnas@fws.gov](mailto:erik_osnas@fws.gov)

Request MBM Biometric Review [here](#)

On Tue, Feb 19, 2019 at 11:51 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

HI Migratory Birders for 1002 area,

Thanks for good questions about how to best provide feedback. After talking through this, I think it would be best for you all to edit the Bird Studies Cost estimate sheet. That sheet starts with Row 1 which was a very general research request that corresponds with Line 18 in the EDIT HERE: Full List of Studies. Chris Latty worked with some of you to provide the details on the cost estimate sheet to flesh that out.

We continue to learn and have more time to think about what information we need for the Arctic Refuge Coastal Plain as we go. What we need to provide now is a budget request for studies that will contribute to immediate regulatory needs or be part of establishing a baseline before development (e.g. we need 6 yrs of nest surveys to be able to identify important habitat for species x). Ideally each research request would flesh out the columns you see in the Full List worksheet, including a Purpose, Need, Recommended action and budget \$\$ request.

Each ARD can submit their teams request then the 1002 leadership team will determine the criteria for what to submit for 2019. If you need money to do something in 2020 that can be secured in contracting, agreements or purchases, that is welcome.

Hope this helps,  
Wendy  
Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Taylor, Eric <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>

**Sent:** Tuesday, February 19, 2019 9:36 AM

**To:** Richard Lanctot <[Richard\\_Lanctot@fws.gov](mailto:Richard_Lanctot@fws.gov)>; Julian Fischer <[Julian\\_Fischer@fws.gov](mailto:Julian_Fischer@fws.gov)>; Michael Swaim <[michael\\_swaim@fws.gov](mailto:michael_swaim@fws.gov)>; Kathy Kuletz <[Kathy\\_Kuletz@fws.gov](mailto:Kathy_Kuletz@fws.gov)>; Robert Kaler <[Robert\\_Kaler@fws.gov](mailto:Robert_Kaler@fws.gov)>; Elizabeth Labunski <[Elizabeth\\_Labunski@fws.gov](mailto:Elizabeth_Labunski@fws.gov)>; Jim A Johnson <[Jim\\_A\\_Johnson@fws.gov](mailto:Jim_A_Johnson@fws.gov)>; Jordan Muir <[Jordan\\_Muir@fws.gov](mailto:Jordan_Muir@fws.gov)>; Erik Osnas <[erik\\_osnas@fws.gov](mailto:erik_osnas@fws.gov)>; Frost, Charles <[charles\\_frost@fws.gov](mailto:charles_frost@fws.gov)>; Tamara Zeller <[Tamara\\_Zeller@fws.gov](mailto:Tamara_Zeller@fws.gov)>; Cheryl Graves <[cheryl\\_graves@fws.gov](mailto:cheryl_graves@fws.gov)>

**Cc:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Subject:** Fwd: 1002 Arctic Refuge Resource Assessment Table Evolving "Frankensheet" - Invitation to edit

Wendy Loya received a budget request from HQ for proposed studies on the 1002 area. Wendy's turnaround time is short requesting ARDs meet tomorrow at 1 pm.

**Please review the attached link for proposed studies and look over the page entitled "Bird Studies cost estimate." Please review and provide me any revisions or thoughts by COB today.**

Thanks.

Eric

----- Forwarded message -----

**From:** Wendy Loya (via Google Sheets) <[drive-shares-noreply@google.com](mailto:drive-shares-noreply@google.com)>

**Date:** Tue, Feb 19, 2019 at 9:15 AM

**Subject:** 1002 Arctic Refuge Resource Assessment Table Evolving "Frankensheet" - Invitation to edit

**To:** <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>

**Cc:** <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>

wendy\_loya@fws.gov has invited you to **edit** the following spreadsheet:

1002 Arctic Refuge Resource Assessment Table Evolving "Frankensheet"

[Open in Sheets](#)

Google Sheets: Create and edit spreadsheets online.

Google LLC, 1600 Amphitheatre Parkway, Mountain View, CA 94043, USA

You have received this email because someone shared a spreadsheet with you from Google Sheets.

**To:** Drew Crane[drew\_crane@fws.gov]; Melissa Burns[melissa\_burns@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-19T16:49:43-05:00  
**Importance:** Normal  
**Subject:** FW: Help with Arctic Refuge Coastal Plain Draft EIS  
**Received:** 2019-02-19T16:49:53-05:00  
810 EDITS vmathews.docx

Hey Drew and Melissa,

Vince Matthews added subsistence/810 comments into the staff draft, and also attached them here. Sending this as with a budget request due Friday also, I am herding an extra cat/lion that has me scrambling today.

Thanks,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Mathews, Vince <vince\_mathews@fws.gov>  
**Sent:** Tuesday, February 19, 2019 12:13 PM  
**To:** Wendy Loya <wendy\_loya@fws.gov>  
**Cc:** Joshua Rose <joshua\_rose@fws.gov>; Socheata Lor <socheata\_lor@fws.gov>; Joshua Ream <joshua\_ream@fws.gov>  
**Subject:** Re: Help with Arctic Refuge Coastal Plain Draft EIS

Wendy,

I added my edits/comments directly in the draft FWS comment letter for the Draft EIS 810 appendix. Hopefully they are in the Google doc and I used the same style as Josh Ream.

Attached are all my comments in a single document. I will take a look at Section 3.4.3.

Thanks.

On Thu, Feb 14, 2019 at 1:30 PM Wendy Loya <wendy\_loya@fws.gov> wrote:  
Hi Vince,

Thank you so much for your willingness to help us review the Draft EIS subsistence sections. Josh Ream from the Office of Subsistence Management will also take a look at it.

I think Josh Rose has explained what we are looking for, which is mostly the high level view of whether the Sec 810 analysis in Appendix E and also the background and analysis in Section 3.4.3 is adequate for conveying the way that subsistence occurs in the Refuge.

Fortunately, these sections were prepared by a contractor familiar with north slope subsistence use and worked on the Pt. Thomson EIS which described Kaktovik subsistence use and underwent public review, so ensuring it captures the effects on subsistence users beyond the Coastal Plain/1002 area might be newer analysis.

Don't hesitate to contact me if you have any questions!

Thank you,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

--

Vince Mathews, Refuge Subsistence Specialist for Arctic, Kanuti, & Yukon Flats National Wildlife Refuges.

Office: 907 455 1823

Cell: 907 947 9309

FAX: 907-456-0447

Email Address: [vince\\_mathews@fws.gov](mailto:vince_mathews@fws.gov)

[www.facebook.com/Kanuti.Refuge](http://www.facebook.com/Kanuti.Refuge)

[www.facebook.com/YukonFlatsNationalWildlifeRefuge](http://www.facebook.com/YukonFlatsNationalWildlifeRefuge)

[www.facebook.com/arcticnationalwildliferefuge](http://www.facebook.com/arcticnationalwildliferefuge)

*“LEADERS BECOME GREAT, NOT BECAUSE OF THEIR POWER, BUT BECAUSE OF THEIR ABILITY TO EMPOWER OTHER.”* John Maxwell

**To:** Osnas, Erik[erik\_osnas@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]; Eric Taylor[eric\_taylor@fws.gov]; Richard Lanctot[richard\_lanctot@fws.gov]; Julian Fischer[julian\_fischer@fws.gov]; Michael Swaim[michael\_swaim@fws.gov]; Kathy Kuletz[kathy\_kuletz@fws.gov]; Robert Kaler[robert\_kaler@fws.gov]; Elizabeth Labunski[elizabeth\_labunski@fws.gov]; Jim Johnson[jim\_a\_johnson@fws.gov]; Jordan Muir[jordan\_muir@fws.gov]; Charles Frost[charles\_frost@fws.gov]; Tamara Zeller[tamara\_zeller@fws.gov]; Cheryl Graves[cheryl\_graves@fws.gov]  
**From:** Latty, Christopher  
**Sent:** 2019-02-20T02:53:50-05:00  
**Importance:** Normal  
**Subject:** Re: 1002 Arctic Refuge Resource Assessment Table Evolving "Frankensheet" - Invitation to edit  
**Received:** 2019-02-20T02:54:06-05:00

Hi Erik,

That's a great point! About a year ago we hired someone to work with Josh Bradley at the Arctic LCC to begin the process of developing a long-term strategy for some of the more recent Refuge bird data and have been slowly plugging away at a solution. We've been doing this with very little dedicated funding, so it's gone slower than I had hoped.

As we continue talking about what projects to fund to meet data needs for the Refuge Coastal Plain, I completely agree we should carve out a certain amount specifically allocated for data management. Having a rigorous scheme in place to collect, vet, manage, store, and publicly share our data will be vital for meeting the barrage of needs for this info in the future. 30% seems totally reasonable to me... I also agree it shouldn't be left to the PIs (I feel I can say this since I'm one of those PIs) and instead should heavily involve data management professionals that are included from project inception to data-collection technique development to final closeout.

Cheers  
Chris

On Tue, Feb 19, 2019 at 12:39 PM Osnas, Erik <[erik\\_osnas@fws.gov](mailto:erik_osnas@fws.gov)> wrote:

Hi All,

The instructions are still not that clear to me, and I understand that a rapid response is needed, so I will just make it here in this email (and leave it to the ARDs to take it or leave it). The total cost is \$175K. How much of this is for data management? A rule of thumb that is used sometimes is that 30% of a budget should be planned for data management (probably not actuate, but I am sure the % is > 0%). So that would be \$52.5K for data management, annually. Given the state of data management in MBM and other programs in R7, I suspect little or no thought has been given to data management for this request. Wouldn't it be appropriate to add a line requesting \$\$ for data management? I hope the plan is not to allow data management to the individual PIs or programs, expecting them to "manage data" without any additional help or over site or training in how to manage data professionally and responsibly. Data management must be given some thought (and



resources!) by managers and supervisors. [I write this knowing that there is at least one highly skilled data manager working on this. I suspect he could use some help.]

Erik

Erik Osnas  
Supervisory Wildlife Biologist (Biometrician)  
Division of Migratory Bird Management, Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road, MS 201  
Anchorage, Alaska 99503 6199  
907 786 3853 (office)  
907 312 3504 (cell)  
[erik\\_osnas@fws.gov](mailto:erik_osnas@fws.gov)

Request MBM Biometric Review [here](#)

On Tue, Feb 19, 2019 at 11:51 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Migratory Birders for 1002 area,

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Each ARD can submit their teams request then the 1002 leadership team will determine the criteria for what to submit for 2019. If you need money to do something in 2020 that can be secured in contracting, agreements or purchases, that is welcome.

Hope this helps,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Taylor, Eric <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>

**Sent:** Tuesday, February 19, 2019 9:36 AM

**To:** Richard Lanctot <[Richard\\_Lanctot@fws.gov](mailto:Richard_Lanctot@fws.gov)>; Julian Fischer <[Julian\\_Fischer@fws.gov](mailto:Julian_Fischer@fws.gov)>; Michael Swaim <[michael\\_swaim@fws.gov](mailto:michael_swaim@fws.gov)>; Kathy Kuletz <[Kathy\\_Kuletz@fws.gov](mailto:Kathy_Kuletz@fws.gov)>; Robert Kaler <[Robert\\_Kaler@fws.gov](mailto:Robert_Kaler@fws.gov)>; Elizabeth Labunski <[Elizabeth\\_Labunski@fws.gov](mailto:Elizabeth_Labunski@fws.gov)>; Jim A Johnson <[Jim\\_A\\_Johnson@fws.gov](mailto:Jim_A_Johnson@fws.gov)>; Jordan Muir <[Jordan\\_Muir@fws.gov](mailto:Jordan_Muir@fws.gov)>; Erik Osnas <[erik\\_osnas@fws.gov](mailto:erik_osnas@fws.gov)>; Frost, Charles <[charles\\_frost@fws.gov](mailto:charles_frost@fws.gov)>; Tamara Zeller <[Tamara\\_Zeller@fws.gov](mailto:Tamara_Zeller@fws.gov)>; Cheryl Graves <[cheryl\\_graves@fws.gov](mailto:cheryl_graves@fws.gov)>

**Cc:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Subject:** Fwd: 1002 Arctic Refuge Resource Assessment Table Evolving "Frankensheet" - Invitation to edit

Wendy Loya received a budget request from HQ for proposed studies on the 1002 area.  
Wendy's turnaround time is short requesting ARDs meet tomorrow at 1 pm.

**Please review the attached link for proposed studies and look over the page entitled "Bird Studies cost estimate." Please review and provide me any revisions or thoughts by COB today.**

Thanks.

Eric

----- Forwarded message -----

From: **Wendy Loya (via Google Sheets)** <[drive-shares-noreply@google.com](mailto:drive-shares-noreply@google.com)>

Date: Tue, Feb 19, 2019 at 9:15 AM

Subject: 1002 Arctic Refuge Resource Assessment Table Evolving "Frankensheet" - Invitation to edit

To: <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>

Cc: <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>

wendy\_loya@fws.gov has invited you to **edit** the following spreadsheet:

## 1002 Arctic Refuge Resource Assessment Table Evolving "Frankensheet"

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You have received this email because someone shared a spreadsheet with you from

Google Sheets.

--

Christopher Latty  
US Fish and Wildlife Service  
Arctic NWR  
101 12th Avenue  
Room 236  
Fairbanks, AK 99701

0000010806

cell 907-347-4300

**To:** Joshua Rose[joshua\_rose@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-20T12:44:06-05:00  
**Importance:** High  
**Subject:** Quick request: Is this the latest project list?  
**Received:** 2019-02-20T12:44:16-05:00  
Arctic NWR 1002 Projects list 09242018.docx

Josh,

Is the attached list the most current and something I can share with Nicole Hayes at BLM?

Thanks,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Rose, Joshua  
**Sent:** 2019-02-20T13:58:55-05:00  
**Importance:** Normal  
**Subject:** Re: Quick request: Is this the latest project list?  
**Received:** 2019-02-20T13:59:13-05:00

Wendy,

It is. If you would like to share one that is by subject area versus funding source the list below is the same as the one you have just reordered by subject (e.g. Polar Bear, Caribou, Abiotic). Both lists include all planned Refuge projects as well but I don't see any reason that they can't be shared.

Thanks,  
Josh

. 1002\_Projects\_list\_By\_Category

On Wed, Feb 20, 2019 at 8:44 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Josh,

Is the attached list the most current and something I can share with Nicole Hayes at BLM?

Thanks,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

--

0000010809

Joshua Rose  
Acting Oil and Gas Coordinator  
Arctic National Wildlife Refuge  
101 12th Ave., Rm 236  
Fairbanks, AK 99701  
phone: (907) 456-0409

**To:** Keeney, Joseph[jkeeney@blm.gov]  
**Cc:** LaMarr, Sarah[slamarr@blm.gov]; Decleva, Edward[edward\_decleva@fws.gov]; Nichelle (Shelly) Jones[njones@blm.gov]; Steve Berendzen[steve\_berendzen@fws.gov]; Wendy Loya[Wendy\_loya@fws.gov]  
**From:** King, Robert (Bob)  
**Sent:** 2019-02-20T13:59:18-05:00  
**Importance:** Normal  
**Subject:** Re: Another shot at a meeting  
**Received:** 2019-02-20T13:59:37-05:00

Friday, Feb. 22, at 1:00 pm should be fine for me, too.

On Thu, Feb 14, 2019 at 5:00 PM Keeney, Joseph <jkeeney@blm.gov> wrote:

Alright, we will shoot for Friday, Feb. 22 at 1:00. Bob will be on leave until the 20th, so he should be able to join, but this is unconfirmed.

We can keep that penciled in and maybe shift it if need be after Bob returns and can't join.

On Thu, Feb 14, 2019 at 3:18 PM LaMarr, Sarah <slamarr@blm.gov> wrote:

Works for me!  
Sarah La Marr  
Bureau of Land Management  
Arctic District Office  
Fairbanks, Alaska  
907-474-2334 (desk)  
406-565-3567 (cell)  
[slamarr@blm.gov](mailto:slamarr@blm.gov)

On Thu, Feb 14, 2019 at 11:32 AM Keeney, Joseph <jkeeney@blm.gov> wrote:

Hi Ed,  
What do you think about next Friday, say around 1:00-2:00? I'd prefer to schedule two hours, but that's the best fit I'm seeing with others' schedules without going out further.

Bob, Shelly, and Sarah, does this work for you?

Steve, do you want to participate in this meeting, and if so, would this work for you? We will be discussing BLM/USFWS roles in future Coastal Plain Section 106 surrounding oil and gas development, sort of the nuts and bolts of what the two agencies are responsible for (e.g., when permitting archaeological surveys, managing resulting artifact inventories, etc.).

Best,  
Joe

On Thu, Feb 14, 2019 at 6:05 AM Decleva, Edward <edward\_decleva@fws.gov> wrote:

Hi Joe,



No worries, I know you all are busy.

With the exception of the 20th and 21st, I'm available most of the next two weeks. But please note that my days conclude by 2 PM.

You can include Steve Berendzen if you wish, and I agree that his input would be valuable. But if he's unavailable, my Regional Director has given his approval for me to attend as the sole USFWS rep.

Thank you,  
Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399

On Wed, Feb 13, 2019 at 5:18 PM Keeney, Joseph <[jkeeney@blm.gov](mailto:jkeeney@blm.gov)> wrote:

Hi Ed,  
Sorry things didn't work out to put together a meeting last week. We have been pretty tied up and I'll be tied up the rest of this week. Assuming we don't close shop again after the 15th, what is your schedule looking like for next week or two?

Note that my manager mentioned including Steve, who might have some valuable input on the BLM/USFWS roles in future Coastal Plain Section 106.

Best,  
Joe

--

Joe Keeney  
Archaeologist  
BLM Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709  
907 474 2312  
[jkeeney@blm.gov](mailto:jkeeney@blm.gov)

--

Joe Keeney  
Archaeologist  
BLM Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709  
907 474 2312  
[jkeeney@blm.gov](mailto:jkeeney@blm.gov)

--

Joe Keeney  
Archaeologist  
BLM Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709  
907 474 2312  
[jkeeney@blm.gov](mailto:jkeeney@blm.gov)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Taylor, Eric  
**Sent:** 2019-02-20T15:12:30-05:00  
**Importance:** Normal  
**Subject:** Re: Rapid response: Arctic Coastal Plain studies funding needs for 2019  
**Received:** 2019-02-20T15:12:50-05:00

thank you. see you then.

Eric J. Taylor, Supervisory Wildlife Biologist  
Chief, Division of Migratory Bird Management  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road, MS 201  
Anchorage, Alaska 99503-6199  
907.786.3446 (office)  
907.903.7210 (cell)  
[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)

On Wed, Feb 20, 2019 at 11:11 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Refuge conference room at 1  
Thanks!

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
[907.786.3532](tel:907.786.3532) (office)  
[907.227.2942](tel:907.227.2942) (mobile)

On Feb 20, 2019, at 11:10, Taylor, Eric <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)> wrote:

Hi Wendy

Are we meeting today at 1 pm and if so, where? Thanks.

Eric

On Tue, Feb 19, 2019 at 9:13 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

I have shared it specifically, although the sharing was set to anyone with link can view. Hope that helps.

Thanks!

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Taylor, Eric <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>

**Sent:** Tuesday, February 19, 2019 9:10 AM

**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

**Subject:** Re: Rapid response: Arctic Coastal Plain studies funding needs for 2019

Hi Wendy - for whatever reason, I do not have access to these documents. Eric

On Tue, Feb 19, 2019 at 9:03 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi 1002 ARDs/POCs,

There is a budget request from HQ for money needed for Arctic Coastal Plain studies, that should be completed by Friday according, to Chris Nolan. With the shutdown and DEIS review, we have not advanced the integrated science planning we had hoped to accomplish by this time, so I would like to make a plan for having NWRS, ES and MBM ARDs or POCs bring their ideas for funding needs for 2019 to the table in a meeting.

**Can we talk about this Wednesday at 1pm and then have a follow up conversation if needed Thursday afternoon?** We should work off the Frankensheet of needed

0000010815

studies from last year, but also recognize as we have learned more there may be other projects we want to add. From our conversations last fall, it seemed like polar bear information needs topped the list for near term data gaps/decision-making, and snow, water and continuing and/or increasing migratory bird surveys were also priorities. We have received a request for more money for the vegetation mapping due to elevated logistics costs. The other item on the short list from 2018 which we did not initiate was subsistence harvest monitoring.

So, have a look at the google doc and please work with your 1002 Subject Matter Experts to bring forward your highest priority needs, and we'll evaluate those through the timeline of potential actions set forth in the DEIS for 2019. The original request form HQ is at the bottom.

[https://docs.google.com/spreadsheets/d/1q3C0tmgDjmYoZjIS2FEg4ulZd4ye0CObCsCmknPMEXs/edit?usp\\_sharing](https://docs.google.com/spreadsheets/d/1q3C0tmgDjmYoZjIS2FEg4ulZd4ye0CObCsCmknPMEXs/edit?usp_sharing)

**Please let me know if Wednesday at 1pm will not work, and I will work to find another time ASAP.**

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>

**Sent:** Tuesday, February 19, 2019 7:53 AM

**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>; John Trawicki <[John\\_Trawicki@fws.gov](mailto:John_Trawicki@fws.gov)>

**Subject:** Fwd: Arctic studies

Wendy and John,

Do you have the information on studies from last year and needs for FY19?

Let's talk today?

Soch

~~~~~

Socheata Lor, Ph.D.

Acting Assistant Regional Director Region 7

National Wildlife Refuge System

U.S. Fish and Wildlife Service

1011 E. Tudor Road

Anchorage, AK 99503

Office: 907.786.3420

Cell: 907.891.6194

~~~~~

----- Forwarded message -----

From: **Greg Siekaniec** <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>

Date: Tue, Feb 19, 2019 at 7:43 AM

Subject: Fwd: Arctic studies

To: <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Karen Clark  
<[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>

Do we have a sense of where we are with studies per last years funds and what is need to follow?

Thanks,

Greg

Sent from my iPhone

Begin forwarded message:

**From:** "Nolin, Chris" <[chris\\_nolin@fws.gov](mailto:chris_nolin@fws.gov)>  
**Date:** February 19, 2019 at 7:02:55 AM AKST  
**To:** Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark  
<[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>  
**Subject:** Arctic studies

Hi folks,

How much funding do you need from the '19 enacted to pay for continuation of the Arctic studies that were initially funded in the '18 spend plan? And can you provide an update on where we are on the ones underway?

This is for our spend plan approval meeting with David Bernhardt.

Thanks!

--

Chris Nolin

Budget Officer

US Fish & Wildlife Service

703-358-2343 desk

240-305-0490 cell

U.S. Fish and Wildlife Service Headquarters

3W019

MS: BMO

5275 Leesburg Pike

Falls Church, VA 22041-3803



**To:** Lemons, Patrick[patrick\_lemons@fws.gov]  
**Cc:** Joshua Rose[joshua\_rose@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]; Colligan, Mary[mary\_colligan@fws.gov]; Christopher Putnam[Christopher\_Putnam@fws.gov]  
**From:** Conn, Sarah  
**Sent:** 2019-02-20T17:27:51-05:00  
**Importance:** Normal  
**Subject:** Re: 1002 Projects Discussion - MMPA and ESA Take  
**Received:** 2019-02-20T17:28:35-05:00

Any of those times would work for me, although I usually have a call with David first thing on a Friday so my preference would be to avoid the 8am Friday slot.  
thanks,

Sarah

On Wed, Feb 20, 2019 at 12:58 PM Lemons, Patrick <patrick\_lemons@fws.gov> wrote:

Hi Josh, Wendy and Sarah,  
I apologize for the delay in setting up this discussion but I needed to cover a few things internally before speaking with you. I'd like to propose the following times for a meeting to discuss coverage for Take under MMPA and ESA for projects that will occur in the 1002 Area. I'm fairly limited on time but would either of the meeting times work for you? Feel free to extend the invitation to those on your staff as necessary.

Thursday 3pm  
Friday 8am  
Friday 10am.

--

Patrick Lemons, Ph.D.  
Chief, Marine Mammals Management  
U.S. Fish and Wildlife Service  
1011 East Tudor Road  
Anchorage, AK 99503  
Work: 907-786-3668  
Cell: 907-717-6787  
Fax: 907-786-3816  
e-mail: [patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Trawicki, John  
**Sent:** 2019-02-20T20:06:14-05:00  
**Importance:** Normal  
**Subject:** Re: Rapid response: Arctic Coastal Plain studies funding needs for 2019  
**Received:** 2019-02-20T20:06:56-05:00

your welcome-

On Wed, Feb 20, 2019 at 2:52 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Great! Thank you so much! I made a few changes to column headings to try to make them clearer for prioritizing!

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Trawicki, John <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>  
**Sent:** Wednesday, February 20, 2019 2:41 PM  
**To:** John Trawicki <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>; Drew Crane <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>; Joshua Rose <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>; Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>; Mary Colligan <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>; Doug Damberg <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>; Eric Taylor <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>; Kenneth Stahlnecker <[kenneth\\_stahlnecker@fws.gov](mailto:kenneth_stahlnecker@fws.gov)>; Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>; Sarah Conn <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>; Paul Leonard <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)>; Socheata Lor <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>; Karen Murphy <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)>; Stephen Arthur <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>; Angela Matz <[Angela\\_Matz@fws.gov](mailto:Angela_Matz@fws.gov)>; Jennifer Reed <[jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)>; William Leacock <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>; Christopher Latty <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>; Randy Brown <[randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)>; Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>; Patrick Lemons <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>  
**Subject:** Fwd: Rapid response: Arctic Coastal Plain studies funding needs for 2019

Hi All-

Due 4 PM Thursday, Feb. 21- tomorrow.

Per our conversation today and the request from Chris Nolin. I have added a tab "FY 2019 priority studies" to the [1002 Resource Assessment studies](#) spreadsheet. Please copy studies from other tabs or add new studies that we missed that are a priority for funding this year. This is a working spreadsheet. It is likely not all projects will be funded. When adding a project to this tab please consider:

Be sure to include a cost estimate for year one and out years.

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3. Can you initiate or obligate funding if you get it?

If you have questions please call me. Please work with your Program POC if need be:  
Drew Crane, Eric Taylor, Joanna Fox, John Trawicki

john t

----- Forwarded message -----

From: **Wendy Loya** <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

Date: Tue, Feb 19, 2019 at 9:03 AM

Subject: Rapid response: Arctic Coastal Plain studies funding needs for 2019

To: Socheata Lor <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, John Trawicki <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>, Mary Colligan <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, Eric Taylor <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>, Patrick Lemons <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>, Drew Crane <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>

Cc: Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Karen Murphy <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)>

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**Please let me know if Wednesday at 1pm will not work, and I will work to find another time ASAP.**

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>

**Sent:** Tuesday, February 19, 2019 7:53 AM

**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>; John Trawicki <[John\\_Trawicki@fws.gov](mailto:John_Trawicki@fws.gov)>

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Let's talk today?

Soch

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Socheata Lor, Ph.D.

Acting Assistant Regional Director Region 7

National Wildlife Refuge System

U.S. Fish and Wildlife Service

1011 E. Tudor Road

Anchorage, AK 99503

Office: 907.786.3420

Cell: 907.891.6194

~~~~~

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Date: Tue, Feb 19, 2019 at 7:43 AM

Subject: Fwd: Arctic studies

To: <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Karen Clark  
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Do we have a sense of where we are with studies per last years funds and what is need to follow?

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Begin forwarded message:

**From:** "Nolin, Chris" <[chris\\_nolin@fws.gov](mailto:chris_nolin@fws.gov)>

**Date:** February 19, 2019 at 7:02:55 AM AKST

**To:** Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark  
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Budget Officer

US Fish & Wildlife Service

703-358-2343 desk

240-305-0490 cell

U.S. Fish and Wildlife Service Headquarters

3W019

MS: BMO  
5275 Leesburg Pike

Falls Church, VA 22041-3803

--

John Trawicki

Water Resources Branch Chief

National Wildlife Refuge System, Alaska

U.S. Fish and Wildlife Service

1011 E. Tudor Road

Anchorage, AK 99503

Work: (907) 786-3474

Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"

George Bernard Shaw

--

John Trawicki  
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**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Joshua Rose[joshua\_rose@fws.gov]; Sarah Conn[sarah\_conn@fws.gov]; Mary Colligan[mary\_colligan@fws.gov]; Christopher Putnam[christopher\_putnam@fws.gov]  
**From:** Lemons, Patrick  
**Sent:** 2019-02-20T21:35:43-05:00  
**Importance:** Normal  
**Subject:** Re: 1002 Projects Discussion - MMPA and ESA Take  
**Received:** 2019-02-20T21:35:56-05:00

Hi Josh,  
I'm going to go ahead and book 3pm Thursday for this meeting since it seems to work best for most of us. Hopefully that works for you as well but let me know.

Patrick

On Wed, Feb 20, 2019 at 1:56 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

I can do any of those times, thank you.

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Lemons, Patrick <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>  
**Sent:** Wednesday, February 20, 2019 12:58 PM  
**To:** Joshua Rose <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>; Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>; Conn, Sarah <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>  
**Cc:** Colligan, Mary <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>; Christopher Putnam <[Christopher\\_Putnam@fws.gov](mailto:Christopher_Putnam@fws.gov)>  
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Friday 10am.

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Patrick Lemons, Ph.D.  
Chief, Marine Mammals Management  
U.S. Fish and Wildlife Service  
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Work: 907-786-3668  
Cell: 907-717-6787  
Fax: 907-786-3816  
e-mail: [patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)

--

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e-mail: [patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)

**To:** Steve Berendzen[[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)]  
**Cc:** Joshua Rose[[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)]  
**From:** Wendy Loya  
**Sent:** 2019-02-20T22:36:35-05:00  
**Importance:** Normal  
**Subject:** RE: Rapid response: Arctic Coastal Plain studies funding needs for 2019  
**Received:** 2019-02-20T22:36:45-05:00

Steve,

The project you mentioned from Hollis could be a good fit for that line item, for sure. It was a general need identified last year, and we did not have a specific project identified that would fulfill that need. So I would encourage you to think about if it is realistic to initiate in 2019, how to accomplish it (contracting, financial assistance agreement with tribes, hiring someone, etc) and the possible cost. If this project needs more time to develop in partnership than we likely have before financial obligation deadlines in 2019, it would still be good to prepare for it in 2020 I think.

Thanks!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Berendzen, Steve <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>  
**Sent:** Wednesday, February 20, 2019 5:13 PM  
**To:** Loya, Wendy <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Cc:** Joshua Rose <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>  
**Subject:** Fwd: Rapid response: Arctic Coastal Plain studies funding needs for 2019

Wendy, do you have any more specifics for the subsistence harvest monitoring program project on the short list? Do you know if this is related to the Porcupine Caribou community harvest surveys that Hollis proposed? We've been trying to get a proposal developed through support of Kaktovik, Arctic Village, Venetie, and Fort Yukon, but it's still under review by some of those communities. The funding need is probably in excess of \$100K per year.

Hollis had intended to request funds from Tribal Wildlife Grant sources, and BLM offered EOY funds last year but we weren't far enough along to accept them. I wasn't intending to include that project in this list, but maybe we should consider doing that? Thoughts?

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

----- Forwarded message -----

From: **Trawicki, John** <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>

Date: Wed, Feb 20, 2019 at 2:41 PM

Subject: Fwd: Rapid response: Arctic Coastal Plain studies funding needs for 2019

To: John Trawicki <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>, Drew Crane <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>, Joshua Rose <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Mary Colligan <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, Doug Damberg <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>, Eric Taylor <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>, Kenneth Stahlnecker <[kenneth\\_stahlnecker@fws.gov](mailto:kenneth_stahlnecker@fws.gov)>, Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>, Sarah Conn <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>, Paul Leonard <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)>, Socheata Lor <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Karen Murphy <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)>, Stephen Arthur <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>, Angela Matz <[Angela\\_Matz@fws.gov](mailto:Angela_Matz@fws.gov)>, Jennifer Reed <[jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)>, William Leacock <[william\\_leacock@fws.gov](mailto:william_leacock@fws.gov)>, Christopher Latty <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>, Randy Brown <[randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)>, Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>, Patrick Lemons <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>

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john t

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Date: Tue, Feb 19, 2019 at 9:03 AM

Subject: Rapid response: Arctic Coastal Plain studies funding needs for 2019

To: Socheata Lor <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, John Trawicki <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>, Mary Colligan <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, Eric Taylor <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>, Patrick Lemons <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>, Drew Crane <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>

Cc: Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Karen Murphy <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)>

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There is a budget request from HQ for money needed for Arctic Coastal Plain studies, that should be completed by Friday according to Chris Nolan. With the shutdown and DEIS review, we have not advanced the integrated science planning we had hoped to accomplish by this time, so I would like to make a plan for having NWRS, ES and MBM ARDs or POCs bring their ideas for funding needs for 2019 to the table in a meeting.

**Can we talk about this Wednesday at 1pm and then have a follow up conversation if needed Thursday afternoon?** We should work off the Frankensheet of needed studies from last year, but also recognize as we have learned more there may be other projects we want to add. From our conversations last fall, it seemed like polar bear information needs topped the list for near term data gaps/decision-making, and snow, water and continuing and/or increasing migratory bird surveys were also priorities. We have received a request for more money for the vegetation mapping due to elevated logistics costs. The other item on the short list from 2018 which we did not initiate was subsistence harvest monitoring.

So, have a look at the google doc and please work with your 1002 Subject Matter Experts to bring forward your highest priority needs, and we'll evaluate those through the timeline of potential actions set forth in the DEIS for 2019. The original request form HQ is at the bottom.

<https://docs.google.com/spreadsheets/d/1q3C0tmgDjmYoZjIS2FEg4ulZd4ye0CObCsCmknPMEXs/edit?usp=sharing>

**Please let me know if Wednesday at 1pm will not work, and I will work to find another time ASAP.**

Thank you,

Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Lor, Socheata <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>

**Sent:** Tuesday, February 19, 2019 7:53 AM

**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>; John Trawicki <[John\\_Trawicki@fws.gov](mailto:John_Trawicki@fws.gov)>

**Subject:** Fwd: Arctic studies

Wendy and John,

Do you have the information on studies from last year and needs for FY19?

Let's talk today?

Soch

~~~~~

*Socheata Lor, Ph.D.
Acting Assistant Regional Director Region 7
National Wildlife Refuge System
U.S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, AK 99503
Office: 907.786.3420
Cell: 907.891.6194*

~~~~~

----- Forwarded message -----

From: **Greg Siekaniec** <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>  
Date: Tue, Feb 19, 2019 at 7:43 AM  
Subject: Fwd: Arctic studies  
To: <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Karen Clark  
<[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>

Do we have a sense of where we are with studies per last years funds and what is need to follow?

Thanks,

Greg  
Sent from my iPhone  
Begin forwarded message:

**From:** "Nolin, Chris" <[chris\\_nolin@fws.gov](mailto:chris_nolin@fws.gov)>  
**Date:** February 19, 2019 at 7:02:55 AM AKST  
**To:** Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark  
<[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>  
**Subject:** Arctic studies

Hi folks,

How much funding do you need from the '19 enacted to pay for continuation of the Arctic studies that were initially funded in the '18 spend plan? And can you provide an update on where we are on the ones underway?

This is for our spend plan approval meeting with David Bernhardt.

Thanks!

--

Chris Nolin  
Budget Officer  
US Fish & Wildlife Service  
703-358-2343 desk  
240-305-0490 cell  
U.S. Fish and Wildlife Service Headquarters  
3W019  
MS: BMO  
5275 Leesburg Pike  
Falls Church, VA 22041-3803

--

John Trawicki  
Water Resources Branch Chief  
National Wildlife Refuge System, Alaska  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
Work: (907) 786-3474  
Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"  
George Bernard Shaw

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]; Steve Berendzen[steve\_berendzen@fws.gov]  
**From:** Decleva, Edward  
**Sent:** 2019-02-21T11:31:36-05:00  
**Importance:** Normal  
**Subject:** Coastal Plain Section106 PA  
**Received:** 2019-02-21T11:31:55-05:00

Good morning Greg,

This is to report a key result of the meeting I attended yesterday afternoon with BLM, Alaska State Historic Preservation Office (SHPO), and Advisory Council on Historic Preservation (ACHP).

Per the discussion I had with you yesterday morning, I presented my argument for USFWS to be a full Signatory to the Coastal Plain Section 106 PA. BLM and AK SHPO initially objected. However, ACHP was fully supportive of the USFWS position. The result is that the parties agreed that USFWS will be a full Signatory and the draft PA is being revised to reflect this.

This morning at 10 I am scheduled to have a teleconference with Wendy Loya and Steve Berendzen to discuss the purpose of the meeting Steve and I are participating in tomorrow between BLM and USFWS to define BLM and USFWS roles in Section 106 review, ARPA permitting, inadvertent discovery, NAGPRA compliance, and management of cultural resources as these pertain to oil & gas permitting/leasing. Based on recent discussions, I expect BLM to press for USFWS to accept lead responsibilities for all of these. However, consistent with my conversation with you, I will press for BLM to accept lead responsibilities because such are driven by oil & gas permitting/leasing, with USFWS as a consulting and cooperating party to BLM, and with USFWS retaining ownership of cultural resources that may be collected from refuge system lands.

I will send to you a summary of the results of tomorrow's meeting with BLM.

Thank you,  
Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399



**To:** Catherine Coon[catherine.coon@boem.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-21T12:46:06-05:00  
**Importance:** Normal  
**Subject:** RE: Coordinating research activities in eastern Southern Beaufort Sea  
**Received:** 2019-02-21T12:46:17-05:00

Hey Cathy!

Thanks for getting back to me. I haven't been able to circle back due to other time commitments, but will do so after March 13<sup>th</sup> (comment deadline for Draft EIS for Arctic Refuge Coastal Plain).

Cheers!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Coon, Catherine <catherine.coon@boem.gov>  
**Sent:** Friday, February 15, 2019 4:02 PM  
**To:** Wendy Loya <wendy\_loya@fws.gov>  
**Subject:** Re: Coordinating research activities in eastern Southern Beaufort Sea

Hi Wendy,

I just left you a voicemail- call me back, sorry it was so long.

<https://marinecadastre.gov/espis/#/>

<https://www.boem.gov/Alaska-Studies/>

Cathy

Cathy Coon  
Chief, Environmental Sciences Management  
Bureau of Ocean Energy Management  
U.S. Department of the Interior  
3801 Centerpoint Drive, Suite 500  
Anchorage, AK 99503-5823  
907-334-5245

On Thu, Feb 7, 2019 at 4:33 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:  
Hey Cathy,

FWS knows it is important to coordinate research in and near the Arctic NWR, as well as across the north slope and Beaufort sea, in order to minimize impacts on wildlife and subsistence users. We are working closely with researchers funded through USFWS and USGS to coordinate logistics, especially those projects that could affect Kaktovik residents. Josh Rose, the Arctic Refuge Acting Oil and Gas Coordinator, is working to move most helicopter activity to Kavik Camp to the west of the Refuge. I wanted to check in with BOEM on what work you all may have near the Arctic Refuge in 2019, and incorporate that into our project tracking if not also collaborative research logistics.

You guys seem to be pros at project tracking, so maybe there is a website that would give us relevant information, but grateful if you are someone on your team can help me gather information from BOEM. Feel free to call for clarification or however works best for you!

Thank you!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** John Trawicki[john\_trawicki@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-21T13:04:07-05:00  
**Importance:** Normal  
**Subject:** 2018 projects for update as part of budget request  
**Received:** 2019-02-21T13:04:15-05:00  
2018 1002 operations plan 040518.xlsx

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Stephen Arthur[stephen\_arthur@fws.gov]; Christopher Latty[christopher\_latty@fws.gov]; Eric Taylor[eric\_taylor@fws.gov]; Patrick Lemons[patrick\_lemons@fws.gov]; Drew Crane[drew\_crane@fws.gov]; Joshua Rose[Joshua\_Rose@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Trawicki, John  
**Sent:** 2019-02-21T14:55:28-05:00  
**Importance:** Normal  
**Subject:** Status of projects funded last year- FY2018  
**Received:** 2019-02-21T14:56:14-05:00

Could you please update the status for the projects you are familiar with in the google sheet "[Coastal Plain Project Status](#)"

This is also due by 4 pm today. It should only take a few minutes.

THANK YOU very very much!

Any questions please ask.

john t

--

John Trawicki  
Water Resources Branch Chief  
National Wildlife Refuge System, Alaska  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
Work: (907) 786-3474  
Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"  
George Bernard Shaw

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Mary Colligan[mary\_colligan@fws.gov]  
**From:** Lemons, Patrick  
**Sent:** 2019-02-21T15:10:13-05:00  
**Importance:** Normal  
**Subject:** Re: update from USGS  
**Received:** 2019-02-21T15:19:12-05:00

Thanks for the update. We're in regular communication with Grant and Todd Atwood but I'll reach out to them again. Appreciate the help.  
Patrick

On Thu, Feb 21, 2019 at 11:04 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Patrick and Mary,

I just got off the phone with John Pearce who is our/my POC for 1002 research. He said that he and Grant have been working on how to allocate unallocated Changing Arctic Ecosystems (CAE) funding, which is discussion about polar bear research. Since conversations between the polar bear teams at USGS and FWS are ongoing, I am not sure what role FWS has played in recent research direction decisions, but it sounds like a really good time to reach out if communication hasn't occurred recently. John said that an email or letter identifying our priority needs is useful, but since we likely have some funding and they have some funding and both are necessary for expensive polar bear work, we can probably only get to that through conversations. Further, they are working on the next 5 year plan for CAE funding, and that seems like a really important collaborative opportunity for the broader Beaufort Sea polar bear study needs leading to the big ITR.

The unofficial official word is that both OSA and NWRS will be directed to allocate \$600K each in 2019 to 1002 related projects.

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

--

Patrick Lemons, Ph.D.  
Chief, Marine Mammals Management  
U.S. Fish and Wildlife Service  
1011 East Tudor Road  
Anchorage, AK 99503  
Work: 907-786-3668  
Cell: 907-717-6787  
Fax: 907-786-3816  
e-mail: [patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]; Karen Clark[karen\_clark@fws.gov]; Steve Berendzen[steve\_berendzen@fws.gov]; Joanna Fox[joanna\_fox@fws.gov]; Joshua Rose[joshua\_rose@fws.gov]; John Trawicki[john\_trawicki@fws.gov]; Randy Brown[randy\_j\_brown@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-21T16:35:34-05:00  
**Importance:** Normal  
**Subject:** State ASTAR budget FY20 request  
**Received:** 2019-02-21T16:35:43-05:00  
[ASTAR FY20Budget Request 021319.pdf](#)

FYI:

Attached is the state Budget request for 2020 funds for the Arctic Slope Transportation and Resources (ASTAR) project. It includes two items of interest that I believe refer to the Arctic Refuge when referring to the "Coastal Plain," although I am waiting for a response from Faith at DNR to confirm. Not sure they could start this work this summer, but will find out what the plan is or if you have further info, please share back.

- Lake survey in the Coastal Plain (\$600.0) to collect information about water depths and fish presence, which will inform water needs for ice road and ice pad construction. Temporary ice infrastructure allows for seasonal transportation associated with construction operations, as well as resource development activities (exploration, development drilling, and oil production) in areas with limited or nonexistent gravel roads.
- Sand and gravel survey in the Coastal Plain (\$750.0). Because it is expensive to transport sand and gravel, identifying where construction-quality sand and gravel resources are located helps communities estimate costs of new infrastructure.

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Mary Colligan[mary\_colligan@fws.gov]; Drew Crane[drew\_crane@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-21T16:50:11-05:00  
**Importance:** Normal  
**Subject:** RE: Arctic Projects funded in FY18  
**Received:** 2019-02-21T16:50:20-05:00  
2018 and 2019 1002 operations plan 022119.xlsx

Here is the worksheet we plan to submit, including the tab with 2018 projects.

**From:** Colligan, Mary <mary\_colligan@fws.gov>  
**Sent:** Thursday, February 21, 2019 12:44 PM  
**To:** Drew Crane <drew\_crane@fws.gov>; Wendy Loya <wendy\_loya@fws.gov>  
**Subject:** Arctic Projects funded in FY18

Drew or Wendy - Do you have the list of the Arctic projects funded in FY18 (\$1.2M total). I assume they are the projects on the short list tab, but many of the costs are ranges so it is hard to tell what was funded at what level.

Thanks

--

Mary Colligan  
Assistant Regional Director  
Fisheries and Ecological Services  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E. Tudor Road, MS-361  
Anchorage, AK 99503  
907-786-3505  
cell: 907-223-5945



**To:** Martin, Aaron[aaron\_e\_martin@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Crane, Drew  
**Sent:** 2019-02-21T17:22:54-05:00  
**Importance:** Normal  
**Subject:** 1002 EIS invasives review  
**Received:** 2019-02-21T17:23:13-05:00

Hi Aaron,

Thank you for taking a look at the DEIS! The link to access the document is below. You will want to focus on Volume 1 in your search for how invasive species were addressed. I'm also sharing the link to our google doc to record any comments you may have. There is a place holder for Invasive species comments on page 54 (after the terrestrial environment comment section). Please follow the format of the other comments in the document (page number, paragraph, recommendation/issue that needs addressed)

Let Wendy or I know if you have any questions.

Thanks!

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)

<https://docs.google.com/document/d/1xpty5i2ijzxhezG2jq19KbWBG5VcvGrL8xJI7U86PJ0/edit#>

Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Stephen Arthur[stephen\_arthur@fws.gov]  
**From:** Johnson, Heather  
**Sent:** 2019-02-21T19:00:25-05:00  
**Importance:** Normal  
**Subject:** Re: FW: Porcupine Caribou Vulnerability Analysis by Russell and Gunn 2019  
**Received:** 2019-02-21T19:00:37-05:00

Sending to USGS for consult

[REDACTED]

On Thu, Feb 21, 2019 at 12:25 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Heather,

We would love to get an update on this work, and after March 13<sup>th</sup> when we finish our Coastal Plain Draft EIS review would be great. Either Steve Arthur or I will connect with you to schedule brown bag presentation if that sounds good? Is there anything you can share with us that might inform our comments on the Draft EIS?

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**From:** Johnson, Heather <[heatherjohnson@usgs.gov](mailto:heatherjohnson@usgs.gov)>  
**Sent:** Thursday, February 21, 2019 11:17 AM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Fwd: FW: Porcupine Caribou Vulnerability Analysis by Russell and Gunn 2019

Hi Wendy,

Sending to USGS for consult

A large rectangular area of the email body is completely redacted with black bars.A large rectangular area of the email body is completely redacted with black bars.

Sincerely, Heather Johnson

----- Forwarded message -----

**From:** **Johnson, Heather** <[heatherjohnson@usgs.gov](mailto:heatherjohnson@usgs.gov)>  
**Date:** Thu, Feb 7, 2019 at 4:48 PM  
**Subject:** Re: FW: Porcupine Caribou Vulnerability Analysis by Russell and Gunn 2019  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

0000010846

Hi Wendy,

Sending to USGS for consult

[REDACTED]

Sincerely, Heather

On Thu, Feb 7, 2019 at 4:16 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Not sure if this has crossed your desks yet.

FYI, attached 2019 report to the Canadian Government titled: Vulnerability analysis of the Porcupine Caribou Herd to potential development of the 1002 lands in the Arctic National Wildlife Refuge, Alaska

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

--

Heather Johnson, Ph.D.

Research Wildlife Biologist

USGS Alaska Science Center

4210 University Drive

Anchorage, Alaska 99508

Phone: 907.786.7155

Email: [heatherjohnson@usgs.gov](mailto:heatherjohnson@usgs.gov)

--

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Anchorage, Alaska 99508

Phone: 907.786.7155

Email: [heatherjohnson@usgs.gov](mailto:heatherjohnson@usgs.gov)

--

Heather Johnson, Ph.D.

Research Wildlife Biologist

USGS Alaska Science Center

4210 University Drive

Anchorage, Alaska 99508

Phone: 907.786.7155

Email: [heatherjohnson@usgs.gov](mailto:heatherjohnson@usgs.gov)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Nolin, Chris  
**Sent:** 2019-02-22T08:47:38-05:00  
**Importance:** Normal  
**Subject:** Fwd: FW: Arctic studies  
**Received:** 2019-02-22T08:47:48-05:00  
2018 and 2019 1002 operations plan 022119.xlsx

That sounds like a good plan - I am assuming we are dedicating the same amount in '19 as we did in '18.

----- Forwarded message -----

**From:** **Nolan, Chris** <[chris\\_nolan@fws.gov](mailto:chris_nolan@fws.gov)>  
**Date:** Fri, Feb 22, 2019 at 8:40 AM  
**Subject:** Fwd: FW: Arctic studies  
**To:** Chris Nolin <[chris\\_nolin@fws.gov](mailto:chris_nolin@fws.gov)>

Sorry, I was out yesterday. Hope this isn't too late getting this to you...

Chris Nolan

Region 5, Budget & Finance Office

Phone: (413) 253-8227

Fax: (413) 253-8354

----- Forwarded message -----

**From:** **Wendy Loya** <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Date:** Thu, Feb 21, 2019 at 1:54 PM  
**Subject:** FW: Arctic studies  
**To:** <[chris\\_nolan@fws.gov](mailto:chris_nolan@fws.gov)>  
**Cc:** John Trawicki <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>

Hi Chris,

We plan to submit the 2018 Studies update and 2019 Studies plan to you by COB Friday. I wanted to check on the format that would be most helpful in preparing for your briefing with Acting Sec Bernhardt. Last year I believe we submitted the attached table, or something similar. Our thought is to 1) add a column to the 2018 table (which includes many studies ongoing in 2019) with a status report and 2) have a separate 2019 table with research priorities and estimated budget needs.

How does that sound? If you would like to discuss, please given John Trawicki who is coordinating the data for the response, at [19077863474](tel:19077863474)

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

Begin forwarded message:

**From:** "Nolin, Chris" <[chris\\_nolin@fws.gov](mailto:chris_nolin@fws.gov)>  
**Date:** February 19, 2019 at 7:02:55 AM AKST  
**To:** Gregory Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark  
<[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>  
**Subject:** Arctic studies

Hi folks,

How much funding do you need from the '19 enacted to pay for continuation of the Arctic studies that were initially funded in the '18 spend plan? And can you provide an update on where we are on the ones underway?

This is for our spend plan approval meeting with David Bernhardt.

Thanks!

--

Chris Nolin

Budget Officer

US Fish & Wildlife Service

703-358-2343 desk

0000010850

240-305-0490 cell

U.S. Fish and Wildlife Service Headquarters

3W019

MS: BMO  
5275 Leesburg Pike

Falls Church, VA 22041-3803

--

Chris Nolin  
Budget Officer  
US Fish & Wildlife Service  
703-358-2343 desk  
240-305-0490 cell  
U.S. Fish and Wildlife Service Headquarters  
3W019

MS: BMO  
5275 Leesburg Pike

Falls Church, VA 22041-3803



**To:** Melissa Burns[melissa\_burns@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]  
**From:** Crane, Drew  
**Sent:** 2019-02-22T18:01:51-05:00  
**Importance:** Normal  
**Subject:** Word version of DEIS Comment Letter  
**Received:** 2019-02-22T18:02:08-05:00  
Copy of FWS Comments Coastal Plain Draft EIS 013019.docx

Attached.  
Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

**To:** Drew Crane[drew\_crane@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-22T18:36:33-05:00  
**Importance:** Normal  
**Subject:** Draft FWS Comments Coastal Plain Draft EIS 022219.docx  
**Received:** 2019-02-22T18:36:40-05:00  
Draft FWS Comments Coastal Plain Draft EIS 022219.docx

Please provide any further edits you would like to see in the cover memo.

I will start editing the next 3 sections for content in General comments (adding, not removing) and formatting consistency in secs 2 and 3.

Thank you!  
Wendy

**To:** Nicole Gustine[nicole\_gustine@fws.gov]  
**Cc:** Drew Crane[drew\_crane@fws.gov]; Melissa Burns[melissa\_burns@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-22T19:40:21-05:00  
**Importance:** Normal  
**Subject:** References for FWS Comments Coastal Plain Draft EIS 022219.docx  
**Received:** 2019-02-22T19:40:30-05:00  
References for FWS Comments Coastal Plain Draft EIS 022219.docx

Hi Nicole,

We have moved away from the Google Doc and into a word document. The letter will undergo ARD review from Monday 2/25- Wednesday 2/27, and the Drew Crane will finalize the letter to send on 3/1 for review by DOI. If you can send the final reference list to Drew when you are done, that would be great. I will be out of the office next week.

Thank you,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Crane, Drew  
**Sent:** 2019-02-22T19:50:44-05:00  
**Importance:** Normal  
**Subject:** Re: Draft FWS Comments Coastal Plain Draft EIS 022219.docx  
**Received:** 2019-02-22T19:51:02-05:00  
Draft FWS Comments Coastal Plain Draft EIS 022219 DC.docx

Minor changes in the cover letter for you.

Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

On Fri, Feb 22, 2019 at 2:36 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Please provide any further edits you would like to see in the cover memo.

I will start editing the next 3 sections for content in General comments (adding, not removing) and formatting consistency in secs 2 and 3.

Thank you!

Wendy

**To:** Mary Colligan[mary\_colligan@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]; Eric Taylor[eric\_taylor@fws.gov]; Sara Boario[sara\_boario@fws.gov]; Karen Murphy[karen\_a\_murphy@fws.gov]; Greg Siekaniec[greg\_siekaniec@fws.gov]; Karen Clark[karen\_clark@fws.gov]; Bud Cribley[bud\_cribley@fws.gov]  
**Cc:** Stephanie Brady[stephanie\_brady@fws.gov]; Drew Crane[drew\_crane@fws.gov]; Melissa Burns[melissa\_burns@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-02-22T20:29:15-05:00  
**Importance:** High  
**Subject:** Arctic Refuge Coastal Plain DEIS comments for 1002 ARD/RD review: Due 2/27  
**Received:** 2019-02-22T20:29:28-05:00  
[Draft FWS Comments Coastal Plain Draft EIS 022219.docx](#)

Dear 1002 Leadership team,

Attached is the comment letter developed with input from more than a dozen of our staff subject matter experts. Drew Crane, Melissa Burns and Nicole Gustine have helped with editing, and will continue to do so, so thank you for making them available. The attached draft for your consideration does not reflect the high standards that our team normally meets before providing a document for your review, but we have done the best we can in the time available.

**The timeline for your review has decreased from 5 to days to allow for review by the Assistant Secretary for Fish, Wildlife and Parks' office. Thus, we are asking that you return your comments to Drew Crane by COB Wednesday 27<sup>th</sup>.**

**Drew will lead the effort to make the recommended revisions Feb 28/Mar 1, and then work with Greg and Karen to submit the letter to Andrea Travnicsek's office for review the week of March 4-8<sup>th</sup>. I will work through their edits and any other feedback the 11-13<sup>th</sup> to meet the deadline for submission to BLM on the 13<sup>th</sup>.**

**I am out of the office Feb 25 – March 4<sup>th</sup>, so Drew, Steve B and John T are the POCs for 1002 related questions.**

Staff had 2 weeks starting immediately after the furlough to review and respond to the DEIS, while catching up on other work, which was insufficient time to allow them to understand the Reasonably Foreseeable Development Scenario and then evaluate how impacts would occur across the 4 action alternatives (B, C, D1 and D2). Nevertheless, they did a great job bringing forth recommendations and additional scientific references to help improve the document and support the process.

As you review, note that Alternative D2 reflects the recommendations for stipulations and required operating procedures (ROPS) that our team put forward at the July Alternatives workshop. I hope you will help us ensure we have provided sufficient justification that conveys how the stips and ROPS under Alt D2 best balance between all of the purposes for the Refuge, including the new oil and gas purpose. There are a significant number of technical comments, so if you have limited time, we would be grateful for your help with the big picture.

Thank you for your time and help,  
Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Mary Colligan[mary\_colligan@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]; Eric Taylor[eric\_taylor@fws.gov]; Sara Boario[sara\_boario@fws.gov]; Karen Murphy[karen\_a\_murphy@fws.gov]; Greg Siekaniec[greg\_siekaniec@fws.gov]; Karen Clark[karen\_clark@fws.gov]; Bud Cribley[bud\_cribley@fws.gov]; Stephanie Brady[stephanie\_brady@fws.gov]; Melissa Burns[melissa\_burns@fws.gov]  
**From:** Crane, Drew  
**Sent:** 2019-02-22T20:39:16-05:00  
**Importance:** Normal  
**Subject:** Re: Arctic Refuge Coastal Plain DEIS comments for 1002 ARD/RD review: Due 2/27  
**Received:** 2019-02-22T20:39:28-05:00

Hi Everyone,

Just adding one thing to Wendy's instructions. Please focus your review on the content of the comments and not on general formatting issues. We will correct all formatting issues once we have comments back from the Leadership Team .

Thank you,

Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

On Fri, Feb 22, 2019 at 4:29 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Dear 1002 Leadership team,

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Thank you for your time and help,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)



**To:** Beth Pattinson[Beth\_Pattinson@fws.gov]; Bradley Shults[bradley\_shults@fws.gov]; Charles Frost[charles\_frost@fws.gov]; Cheryl Graves[cheryl\_graves@fws.gov]; David Safine[david\_safine@fws.gov]; Debbie Groves[Debbie\_Groves@fws.gov]; Dennis Marks[Dennis\_Marks@fws.gov]; Elizabeth Labunski[Elizabeth\_Labunski@fws.gov]; Eric Taylor[Eric\_Taylor@fws.gov]; Erik Osnas[erik\_osnas@fws.gov]; Heather Wilson[Heather\_Wilson@fws.gov]; Jim A Johnson[Jim\_A\_Johnson@fws.gov]; Jordan Muir[Jordan\_Muir@fws.gov]; Julian Fischer[Julian\_Fischer@fws.gov]; Kathy Kuletz[Kathy\_Kuletz@fws.gov]; Laura Mcduffie[laura\_mcduffie@fws.gov]; Michael Swaim[michael\_swaim@fws.gov]; Paul Matusewic[paul\_matusewic@fws.gov]; Richard Lanctot[Richard\_Lanctot@fws.gov]; Robert Kaler[Robert\_Kaler@fws.gov]; Sarah Saalfeld[sarah\_saalfeld@fws.gov]; Steve Lewis[steve\_b\_lewis@fws.gov]; Tamara Zeller[Tamara\_Zeller@fws.gov]; Willard Lacy[willard\_lacy@fws.gov]  
**Cc:** Christopher Latty[christopher\_latty@fws.gov]; Steve Berendzen[Steve\_Berendzen@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]; Crane, Drew[drew\_crane@fws.gov]  
**From:** Taylor, Eric  
**Sent:** 2019-02-22T20:59:03-05:00  
**Importance:** Normal  
**Subject:** Fwd: Arctic Refuge Coastal Plain DEIS comments for 1002 ARD/RD review: Due 2/27  
**Received:** 2019-02-22T20:59:20-05:00  
Draft FWS Comments Coastal Plain Draft EIS 022219.docx

Hello Migratory Birds -

The attached letter represents the Service's comments on the 2018 Draft Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program for the Arctic National Wildlife Refuge, Alaska. Pages 36-50 address potential impacts to resident and migratory birds.

I am to provide comments to Drew Crane by 5 pm, Wednesday 27 February. I hope to have my review completed by Monday as I travel to Seattle Tuesday afternoon returning Sunday.

I know many of you have already invested many hours in this effort. Thank you. If you want to see how your comments were included in this letter, please take a look. If you find any errors, omissions, or mistakes, please send them to me as soon as possible. It is critical this letter is accurate and defensible.

Eric

----- Forwarded message -----

**From:** Wendy Loya <wendy\_loya@fws.gov>  
**Date:** Fri, Feb 22, 2019 at 4:29 PM  
**Subject:** Arctic Refuge Coastal Plain DEIS comments for 1002 ARD/RD review: Due 2/27  
**To:** Mary Colligan <mary\_colligan@fws.gov>, Socheata Lor <socheata\_lor@fws.gov>, Eric Taylor <eric\_taylor@fws.gov>, Sara Boario <sara\_boario@fws.gov>, Karen Murphy <karen\_a\_murphy@fws.gov>, Greg Siekaniec <greg\_siekaniec@fws.gov>, Karen Clark <karen\_clark@fws.gov>, Bud Cribley <bud\_cribley@fws.gov>  
**Cc:** Stephanie Brady <stephanie\_brady@fws.gov>, Drew Crane <drew\_crane@fws.gov>, Melissa Burns <melissa\_burns@fws.gov>

Dear 1002 Leadership team,

Attached is the comment letter developed with input from more than a dozen of our staff subject matter experts. Drew Crane, Melissa Burns and Nicole Gustine have helped with editing, and will continue to do so, so thank you for making them available. The attached draft for your consideration does not reflect the high standards that our team normally meets before providing a document for your review, but we have done the best we can in the time available.

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Thank you for your time and help,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Brady, Stephanie  
**Sent:** 2019-02-25T18:38:19-05:00  
**Importance:** Normal  
**Subject:** Re: Arctic Refuge Coastal Plain DEIS comments for 1002 ARD/RD review: Due 2/27  
**Received:** 2019-02-25T18:38:38-05:00

Thank you Wendy for mentioning Nicole! I appreciate that. Stephanie

[stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov) | Branch Chief, Conservation Planning and Policy |  
U.S. Fish and Wildlife Service | National Wildlife Refuge System | Alaska |  
907.306.7448

On Fri, Feb 22, 2019 at 4:29 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Dear 1002 Leadership team,

Attached is the comment letter developed with input from more than a dozen of our staff subject matter experts. Drew Crane, Melissa Burns and Nicole Gustine have helped with editing, and will continue to do so, so thank you for making them available. The attached draft for your consideration does not reflect the high standards that our team normally meets before providing a document for your review, but we have done the best we can in the time available.

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Thank you for your time and help,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Drew Crane[drew\_crane@fws.gov]; Melissa Burns[melissa\_burns@fws.gov]  
**From:** Gustine, Nicole  
**Sent:** 2019-02-26T17:46:38-05:00  
**Importance:** Normal  
**Subject:** Re: References for FWS Comments Coastal Plain Draft EIS 022219.docx  
**Received:** 2019-02-26T17:46:58-05:00  
References for FWS Comments Coastal Plain Draft EIS 02262019 (1).docx

Hi everyone,

I have attached a revised reference list. There was some formatting needs, but it should be good to go. I'd be happy to cross reference the document again if there are any changes after the RD review.

Sincerely,

Nicole Gustine, Refuge Specialist  
U.S Fish and Wildlife Service  
(907) 903-8819 - cell

*Hours: Monday Thursday 6am to 2pm (AK Time)*

***Do you have planning questions? Find your answers here!***

On Fri, Feb 22, 2019 at 5:40 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

HI Nicole,

We have moved away from the Google Doc and into a word document. The letter will undergo ARD review from Monday 2/25- Wednesday 2/27, and the Drew Crane will finalize the letter to send on 3/1 for review by DOI. If you can send the final reference list to Drew when you are done, that would be great. I will be out of the office next week.

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**To:** Karen Clark[karen\_clark@fws.gov]; Greg Siekaniec[greg\_siekaniec@fws.gov]  
**Cc:** Mary Colligan[mary\_colligan@fws.gov]; Socheata Lor[Socheata\_Lor@fws.gov]; Eric Taylor[Eric\_Taylor@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]; John Trawicki[John\_Trawicki@fws.gov]; Kenneth Stahlnecker[kenneth\_stahlnecker@fws.gov]  
**From:** Murphy, Karen  
**Sent:** 2019-02-27T13:14:47-05:00  
**Importance:** Normal  
**Subject:** Arctic Projects tables  
**Received:** 2019-02-27T13:15:09-05:00  
[FY2019 Arctic Project Proposals.pdf](#)  
[FY2018 Arctic Project Status.pdf](#)

Hi Karen and Greg,  
Please see the attached pdf documents for the final tables to send in to HQ. I've reordered the FY19 table to match the order of the FY18 table and removed the reference number column.

As always, the team can provide additional information if needed.

Thanks,  
Karen

*Karen A Murphy*  
*Science Applications*  
*907-786-3501*  
[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)



**To:** Karen Clark[karen\_clark@fws.gov]; Greg Siekaniec[greg\_siekaniec@fws.gov]  
**Cc:** Mary Colligan[mary\_colligan@fws.gov]; Socheata Lor[Socheata\_Lor@fws.gov]; Eric Taylor[Eric\_Taylor@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]; John Trawicki[John\_Trawicki@fws.gov]; Kenneth Stahlnecker[kenneth\_stahlnecker@fws.gov]  
**From:** Murphy, Karen  
**Sent:** 2019-02-27T13:57:30-05:00  
**Importance:** Normal  
**Subject:** Re: Arctic Projects tables  
**Received:** 2019-02-27T13:57:51-05:00  
[FY2019 Arctic Projects.pdf](#)

Hi everyone, Karen Clark asked for a small change to the FY2019 table. Please use this one instead.

Thanks,  
Karen

*Karen A Murphy*  
*Science Applications*  
*907-786-3501*  
[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)

On Wed, Feb 27, 2019 at 9:14 AM Murphy, Karen <[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)> wrote:

Hi Karen and Greg,  
Please see the attached pdf documents for the final tables to send in to HQ. I've reordered the FY19 table to match the order of the FY18 table and removed the reference number column.

As always, the team can provide additional information if needed.

Thanks,  
Karen

*Karen A Murphy*  
*Science Applications*  
*907-786-3501*  
[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]; Clark, Karen[karen\_clark@fws.gov]  
**Cc:** Mary Colligan[mary\_colligan@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]; Eric Taylor[eric\_taylor@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]; Karen Murphy[karen\_a\_murphy@fws.gov]; Sara Boario[Sara\_boario@fws.gov]; Melissa Burns[melissa\_burns@fws.gov]; Damberg, Doug[doug\_damberg@fws.gov]; John Trawicki[john\_trawicki@fws.gov]; Stephanie Brady[stephanie\_brady@fws.gov]; Tracy Fischbach[tracy\_fischbach@fws.gov]  
**From:** Crane, Drew  
**Sent:** 2019-03-01T21:30:40-05:00  
**Importance:** Normal  
**Subject:** Draft Comment Letter on Coastal Plain DEIS  
**Received:** 2019-03-01T21:30:54-05:00  
[DRAFT USFWS Comments Letter to BLM Coastal Plain DEIS 20180301.docx](#)

Hi Everyone,

Attached is the draft comment letter with ARD edits and comments addressed. There may be some minor edits that were missed, but this version should address the comments and suggestions that were provided.

Greg and Karen, you will see a comment on page 7 and on page 16 related to NSOs for wild and scenic rivers. At this time, it seems appropriate to leave it in based on our rough understanding of WSR regs and policy, but will leave the final decision to you

A big THANK YOU to Melissa, Tracy and Stephanie for helping pull this together over the last two days!! Wrapping this up without their assistance would not have been possible.

Let me know if you have any questions.

Thanks!

Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

**To:** Andrea Medeiros[andrea\_medeiros@fws.gov]  
**Cc:** Sara Boario[sara\_boario@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-05T14:48:08-05:00  
**Importance:** Normal  
**Subject:** Coastal Plain (1002) Research Activities for FY 2018  
**Received:** 2019-03-05T14:48:20-05:00  
[Coastal Plain FY2018 Research Projects.pdf](#)

Andrea,

Attached is the list of projects USFWS funded in FY 2018 towards improved information for future oil and gas program activities in the 1002/Coastal Plain. Some are completed and some are ongoing due to the project length. FY 2019 Research planning is in progress, and that list would be complete in September 2019 when all funds have been allocated or spent.

These should be publically shareable.

Thank you,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Clark, Karen  
**Sent:** 2019-03-05T15:34:46-05:00  
**Importance:** Normal  
**Subject:** Fwd: 1002 Coastal Plain Cover Letter and DEIS Comments  
**Received:** 2019-03-05T15:35:33-05:00  
DRAFT USFWS Comments and Cover Letter to BLM Coastal Plain DEIS 20180301(gs4).docx

Karen P. Clark  
Deputy Regional Director  
U.S. Fish & Wildlife Service- Alaska Region  
1011 E Tudor Rd, MS 374  
Anchorage, AK 99503  
[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)  
907.786.3542 office  
907.786.3493 direct  
907.786.3306 fax

----- Forwarded message -----

**From:** Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>  
**Date:** Sun, Mar 3, 2019 at 3:25 PM  
**Subject:** 1002 Coastal Plain Cover Letter and DEIS Comments  
**To:** <[margaret\\_e\\_everson@fws.gov](mailto:margaret_e_everson@fws.gov)>, <[jim\\_kurth@fws.gov](mailto:jim_kurth@fws.gov)>, Bud Cribley  
<[bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov)>  
**Cc:** Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>

Good Afternoon,

We Please find the attached document that is a combined cover letter and comments on the Draft EIS for the Arctic Refuge Coastal Plain Oil and Gas Lease. I plan to provide the cover letter with the comments attached when transmitted to BLM. They are combined here for simplicity and ease of review.

I'm available to discuss and will have Lucy put them in DTS tomorrow morning. I have not provided them beyond FWS Directors Office as I thought you would like to review prior to Assistant Secretary.

I will look forward to our conversations as we intend to provide these by 13 of March as requested by BLM.

Regards,

Greg

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Clark, Karen  
**Sent:** 2019-03-05T15:45:06-05:00  
**Importance:** Normal  
**Subject:** Fwd: 1002 Docs in DTS  
**Received:** 2019-03-05T15:45:49-05:00  
DRAFT USFWS Cover Letter to BLM Coastal Plain DEIS.docx  
DRAFT USFWS Comments to BLM Coastal Plain DEIS.docx

Karen P. Clark  
Deputy Regional Director  
U.S. Fish & Wildlife Service- Alaska Region  
1011 E Tudor Rd, MS 374  
Anchorage, AK 99503  
[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)  
907.786.3542 office  
907.786.3493 direct  
907.786.3306 fax

----- Forwarded message -----  
**From:** **Frerich, Lucille** <[lucille\\_frerich@fws.gov](mailto:lucille_frerich@fws.gov)>  
**Date:** Tue, Mar 5, 2019 at 11:37 AM  
**Subject:** 1002 Docs in DTS  
**To:** Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>

Lucille Frerich  
Executive Secretary, Regional Directors Office - Alaska Region  
U.S. Fish & Wildlife Service  
1011 E. Tudor Rd MS-381  
Anchorage, AK 99503  
907 786-3542 Fax: 907 786-3306

**To:** John Trawicki[john\_trawicki@fws.gov]; Paul Leonard[paul\_leonard@fws.gov]; Joshua Rose[joshua\_rose@fws.gov]; Stephen Arthur[stephen\_arthur@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-05T17:43:38-05:00  
**Importance:** Normal  
**Subject:** RE: [EXTERNAL] coop' agreement AWR  
**Received:** 2019-03-05T17:43:48-05:00

Hi John,

Thank you for the opportunity to provide feedback on the attached research proposal for completing a 5 year dataset of hydrology at Lake Peters. While I don't doubt that an additional 2 yrs of data would make a better hydrologic model, that model will be limited to one watershed. Since my role is more about science for the 1002 area, I would say that this project is too limited and short-term to provide information necessary to inform future implementation of the oil and gas program. I hope that through our science planning process for key resources including hydrology, we can implement a program greater than the Hulahula streamgage, and work with Industry to fund research in areas they are interested in. Another point is that the Arctic LCC has proposed a more balanced hydrologic monitoring program through TEON which had undergone peer-review, and I think it needs to be more than a grad student project. I don't know that the meteorological and stream gage data would contribute significantly to Refuge management needs, so defer to Steve A on that. It isn't a huge budget request, but imagine there are a number of management related projects that might rise above the opportunity presented by NAU.

Thank you,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Trawicki, John <john\_trawicki@fws.gov>  
**Sent:** Monday, March 4, 2019 8:16 AM  
**To:** Wendy Loya <wendy\_loya@fws.gov>; Paul Leonard <paul\_leonard@fws.gov>; Joshua Rose <Joshua\_Rose@fws.gov>; Stephen Arthur <stephen\_arthur@fws.gov>  
**Subject:** Fwd: [EXTERNAL] coop' agreement AWR

Any thoughts on this project.

Purpose: " These datasets are being used in a watershed model, currently under development, with the goal of quantifying the proportion of river flow that is sourced in the small and diminishing mountain glaciers in the Sadlerochit River catchment. This will enable us to estimate how long into the future the glaciers are capable of contributing significant meltwater. The watershed model is linked to a sediment transport model, with the goal of determining the effect of diminished flows on the delivery of sediment and attended nutrients"

It falls in the climate science world. If this is of interest it should be restructured for multiple years. Deliverables need to expand to model outputs, analysis and interpretation. Would also like to see interpretation of first 3 years of the project. Add approximately \$5k for transport lodging.

Does the refuge have the ability to support this (aircraft, pilot time, funds)?

john t

----- Forwarded message -----

From: **Darrell S Kaufman** <[Darrell.Kaufman@nau.edu](mailto:Darrell.Kaufman@nau.edu)>

Date: Fri, Mar 1, 2019 at 8:36 AM

Subject: [EXTERNAL] coop' agreement AWR

To: [john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov) <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>

Cc: Stephen Arthur <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>, [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov) <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, [joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov) <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>

Dear John:

Steve Berendzen suggested that I contact you about the possibility of establishing a cooperative agreement to continue the hydrological and meteorological monitoring that we initiated in 2015 at the Holmes Research Station, Lake Peters. I've prepared a brief proposal with background, scope of work and budget (attached).

Steve and I also discussed the possibility of deploying a non-permanent gaging station downstream of Lake Peters on the Sadlerochit River where you previously gaged the river and a nearby spring. As you know, access to this site is more difficult than for the two rivers that we have been monitoring in the headwaters of Sadlerochit River (Carnivore and Chamberlin Creeks). Re-establishing a station below the confluence with the main stem of Sadlerochit River would be important for detecting a possible regime shift since the last observations, and for quantifying surface water resources more completely. I believe that my team could deploy in-stream instruments at this site; however, a several-year commitment is needed generate a meaningful time series. The proposal doesn't include establishing new stations, but I would be happy to discuss this possibility.

Last spring, Josh and I tracked down the funding procedure for Cooperative Agreements, including the responsible administrators for both parties. We learned that it can take months for the paperwork to progress through the various stages. If FWS is interested in continuing the monitoring this year, we'll need to act quickly.

Please let me know if you would like additional information about the outcome of my group's 3-year monitoring and research project at Lake Peters, or would like to discuss the possibility of continuing the work.

Best,  
Darrell

Darrell S. Kaufman, Regents' Professor  
School of Earth & Sustainability  
Northern Arizona University  
928-523-7192  
[nau.edu/DKaufman](http://nau.edu/DKaufman)

--

John Trawicki  
Water Resources Branch Chief  
National Wildlife Refuge System, Alaska  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
Work: (907) 786-3474  
Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"  
George Bernard Shaw



**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Crane, Drew  
**Sent:** 2019-03-05T19:15:17-05:00  
**Importance:** Normal  
**Subject:** Fwd: DEIS comments  
**Received:** 2019-03-05T19:15:35-05:00  
Draft FWS Comments Coastal Plain Draft EIS 022219 KM comments.docx

FYI

Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

----- Forwarded message -----

**From:** **Murphy, Karen** <karen\_a\_murphy@fws.gov>  
**Date:** Wed, Feb 27, 2019 at 1:40 PM  
**Subject:** DEIS comments  
**To:** Drew Crane <drew\_crane@fws.gov>

Hello Drew,

I reviewed the draft comments through page 44. I have very few comments in track changes in this document. Although Wendy's email stated that the comments don't meet your normally high standards, I was extremely impressed by the depth and detail of the comments. For such a complex review, short time period, and massive documents, the team did a tremendous job.

I feel like I only have two substantive comments. The first, relates to ensuring access to the data that industry/partners collect as they monitor the impacts to resources (or establish baseline). Personally, I would like to see that as part of the general comments and I have placed some token language in that section, though I think we generally fail to make that demand as an agency.

Secondly, there are many places throughout the document where we point out that a requirement/stipulation etc.. is in place on the Kenai or NPRA. I think that strengthens those points but I have a feeling that we don't state that everywhere that it applies. I have very little real knowledge of this, but it seems like some of the rules that are in place for water and fish across the state are not necessarily talked about here. Perhaps the experts can double check to see if they highlight those things that are standard practices in NPRA or Kenai but are not being proposed in Alternatives B C.

My other comments are largely grammatical, though there is one instance where I was uncomfortable with the tone of the comment. If the document had page numbers I'd tell you where but you should just read my comments in the attached document.

Thank you so much for all the work that you and the team have put into this. I'm sure that the next iteration will be even stronger.

Best regards,

Karen

*Karen A Murphy*  
*Science Applications*  
907-786-3501  
[karen\\_a\\_murphy@fws.gov](mailto:karen_a_murphy@fws.gov)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Crane, Drew  
**Sent:** 2019-03-05T19:15:31-05:00  
**Importance:** Normal  
**Subject:** Fwd: I am sorry...  
**Received:** 2019-03-05T19:15:49-05:00  
Draft FWS Comments Coastal Plain Draft EIS 022219 MAC (1).docx

FYI

Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

----- Forwarded message -----

**From:** Colligan, Mary <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>  
**Date:** Wed, Feb 27, 2019 at 12:49 PM  
**Subject:** I am sorry...  
**To:** Drew Crane <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>

Attached are my comments on the comments on the DEIS

--

Mary Colligan  
Assistant Regional Director  
Fisheries and Ecological Services  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E. Tudor Road, MS-361  
Anchorage, AK 99503  
907-786-3505  
cell: 907-223-5945

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Crane, Drew  
**Sent:** 2019-03-05T19:16:01-05:00  
**Importance:** Normal  
**Subject:** Fwd: Arctic Refuge Coastal Plain DEIS comments for 1002 ARD/RD review: Due 2/27  
**Received:** 2019-03-05T19:16:19-05:00  
Draft FWS Comments Coastal Plain Draft EIS 022219\_ejt.docx

FYI

Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

----- Forwarded message -----

From: **Taylor, Eric** <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>  
Date: Wed, Feb 27, 2019 at 7:55 PM  
Subject: Re: Arctic Refuge Coastal Plain DEIS comments for 1002 ARD/RD review: Due 2/27  
To: Crane, Drew <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)>

Hi Drew

Sorry I am three hours late in my review. Please note I only read the memo and migratory/resident bird section. Please let me know if you need any other reviews and sorry for the late submission.

Eric

Eric J. Taylor, Supervisory Wildlife Biologist  
Chief, Division of Migratory Bird Management  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road, MS 201  
Anchorage, Alaska 99503-6199  
907.786.3446 (office)  
907.903.7210 (cell)  
[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)

On Fri, Feb 22, 2019 at 4:39 PM Crane, Drew <[drew\\_crane@fws.gov](mailto:drew_crane@fws.gov)> wrote:

Hi Everyone,

Just adding one thing to Wendy's instructions. Please focus your review on the content of the comments and not on general formatting issues. We will correct all formatting issues once we have comments back from the Leadership Team .

Thank you,

0000010879

Drew Crane  
Regional Endangered Species Coordinator  
Alaska Region  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
907-786-3323

On Fri, Feb 22, 2019 at 4:29 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Dear 1002 Leadership team,

Attached is the comment letter developed with input from more than a dozen of our staff subject matter experts. Drew Crane, Melissa Burns and Nicole Gustine have helped with editing, and will continue to do so, so thank you for making them available. The attached draft for your consideration does not reflect the high standards that our team normally meets before providing a document for your review, but we have done the best we can in the time available.

**The timeline for your review has decreased from 5 to days to allow for review by the Assistant Secretary for Fish, Wildlife and Parks' office. Thus, we are asking that you return your comments to Drew Crane by COB Wednesday 27<sup>th</sup>.**

**Drew will lead the effort to make the recommended revisions Feb 28/Mar 1, and then work with Greg and Karen to submit the letter to Andrea Travnicek's office for review the week of March 4-8<sup>th</sup>. I will work through their edits and any other feedback the 11-13<sup>th</sup> to meet the deadline for submission to BLM on the 13<sup>th</sup>.**

**I am out of the office Feb 25 – March 4<sup>th</sup>, so Drew, Steve B and John T are the POCs for 1002 related questions.**

Staff had 2 weeks starting immediately after the furlough to review and respond to the DEIS, while catching up on other work, which was insufficient time to allow them to understand the Reasonably Foreseeable Development Scenario and then evaluate how impacts would occur across the 4 action alternatives (B, C, D1 and D2). Nevertheless, they did a great job bringing forth recommendations and additional scientific references to help improve the document and support the process.

As you review, note that Alternative D2 reflects the recommendations for stipulations and required operating procedures (ROPS) that our team put forward at the July Alternatives workshop. I hope you will help us ensure we have provided sufficient justification that conveys how the stips and ROPs under Alt D2 best balance between all of the purposes for the Refuge, including the new oil and gas purpose. There are a significant number of technical comments, so if you have limited time, we would be grateful for your help with the big picture.

Thank you for your time and help,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

**To:** Marino, Eugene[eugene\_marino@fws.gov]  
**Cc:** Debbie Steen[debbie\_steen@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]; Socheata Lor[socheata\_lor@fws.gov]; Kenneth Stahlnecker[kenneth\_stahlnecker@fws.gov]; Doug Damberg[doug\_damberg@fws.gov]; Steve Berendzen[steve\_berendzen@fws.gov]  
**From:** Decleva, Edward  
**Sent:** 2019-03-06T13:04:01-05:00  
**Importance:** Normal  
**Subject:** Arctic Plain Oil & Gas Leasing, Arctic NWR, cultural resources related responsibilities between BLM and USFWS  
**Received:** 2019-03-06T13:04:21-05:00  
[Arctic CP MOU.docx](#)

Hi Eugene,

Partly because of the magnitude of Arctic Plain Oil & Gas to the refuge system, and partly because of my planned retirement this coming September, I have been asked to keep you informed and involved as I work with BLM to establish cultural resources related responsibilities.

I am also to ensure that you are engaged as a Section 106 PA is being developed for Arctic Plain Oil & Gas. (I've seen your name on Google Calendar invites from BLM on the PA, so I don't think I need to explain further here).

You know that Debbie Steen is my supervisor. Wendy Loya is the primary USFWS Regional Office point of contact on Arctic Plain Oil & Gas. Socheata Lor is the acting regional NWRS Chief. Ken Stahlnecker is the acting regional NWRS Deputy Chief. Doug Damberg is the Refuge Supervisor. Steve Berendzen is the Arctic Refuge Manager.

I would be happy to schedule a teleconference with you to provide a more thorough briefing on the subject.

Thank you,  
Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399

----- Forwarded message -----

**From:** Decleva, Edward <[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)>  
**Date:** Wed, Mar 6, 2019 at 8:44 AM  
**Subject:** For our meeting tomorrow  
**To:** Joseph Keeney <[jkeeney@blm.gov](mailto:jkeeney@blm.gov)>  
**Cc:** Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>, Miriam (Nicole) Hayes <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>, Robert (Bob) King <[r2king@blm.gov](mailto:r2king@blm.gov)>

Hi Joe,

I spent a few hours yesterday and today sketching out a very rough outline (attached) on what I think we want to address tomorrow.

0000010882

Please note that it is intended only to help us develop something for our respective leaders.

It doesn't have to be a MOU device. I only roughed it out that way as a starting point. Your State Director and my Regional Director may prefer a different device.

It was a lot to wrap my head around. So maybe I went too far, or maybe I didn't go far enough, All I can tell you is that I tried to capture the essence of the roles, responsibilities, and procedures that I have discussed with my Regional Director. That doesn't mean we'll see eye to eye right off the bat. This is simply the first attempt to capture it in a document.

This is shared with courtesy copied individuals in case they want to provide any comments to us prior to our meeting. With that in mind, I separated key topics by page breaks to provide space for anyone to insert comments or additional text. Otherwise, you and I will share another more developed version for review.

Looking forward to talking with you tomorrow.

Best regards,  
Ed

Edward J. DeCleva  
Regional Historic Preservation Officer  
U.S. Fish and Wildlife Service, Alaska Region  
1011 E Tudor Rd, MS-235  
Anchorage, AK 99503

[edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)  
907-786-3399



**To:** Drew Crane[drew\_crane@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-06T15:08:02-05:00  
**Importance:** Normal  
**Subject:** FW: 1002 Docs in DTS  
**Received:** 2019-03-06T15:08:13-05:00  
DRAFT USFWS Cover Letter to BLM Coastal Plain DEIS.docx  
DRAFT USFWS Comments to BLM Coastal Plain DEIS.docx

Thanks for your help with these! These are current versions, not ready for distribution to SMEs until after HQ recommendations.

Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Clark, Karen <karen\_clark@fws.gov>  
**Sent:** Tuesday, March 5, 2019 11:45 AM  
**To:** Wendy Loya <wendy\_loya@fws.gov>  
**Subject:** Fwd: 1002 Docs in DTS

Karen P. Clark  
Deputy Regional Director  
U.S. Fish & Wildlife Service- Alaska Region  
1011 E Tudor Rd, MS 374  
Anchorage, AK 99503  
[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)  
907.786.3542 office  
907.786.3493 direct  
907.786.3306 fax

----- Forwarded message -----

**From:** Frerich, Lucille <lucille\_frerich@fws.gov>  
**Date:** Tue, Mar 5, 2019 at 11:37 AM  
**Subject:** 1002 Docs in DTS  
**To:** Karen Clark <karen\_clark@fws.gov>

Lucille Frerich  
Executive Secretary, Regional Directors Office - Alaska Region  
U.S. Fish & Wildlife Service  
1011 E. Tudor Rd MS-381  
Anchorage, AK 99503  
907 786-3542 Fax: 907 786-3306

**To:** Christian Zimmerman[czimmerman@usgs.gov]; John Pearce[jpearce@usgs.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-06T15:42:18-05:00  
**Importance:** Normal  
**Subject:** SSP priority confirmation for 2019 projects  
**Received:** 2019-03-06T15:42:21-05:00

John and Chris,

Below is my response to Mark Wilmer regarding our SSP requested projects for Koch and von Biela for your information, as it includes the near-term management needs for that research. Wanted to keep you in the loop as our POCs for this.

Thank you,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

---

**From:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Sent:** Wednesday, March 6, 2019 11:40 AM  
**To:** 'Wimer, Mark' <[mwimer@usgs.gov](mailto:mwimer@usgs.gov)>; 'Charla Sterne' <[charla\\_sterne@fws.gov](mailto:charla_sterne@fws.gov)>  
**Cc:** Joseph Bunnell <[jbunnell@usgs.gov](mailto:jbunnell@usgs.gov)>; Steven Hilburger <[shilburger@usgs.gov](mailto:shilburger@usgs.gov)>  
**Subject:** RE: Science Support Partnership (SSP) & Quick Response Program (QRP) FY2019 Announcement

Hi Mark,

I do confirm agreement that these two studies are a priority request for USGS science in support of FWS/BLM information needs related to the DOI priority for implementing an oil and gas program in the Arctic National Wildlife Refuge. Both of these projects should contribute information needed in the early stages of an oil and gas program (next 1-3 years), including informing protections for groundwater and aufeis (Koch) and fish winter habitat (von Biela) that could be affected by next winter's proposed seismic exploration, including water withdrawals, as well as how BLM will implement any leasing restrictions and/or required operating procedures to protect water resources and fish & wildlife habitat, which are purposes for the Arctic Refuge under ANILCA. I would be happy to discuss further if a greater understanding of the purpose and need would help you in your decision-making.

Thank you for your help,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska

907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Wimer, Mark <[mwimer@usgs.gov](mailto:mwimer@usgs.gov)>  
**Sent:** Wednesday, March 6, 2019 9:05 AM  
**To:** Charla Sterne <[charla\\_sterne@fws.gov](mailto:charla_sterne@fws.gov)>; Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Cc:** Joseph Bunnell <[jbunnell@usgs.gov](mailto:jbunnell@usgs.gov)>; Steven Hilburger <[shilburger@usgs.gov](mailto:shilburger@usgs.gov)>  
**Subject:** Re: Science Support Partnership (SSP) & Quick Response Program (QRP) FY2019 Announcement

Hi Charla and Wendy,

[illegible]

Mark

Mark Wimer  
Ecosystems Mission Area - Wildlife Program (on Detail Dec-Feb)  
 U.S. Geological Survey, 12201 Sunrise Valley Dr., MS 300, Reston, VA 20192  
[mwimer@usgs.gov](mailto:mwimer@usgs.gov) / cell/text: 240-755-1469 / desk: 703-648-4098

[March 2019+: Patuxent Wildlife Research Center, Laurel, MD]

On Tue, Mar 5, 2019 at 4:12 PM Zimmerman, Christian <[czimmerman@usgs.gov](mailto:czimmerman@usgs.gov)> wrote:  
Mark-

Sending to USGS for consult

[REDACTED]

[REDACTED]

[REDACTED]

Sending to USGS for consult

[REDACTED]  
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[REDACTED]

Thank you,

Chris

**Christian E. Zimmerman**  
Center Director  
Acting Regional Aviation Manager  
**USGS Alaska Science Center**  
4210 University Dr.  
Anchorage, AK 99508  
(907)786-7071  
[czimmerman@usgs.gov](mailto:czimmerman@usgs.gov)

On Tue, Feb 26, 2019 at 1:58 PM Wimer, Mark <[mwimer@usgs.gov](mailto:mwimer@usgs.gov)> wrote:

Sending to USGS for consult

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Sending to USGS for consult

[REDACTED]

[REDACTED]

[REDACTED]

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Sending to USGS for consult [redacted]

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[redacted]  
[redacted]



**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Charla Sterne[charla\_sterne@fws.gov]; Joseph Bunnell[jbunnell@usgs.gov]; Steven Hilburger[shilburger@usgs.gov]  
**From:** Wimer, Mark  
**Sent:** 2019-03-06T17:24:59-05:00  
**Importance:** Normal  
**Subject:** Re: Science Support Partnership (SSP) & Quick Response Program (QRP) FY2019 Announcement  
**Received:** 2019-03-06T17:25:19-05:00

Excellent, and thank you, this will be sufficient for us to proceed.  
Mark

---

Mark Wimer

*Ecosystems Mission Area - Wildlife Program (on Detail Dec-Feb)*

U.S. Geological Survey, 12201 Sunrise Valley Dr., MS 300, Reston, VA 20192  
[mwimer@usgs.gov](mailto:mwimer@usgs.gov) / cell/text: 240-755-1469 / desk: 703-648-4098

[March 2019+: Patuxent Wildlife Research Center, Laurel, MD]

---

On Wed, Mar 6, 2019 at 3:40 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Mark,

I do confirm agreement that these two studies are a priority request for USGS science in support of FWS/BLM information needs related to the DOI priority for implementing an oil and gas program in the Arctic National Wildlife Refuge. Both of these projects should contribute information needed in the early stages of an oil and gas program (next 1-3 years), including informing protections for groundwater and aufeis (Koch) and fish winter habitat (von Biela) that could be affected by next winter's proposed seismic exploration, including water withdrawals, as well as how BLM will implement any leasing restrictions and/or required operating procedures to protect water resources and fish & wildlife habitat, which are purposes for the Arctic Refuge under ANILCA. I would be happy to discuss further if a greater understanding of the purpose and need would help you in your decision-making.

Thank you for your help,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**From:** Wimer, Mark <[mwimer@usgs.gov](mailto:mwimer@usgs.gov)>  
**Sent:** Wednesday, March 6, 2019 9:05 AM  
**To:** Charla Sterne <[charla\\_sterne@fws.gov](mailto:charla_sterne@fws.gov)>; Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Cc:** Joseph Bunnell <[jbunnell@usgs.gov](mailto:jbunnell@usgs.gov)>; Steven Hilburger <[shilburger@usgs.gov](mailto:shilburger@usgs.gov)>  
**Subject:** Re: Science Support Partnership (SSP) & Quick Response Program (QRP) FY2019 Announcement

Hi Charla and Wendy,

Sending to USGS for consult  
[Redacted]

[Redacted]

[Redacted]

Mark

---

Mark Wimer

*Ecosystems Mission Area - Wildlife Program (on Detail Dec-Feb)*

U.S. Geological Survey, 12201 Sunrise Valley Dr., MS 300, Reston, VA 20192

[mwimer@usgs.gov](mailto:mwimer@usgs.gov) / cell/text: 240-755-1469 / desk: 703-648-4098

[March 2019+: Patuxent Wildlife Research Center, Laurel, MD]

---

On Tue, Mar 5, 2019 at 4:12 PM Zimmerman, Christian <[czimmerman@usgs.gov](mailto:czimmerman@usgs.gov)> wrote:

Mark-

Sending to USGS for consult

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Sending to USGS for consult

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\_\_\_\_\_

Thank you,

0000010895

Chris

**Christian E. Zimmerman**

Center Director

Acting Regional Aviation Manager

**USGS Alaska Science Center**

4210 University Dr.

Anchorage, AK 99508

(907)786-7071

[czimmerman@usgs.gov](mailto:czimmerman@usgs.gov)

On Tue, Feb 26, 2019 at 1:58 PM Wimer, Mark <[mwimer@usgs.gov](mailto:mwimer@usgs.gov)> wrote:

Sending to USGS for consult  
[Redacted]

[Redacted]  
[Redacted]  
[Redacted]  
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Sending to USGS for consult  
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Sending to USGS for consult

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[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**To:** Trawicki, John[john\_trawicki@fws.gov]  
**Cc:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Brumbaugh, Robert  
**Sent:** 2019-03-07T19:08:59-05:00  
**Importance:** Normal  
**Subject:** Re: [EXTERNAL] From Greenwire -- OIL AND GAS: Alaska regulators order BP to plug, abandon 14 wells  
**Received:** 2019-03-07T19:09:30-05:00

Thanks John, I do recall us having this conversation. This is the scenario where BP had completed their surface casing in the permafrost zone. As I recall these wells are at least 30 years old and have seen some movement in the permafrost which has move the surface casing string, and either creating a leak or the potential to leak. The State of Alaska and the BLM have updated their regulations and do not allow for surface casing to be completed in the permafrost zone.

On Thu, Mar 7, 2019 at 12:32 PM Trawicki, John <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)> wrote:

Rob-

This article is similar to the article in ADN, but was what we were discussing on Tuesday.

john t

----- Forwarded message -----

**From:** john\_trawicki <[email\\_this@eenews.net](mailto:email_this@eenews.net)>  
**Date:** Thu, Mar 7, 2019 at 10:40 AM  
**Subject:** [EXTERNAL] From Greenwire -- OIL AND GAS: Alaska regulators order BP to plug, abandon 14 wells  
**To:** <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>

**This Greenwire story was sent to you by:** [john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)

AN E&E NEWS PUBLICATION

## OIL AND GAS

### Alaska regulators order BP to plug, abandon 14 wells

*Published: Thursday, March 7, 2019*

State oil and gas regulators have ordered BP PLC to plug and abandon 14 wells in northern



Alaska that were identified as at risk of failure.

The state Oil and Gas Conservation Commission has also ordered BP to gather additional information about wells at Prudhoe Bay after multiple wells have failed, causing leaks, Alaska's Energy Desk reported Tuesday.

State and BP officials linked an April 2017 well accident that caused a dayslong leak to thawing permafrost and the well's design. The company then identified and shut in 14 wells that shared a design, indicating they were at risk.

An accident occurred last December at one of the 14 wells, leading to another investigation.

In the order last week, the commission said BP has not proven that thawing permafrost will not cause more accidents at other wells with a common design, which accounts for most of the 1,800 wells at Prudhoe Bay.

"That's why we're ordering BP to gather additional data on those wells so we can gain an understanding of whether or not there is a risk associated with those wells also," said Cathy Foerster, a commission member. "We haven't had anything to cause us to believe that they do have a risk, but we just want to make sure they don't."

The company is working with the state to comply with the order, and it remains committed to operating in a "safe, reliable and compliant manner," BP spokeswoman Megan Baldino said.

BP is monitoring the 14 wells in real time, and their flow lines and well houses have been removed to prevent future accidents, the company said. — *Associated Press*

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### **ABOUT GREENWIRE – THE LEADER IN ENERGY AND ENVIRONMENT NEWS**

Greenwire is written and produced by the staff of E&E News. The one-stop source for those who need to stay on top of all of today's major energy and environmental action with an average of more than 20 stories a day, Greenwire covers the complete spectrum, from electricity industry restructuring to Clean Air Act litigation to public lands management. Greenwire publishes daily at 1 p.m.

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Phone: 202-628-6500 Fax: 202-737-5299  
[www.eenews.net](http://www.eenews.net)

--

John Trawicki  
Water Resources Branch Chief  
National Wildlife Refuge System, Alaska  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
Work: (907) 786-3474  
Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"  
George Bernard Shaw

--

Rob Brumbaugh  
BLM-Alaska Oil and Gas Section Chief  
Division of Resources  
Bureau of Land Management  
222 W 7th Ave., Ste 13  
Anchorage, AK 99513  
907-271-4429

**To:** Socheata Lor[Socheata\_Lor@fws.gov]; Mary Colligan[mary\_colligan@fws.gov]; Eric Taylor[eric\_taylor@fws.gov]; Wendy Loya[wendy\_loya@fws.gov]; Kenneth Stahlnecker[kenneth\_stahlnecker@fws.gov]  
**From:** Trawicki, John  
**Sent:** 2019-03-07T20:07:19-05:00  
**Importance:** Normal  
**Subject:** Coastal Plain 2018 Project Status and 2019 Projects  
**Received:** 2019-03-07T20:08:00-05:00  
[FY2018 Arctic Project Status.pdf](#)  
[FY2019 Arctic Projects.pdf](#)

The attachments documents highlight 2018 project status and projects for 2019.

--

John Trawicki  
Water Resources Branch Chief  
National Wildlife Refuge System, Alaska  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
Work: (907) 786-3474  
Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"  
George Bernard Shaw

**To:** Karen Clark[karen\_clark@fws.gov]; mary\_colligan@fws.gov[mary\_colligan@fws.gov]; wendy\_loya@fws.gov[wendy\_loya@fws.gov]; steve\_berendzen@fws.gov[steve\_berendzen@fws.gov]  
**From:** Greg Siekaniec  
**Sent:** 2019-03-07T22:44:48-05:00  
**Importance:** Normal  
**Subject:** Fwd: [EXTERNAL] Arctic Refuge scientists' letter on DEIS  
**Received:** 2019-03-07T22:44:53-05:00  
[ATT00001.htm](#)  
[Arctic NWR leasing science letter 2019 03 07.pdf](#)

FYI - a lot of familiar names speaking up on behalf of Arctic NWR.  
Greg

Sent from my iPhone

Begin forwarded message:

**From:** "Senner, Stanley" <[ssenner@audubon.org](mailto:ssenner@audubon.org)>  
**Date:** March 7, 2019 at 6:21:52 PM AKST  
**To:** Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>  
**Subject:** [EXTERNAL] Arctic Refuge scientists' letter on DEIS

Greg,

The attached has been submitted to BLM as a public comment on the Arctic Refuge Coastal Plain Leasing DEIS.

This copy is for your information.

Best wishes to you,

Stan

—  
**Stan Senner**  
Vice President, Bird Conservation  
406.926.2811

**National Audubon Society**  
700 SW Higgins Avenue, Suite 104  
Missoula, Montana 59803  
[www.audubon.org](http://www.audubon.org)

**To:** Drew Crane[Drew\_crane@fws.gov]; John Trawicki[john\_trawicki@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-08T12:51:50-05:00  
**Importance:** Normal  
**Subject:** FW: [EXTERNAL] Arctic Refuge scientists' letter on DEIS  
**Received:** 2019-03-08T12:52:04-05:00  
Arctic NWR leasing science letter 2019 03 07.pdf

FYI as relates to topics in your programs.

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

---

**From:** Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>  
**Sent:** Thursday, March 7, 2019 6:45 PM  
**To:** Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>; [mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov); [wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov); [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)  
**Subject:** Fwd: [EXTERNAL] Arctic Refuge scientists' letter on DEIS

FYI - a lot of familiar names speaking up on behalf of Arctic NWR.

Greg

Sent from my iPhone  
Begin forwarded message:

**From:** "Senner, Stanley" <[ssenner@audubon.org](mailto:ssenner@audubon.org)>  
**Date:** March 7, 2019 at 6:21:52 PM AKST  
**To:** Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>  
**Subject:** [EXTERNAL] Arctic Refuge scientists' letter on DEIS

Greg,

The attached has been submitted to BLM as a public comment on the Arctic Refuge Coastal Plain Leasing DEIS.

This copy is for your information.

Best wishes to you,

Stan

—

**Stan Senner**

Vice President, Bird Conservation  
406.926.2811

**National Audubon Society**

700 SW Higgins Avenue, Suite 104  
Missoula, Montana 59803  
[www.audubon.org](http://www.audubon.org)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Siekaniec, Greg  
**Sent:** 2019-03-11T13:53:27-04:00  
**Importance:** Normal  
**Subject:** Draft EIS comments  
**Received:** 2019-03-11T13:54:16-04:00  
DRAFT USFWS Comments and Cover Letter to BLM Coastal Plain DEIS 20180301(gs4).docx

After all the iterations this is what Andrea is looking at and has a couple of questions.  
please join me in my office at 1:45 today.

thank you,

greg

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]  
**Cc:** Drew Crane[Drew\_crane@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-12T01:56:02-04:00  
**Importance:** Normal  
**Subject:** Revised comment letter addressing Andrea's questions/recommendations  
**Received:** 2019-03-12T01:56:10-04:00  
DRAFT USFWS Comments to BLM Coastal Plain DEIS revised 031119.docx

Hi Greg,

Attached is a word version of our comment letter with the changes I have implemented to address Andrea's questions or concerns. The changes can be viewed by selecting the Review tab and ensuring that All Markup is checked to show additions and deletions. The areas I addressed were:

1. Changing language about FWS as a co-lead;
2. Setbacks for rivers, including Wild and Scenic Rivers;
3. Ensuring that our comments did not characterize the coastal plain as Designated Wilderness, while retaining acknowledgement that wilderness characteristics are an important human value for the area as well as important habitat characteristic;
4. Clarifying why we requested a No Surface Occupancy buffer along the northern edge of the Designated Wilderness boundary, and that the distance was based on existing information on in-air sound travel for another development on the northslope, and that that value could be refined with further analysis;
5. Removing reference to prohibiting temporary infrastructure in river setbacks;
6. Clarifying that our request to include more information on moose was in direct response to concerns raised by subsistence hunters in Kaktovik and that we can provide the information we recommend including;
7. We recommended the DEIS refer to a recently produced study by scientists on the Porcupine Caribou Technical Committee, which will ensure the DEIS is based on the best available science and honors the input from our Canadian partners by treaty in managing the Porcupine Caribou Herd. Throughout the document, our subject matter experts have tried to highlight studies that the DEIS team may find useful in establishing the baseline and best quantifying impacts. These include studies from the 1980s that document caribou response to development in areas previously undisturbed, as is the case for the Coastal Plain;
8. Our comments regarding ROP 16 had language about exploratory drilling being prohibited in both fish and non-fish bearing waters. We would like to include this recommendation as a means of ensuring that all the purposes of the Refuge are achieved, and I have added language that explains the justification for protection of river corridors which typically contain higher diversity gradients than the surrounding landscape;
9. The snow depth and density stipulations were revised to refer to the Alaska DNR protocols and remove some redundant points
10. I have clarified that for ROP 28 Ecological Mapping, the number of years of studies should be determined by the species/habitat experts and not be a standard value. As I mentioned, these products are typically requested by industry and completed by ecological experts at local consulting companies, and the standards are very high. This recommendation acknowledges how this ROP has refined since originally drafted for NPRA; and
11. I have added language to indicate that while water withdrawal guidelines are established by Alaska DNR, we are specifically asking that springs be included in ROP 8 and that due to the limited surface water availability, water use from rivers may be considered if proven not to



have a detrimental impact on Refuge purposes.

I believe I captured her full list of questions in my notes, and hope I have made changes that make this a better, stronger set of comments to aid BLM in completing a well-documented Final EIS. I am available all day Tuesday to work through these as needed.

Thank you!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**Cc:** Drew Crane[Drew\_crane@fws.gov]  
**From:** Greg Siekaniec  
**Sent:** 2019-03-12T10:18:11-04:00  
**Importance:** Normal  
**Subject:** Re: Revised comment letter addressing Andrea's questions/recommendations  
**Received:** 2019-03-12T10:18:20-04:00

Good Morning Wendy,  
Thank you for your effort to make adjustments.

We have a call scheduled for 2:00 pm with Andrea.

I will look these over this morning and send for review.

See you later this morning,

Greg

Sent from my iPhone

On Mar 11, 2019, at 9:56 PM, Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Greg,

Attached is a word version of our comment letter with the changes I have implemented to address Andrea's questions or concerns. The changes can be viewed by selecting the Review tab and ensuring that All Markup is checked to show additions and deletions.

The areas I addressed were:

1. Changing language about FWS as a co-lead;
2. Setbacks for rivers, including Wild and Scenic Rivers;
3. Ensuring that our comments did not characterize the coastal plain as Designated Wilderness, while retaining acknowledgement that wilderness characteristics are an important human value for the area as well as important habitat characteristic;
4. Clarifying why we requested a No Surface Occupancy buffer along the northern edge of the Designated Wilderness boundary, and that the distance was based on existing information on in-air sound travel for another development on the northslope, and that that value could be refined with further analysis;
5. Removing reference to prohibiting temporary infrastructure in river setbacks;
6. Clarifying that our request to include more information on moose was in direct response to concerns raised by subsistence hunters in Kaktovik and that we can provide the information we recommend including;
7. We recommended the DEIS refer to a recently produced study by scientists on the Porcupine Caribou Technical Committee, which will ensure the DEIS is based on the best available science and honors the input from our Canadian partners by treaty in managing the Porcupine Caribou Herd. Throughout the document, our subject matter experts have tried to highlight studies that the DEIS team

may find useful in establishing the baseline and best quantifying impacts. These include studies from the 1980s that document caribou response to development in areas previously undisturbed, as is the case for the Coastal Plain;

8. Our comments regarding ROP 16 had language about exploratory drilling being prohibited in both fish and non-fish bearing waters. We would like to include this recommendation as a means of ensuring that all the purposes of the Refuge are achieved, and I have added language that explains the justification for protection of river corridors which typically contain higher diversity gradients than the surrounding landscape;
9. The snow depth and density stipulations were revised to refer to the Alaska DNR protocols and remove some redundant points
10. I have clarified that for ROP 28 Ecological Mapping, the number of years of studies should be determined by the species/habitat experts and not be a standard value. As I mentioned, these products are typically requested by industry and completed by ecological experts at local consulting companies, and the standards are very high. This recommendation acknowledges how this ROP has refined since originally drafted for NPRA; and
11. I have added language to indicate that while water withdrawal guidelines are established by Alaska DNR, we are specifically asking that springs be included in ROP 8 and that due to the limited surface water availability, water use from rivers may be considered if proven not to have a detrimental impact on Refuge purposes.

I believe I captured her full list of questions in my notes, and hope I have made changes that make this a better, stronger set of comments to aid BLM in completing a well-documented Final EIS. I am available all day Tuesday to work through these as needed.

Thank you!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

<DRAFT\_USFWS Comments to BLM\_Coastal Plain DEIS revised  
031119.docx>

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** Siekaniec, Greg  
**Sent:** 2019-03-12T12:46:38-04:00  
**Importance:** Normal  
**Subject:** DEIS Arctic  
**Received:** 2019-03-12T12:47:22-04:00  
DRAFT USFWS Comments to BLM Coastal Plain DEIS revised 031219 (2).docx

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-12T14:49:38-04:00  
**Importance:** Normal  
**Subject:** Thoughts: PEER - ARCTIC REFUGE DRILLING SCIENTIFIC CONCERNS SUPPRESSED  
**Received:** 2019-03-12T14:49:45-04:00

Hi Greg,

With regards to the [PEER story on the Rapid Response Resource Assessments](#), a few thoughts:

1. The reports were submitted to BLM during scoping, and while they do identify information needs for implementing an oil and gas program, not all information is needed to finalize the Arctic Refuge Coastal Plain Oil and Gas Program Leasing EIS. Most of this information will be needed for specific activity permitting, in future step-down NEPA analysis. With regards to being included in any FOIA response, the Service included the assessments in the information we submitted to DOI for release, although I am unsure of the status of that process as it moved outside the region.
2. The Service has tried to prioritize the timing of when the information is needed in the oil development process (seismic, exploratory drilling, production, reclamation) and its importance (e.g. regulatory/permitting, subsistence use, treaty obligations), and moved forward projects in 2018 and 2019 that provide information needed in the next 1-3 years. We will take time in 2019 to plan out 3-5 years with agency, industry, community and academic partners, as all of these partners bring critical expertise on what information is needed when.
3. To address the three specific points the article makes:
  - ☐ It is not true there is no baseline data for natural resources that may be impacted. For example, FWS and its partners have more than 40 years of data on caribou use of the area, there are data on polar bear dens that were sufficient to identify critical habitat, we have avian presence/abundance surveys, and subsistence use has been documented through the recent Pt Thomson Final EIS. Continuing to collect pre-development data on species and habitat use is important, and we will expand and fine tune our research to have good information.
  - ☐ There has not been a complete coastal plain vegetation survey in 25 years, that is true. However, we understand that while the vegetation has begun to change, such as increasing shrubs, over the last several decades, the interaction between soils, permafrost and plants does not appear to have dramatically changed based off follow up surveys conducted in recent years. In FY 2018, we funded updated vegetation, wetlands and hydrologic mapping that should be completed by 2020 which would be in advance of any exploratory drilling or development.
  - ☐ Our Oil Spill and Contaminants Coordinator is out of the office today to represent the FWS knowledge on the third concern that there is not an oil spill or contaminants plan. The correct plans will be in place per state and federal regulations once we have a proposed action that could result in an oil spill or contaminants release. I am aware that an Oil Discharge Prevention and Contingency plan is required by the Alaska Dept of Environmental Conservation under 18 AAC 75.425 before any development. Thus, the response actions, equipment, procedures and other required elements needed in the case of a spill will be identified by an operator when there is a proposed exploration or development activity. In the case of Pt.

Thomson, per their Final EIS in 2012, it states that the operator retains an Oil Spill Removal Organization and funds an Oil Spill Contingency Agreement.

4. The Draft EIS was intended to use the best available science, and the FWS has worked with BLM and their contractors to access information for the resources which we have management responsibility for under ANILCA, PLO 2214, the National Wildlife Refuge System Administration Act as amended by the National Wildlife Refuge System Improvement Act, Endangered Species Act, Marine Mammal Protection Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, Fish and Wildlife Coordination Act, and the Wild and Scenic Rivers Act.

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

-----Original Message-----

From: Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>

Sent: Tuesday, March 12, 2019 8:48 AM

To: [wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)

Subject: PEER - ARCTIC REFUGE DRILLING SCIENTIFIC CONCERNS SUPPRESSED

<https://www.peer.org/news/press-releases/arctic-refuge-drilling-scientific-concerns-suppressed.html>

Sent from my iPhone

**To:** Karen Clark[karen\_clark@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-12T15:26:34-04:00  
**Importance:** Normal  
**Subject:** FW: Revised comment letter addressing Andrea's questions/recommendations  
**Received:** 2019-03-12T15:26:46-04:00  
DRAFT USFWS Comments to BLM Coastal Plain DEIS revised 031219 (3).docx

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**From:** Wendy Loya <wendy\_loya@fws.gov>  
**Sent:** Tuesday, March 12, 2019 9:51 AM  
**To:** Greg Siekaniec <greg\_siekaniec@fws.gov>  
**Subject:** Revised comment letter addressing Andrea's questions/recommendations

Hi Greg,

Attached is a revised draft of the letter that I believe addresses Andrea's helpful questions and concerns. The points we addressed include:

1. Changing language about FWS as a co-lead;
2. Describing rationale setback distances along rivers, including Wild and Scenic Rivers;
3. Ensuring that our comments did not characterize the coastal plain as Designated Wilderness, while retaining acknowledgement that wilderness characteristics are an important human value for the area as well as important habitat characteristic;
4. Better describing the rationale for a NSO setback to minimize visual and acoustic degradation along the northern edge of the Designated Wilderness Boundary, and clarifying that the recommended distance was based on existing information on in-air sound travel for another development on the northslope, and that that value could be refined with further analysis;
5. Removing reference to prohibiting temporary infrastructure in river setbacks;
6. Clarifying that our request to include more information on moose was in direct response to concerns raised by subsistence hunters in Kaktovik and that we can provide the information we recommend including;
7. We recommended the DEIS refer to a recently produced study by scientists on the Porcupine Caribou Technical Committee, which will ensure the DEIS is based on the best available science and acknowledges the input from our Canadian partners towards informing management of the Porcupine Caribou Herd. Throughout the document, our subject matter experts have tried to highlight studies that the DEIS team may find useful in establishing the baseline and best quantifying impacts. These include studies from the 1980s that document caribou response to development in areas previously undisturbed, as is the case for the Coastal Plain;
8. Our comments regarding ROP 16 had language about exploratory drilling being prohibited in both fish and non-fish bearing waters. We would like to include this recommendation as a means of ensuring that all the purposes of the Refuge are achieved, and we have added language that explains the justification for protection of river corridors which typically contain higher diversity gradients than the surrounding landscape;
9. The snow depth and density stipulations were revised to refer to the Alaska DNR protocols and we removed some redundant points
10. We clarified that for ROP 28 Ecological Mapping, the number of years of studies should be determined by the species/habitat experts and not be a standard value. As I mentioned,

these products are typically requested by industry and completed by ecological experts at local consulting companies, and the standards are very high. This recommendation acknowledges how this ROP has been applied since originally drafted for NPRA; and

11. I have added language to indicate that while water withdrawal guidelines are established by Alaska DNR, we are specifically asking that springs be included in ROP 8. Also, due to the limited surface water availability, water use from rivers may be considered if proven not to have a detrimental impact on Refuge purposes.

I believe I captured her full list of questions in my notes, and hope I have made changes that make this a better, stronger set of comments to aid BLM in completing the Final EIS.

Thank you,  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)



**To:** Matz, Angela[angela\_matz@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-12T18:17:10-04:00  
**Importance:** Normal  
**Subject:** Re: PEER - ARCTIC REFUGE DRILLING SCIENTIFIC CONCERNS SUPPRESSED  
**Received:** 2019-03-12T18:17:19-04:00

Sounds good. 10 am would be good to give me time for any final comment letter stuff. Enjoy the afternoon ☀?

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

On Mar 12, 2019, at 14:00, Matz, Angela <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)> wrote:

If it can wait that would be much appreciated :)...I am free tomorrow morning so set a time and I'll come to your office(?).

On Tue, Mar 12, 2019 at 1:57 PM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

That would be good, except you are on leave! This can wait until tomorrow....?

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

On Mar 12, 2019, at 13:55, Matz, Angela <[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)> wrote:

Hi Wendy,

Yes, how does 2:30 work for you?

On Tue, Mar 12, 2019 at 10:21 AM Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

Hi Angela,

I am trying to help Greg with some notes to respond to the following article, and wondered if you could help me with the timeline for developing oil spill response plans and addressing how pollutants are regulated, maybe 10 min chat?

<https://www.peer.org/news/press-releases/arctic-refuge-drilling-scientific-concerns-suppressed.html>

Thank you,

Wendy

Dr. Wendy M. Loya

Arctic Program Coordinator

US Fish and Wildlife Service, Office of Science Applications

Anchorage, Alaska

907.786.3532 (office)

907.227.2942 (mobile)

--

Angela Matz, Oil Spill and Contaminants Coordinator  
Alaska Region, U.S. Fish and Wildlife Service  
1011 E. Tudor Road, MS 361  
Anchorage, AK 99503  
[angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)  
Mobile: 907 750 8527  
Landline: 907 786 3483

USFWS Alaska Region Spill Response: 907-242-6893, [fwsakspillresponse@fws.gov](mailto:fwsakspillresponse@fws.gov)

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]; Karen Clark[karen\_clark@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-12T20:37:46-04:00  
**Importance:** Normal  
**Subject:** Final edits to DEIS comment letter  
**Received:** 2019-03-12T20:38:04-04:00  
DRAFT USFWS Cover Letter to BLM Coastal Plain DEIS 031219.docx  
DRAFT USFWS Comments to BLM Coastal Plain DEIS revised 031219 (3).docx  
USFWS Comments to BLM Coastal Plain DEIS 031219.pdf

Hi Greg and Karen,

I have addressed the final recommendation to make clear that our preferences for setback distances could be adapted through further analyses, particularly the Wilderness boundary buffer (p. 10) and river setbacks (p. 4). I have gone through and proofread the edits we have made and spell checked the entire document. There are still likely to be small errors in 57 pages of technical comments, but I feel confident we can work with Nicole Hayes and BLM's contractors to clarify our comments as needed.

The cover memo and comments are here as two separate word documents as well as one combined PDF. I know you sometimes sign the memo and scan that to PDF before transmission. I can submit the final PDF through the eplanning web portal tomorrow when you approve. Interestingly, I am having trouble accessing that site at the moment:

[https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName\\_dispatchToPatternPage&currentPageId\\_152110](https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName_dispatchToPatternPage&currentPageId_152110)

Thanks for your guidance, support and patience with this!  
Wendy

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** John Trawicki[john\_trawicki@fws.gov]; Randy Brown[randy\_j\_brown@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-13T17:10:34-04:00  
**Importance:** Normal  
**Subject:** Arp et al 2019 AAAR: Ice Roads, freshwater habitat and climate uncertainty  
**Received:** 2019-03-13T17:11:16-04:00  
FishCAFE-et al 2019 AAAR IceRoadsthroughArcticWatersheds.pdf

Randy and John,

A paper funded in part by the Arctic LCC regarding water availability in NPRA. I am just looking at the final published version now, but thought I would share as we think about the Arctic Refuge.

<https://www.tandfonline.com/doi/full/10.1080/15230430.2018.1560839>

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

**To:** Wendy Loya[wendy\_loya@fws.gov]  
**From:** John Trawicki  
**Sent:** 2019-03-14T02:43:52-04:00  
**Importance:** Normal  
**Subject:** Fwd: [EXTERNAL] FYI - my comments on the EIS for Oil Leasing in the 1002 Area of the Arctic Refuge  
**Received:** 2019-03-14T02:43:56-04:00  
[ATT00001.htm](#)  
[2019.03.13 ArcticRefuge EIS comments GretaBurkartPhD.docx](#)

FYI

Sent from my iPhone

Begin forwarded message:

**From:** Greta Burkart <(b) (6)>  
**Date:** March 13, 2019 at 8:48:15 PM AKDT  
**To:** John Trawicki <[John\\_Trawicki@fws.gov](mailto:John_Trawicki@fws.gov)>, "Fox, Joanna" <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>, "Arthur, Stephen" <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, "janet\_jorgenson@fws.gov Jorgenson" <[janet\\_jorgenson@fws.gov](mailto:janet_jorgenson@fws.gov)>, Christopher Latty <[cjlatty@alaska.edu](mailto:cjlatty@alaska.edu)>, Roy Churchwell <(b) (6)>, Josh Rose <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>, <[allyssa\\_morris@fws.gov](mailto:allyssa_morris@fws.gov)>, Roger Kaye <[roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov)>, <[randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)>, Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>, <[paul\\_leonard@fws.gov](mailto:paul_leonard@fws.gov)>, Paul Banyas <[paul\\_banyas@fws.gov](mailto:paul_banyas@fws.gov)>, "Flanagan, Cathleen" <[cathleen\\_flanagan@fws.gov](mailto:cathleen_flanagan@fws.gov)>  
**Subject:** [EXTERNAL] FYI - my comments on the EIS for Oil Leasing in the 1002 Area of the Arctic Refuge

Hi Everyone,

I have attached the comments that I submitted to BLM regarding the draft EIS for the Arctic Refuge. I would have submitted more, but I found the poorly written document very hard to review and ran out of time. Most of my comments were related to the Water Resources section. I found that the draft EIS contains numerous mistakes and misinterpretations of existing studies, references sources that have not been peer-reviewed, and draws erroneous conclusions that are not supported by scientific evidence. I provide numerous examples of issues and recommendations in the 24-page attachment. Let me know if you have any questions or would like additional information.

I hope everyone is doing well.

Greta

**To:** Wendy Loya[wendy\_loya@fws.gov]; Doug Damberg[doug\_damberg@fws.gov]; Steve Berendzen[steve\_berendzen@fws.gov]  
**From:** Trawicki, John  
**Sent:** 2019-03-14T12:48:07-04:00  
**Importance:** Normal  
**Subject:** Fwd: Agenda: Spring 2019 AHTWG Quarterly Meeting - March 26, 2019  
**Received:** 2019-03-14T12:48:51-04:00

fyi

----- Forwarded message -----

**From:** Wigglesworth, David <david\_wigglesworth@fws.gov>  
**Date:** Thu, Mar 14, 2019 at 8:19 AM  
**Subject:** Re: Agenda: Spring 2019 AHTWG Quarterly Meeting - March 26, 2019  
**To:** Wright, Brian <bwright@usgs.gov>  
**Cc:** John Trawicki <john\_trawicki@fws.gov>, Neil Stichert <Neil\_Stichert@fws.gov>

Thanks for the response, Brian. What you propose sounds fine to me.  
- David

On Thu, Mar 14, 2019 at 2:28 AM Wright, Brian <bwright@usgs.gov> wrote:

David,

consulting with USGS

[Redacted content]

Brian

On Wed, Mar 13, 2019 at 11:39 AM Wigglesworth, David <[david\\_wigglesworth@fws.gov](mailto:david_wigglesworth@fws.gov)> wrote:

Hi Brian - In preparation for this meeting, just checking on our communications last week regarding NHD upgrades for 1002 Area C and possible funding. Is this something you will identify during the meeting? Or should we or both.  
David

On Wed, Mar 13, 2019 at 5:57 AM Wright, Brian <[bwright@usgs.gov](mailto:bwright@usgs.gov)> wrote:

Hello AHTWG members,

consulting with USGS

[Redacted]

[Redacted]

[Redacted]

Brian

On Tue, Jan 29, 2019 at 10:15 AM Wright, Brian <[bwright@usgs.gov](mailto:bwright@usgs.gov)> wrote:

consulting with USGS

[Redacted]

[Redacted]

[Redacted]

consulting with USGS

Please feel free to contact Kacy Krieger or myself with any questions, comments, or concerns,

Respectfully,

Brian

--

Brian Wright  
National Map Liaison - Alaska  
US Geological Survey  
4210 University Drive  
Grace Hall, Room 228  
Anchorage, AK 99508  
Office/Cell: 907-201-0113  
Email: [bwright@usgs.gov](mailto:bwright@usgs.gov)

----- Forwarded message -----

From: **Wright, Brian** <[bwright@usgs.gov](mailto:bwright@usgs.gov)>

Date: Tue, Oct 30, 2018 at 1:42 PM

Subject: Alaska Hydrography Technical Work Group (AHTWG) Quarterly Meeting Postponed

To: Kacy Krieger <[kekrieger2@alaska.edu](mailto:kekrieger2@alaska.edu)>

Cc: Scott Lindsey <[scott.lindsey@noaa.gov](mailto:scott.lindsey@noaa.gov)>, Smith, William <[wjsmith@usgs.gov](mailto:wjsmith@usgs.gov)>, Tracy Fuller <[tfuller@usgs.gov](mailto:tfuller@usgs.gov)>, Charley Palmer <[charley.palmer@alaska.gov](mailto:charley.palmer@alaska.gov)>, <[alaskageospatialtag@gmail.com](mailto:alaskageospatialtag@gmail.com)>, Matt Varner <[mvarner@blm.gov](mailto:mvarner@blm.gov)>, Andy Robertson <[aroberts@smumn.edu](mailto:aroberts@smumn.edu)>, Jim DePasquale <[jdepasquale@tnc.org](mailto:jdepasquale@tnc.org)>, Parker Martyn <[parker\\_martyn@nps.gov](mailto:parker_martyn@nps.gov)>, Cory Black <[cblack@blm.gov](mailto:cblack@blm.gov)>, Cathy Hillis <[chillis@blm.gov](mailto:chillis@blm.gov)>, Jim Rypkema <[james.rypkema@alaska.gov](mailto:james.rypkema@alaska.gov)>, Steinberger, Wendy S (DNR) <[wendy.steinberger@alaska.gov](mailto:wendy.steinberger@alaska.gov)>, Branden Bornemann <[branden@kenaiwatershed.org](mailto:branden@kenaiwatershed.org)>, Caixia Wang <[cwang12@alaska.edu](mailto:cwang12@alaska.edu)>, Wen Cao <[wcao4@alaska.edu](mailto:wcao4@alaska.edu)>, Angie Southwould <[angie\\_southwould@nps.gov](mailto:angie_southwould@nps.gov)>, Jason Seifert <[jason.seifert@alaska.gov](mailto:jason.seifert@alaska.gov)>, Kim Homan <[kimhoman@fs.fed.us](mailto:kimhoman@fs.fed.us)>, Mike Plivelich <(b) (6)>, Alan Rea <[ahrea@usgs.gov](mailto:ahrea@usgs.gov)>, Sheryl Boyack <[sboyack@usgs.gov](mailto:sboyack@usgs.gov)>, Crane Johnson <[benjamin.johnson@noaa.gov](mailto:benjamin.johnson@noaa.gov)>, Neil Stichert <[neil\\_stichert@fws.gov](mailto:neil_stichert@fws.gov)>, <[jason.graham1@alaska.gov](mailto:jason.graham1@alaska.gov)>, Toohey, Ryan <[rtoohy@usgs.gov](mailto:rtoohy@usgs.gov)>, Elizabeth Powers <[elizabeth\\_powers@fws.gov](mailto:elizabeth_powers@fws.gov)>, Emil Tucker <[etucker@fs.fed.us](mailto:etucker@fs.fed.us)>, Ashley Seim <[aseim@resdat.com](mailto:aseim@resdat.com)>, Franklin Dekker <[franklin\\_dekker@fws.gov](mailto:franklin_dekker@fws.gov)>, Stephen Aichele <[saichele@usgs.gov](mailto:saichele@usgs.gov)>, Chris Noyles <[cnoyles@blm.gov](mailto:cnoyles@blm.gov)>, Susan Buto <[sbuto@usgs.gov](mailto:sbuto@usgs.gov)>



Good Afternoon AHTWG,

consulting with USGS

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Brian

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Hello AHTWG,

Thank you all for the productive quarterly meeting last week. Attached are the draft minutes for you to review. Please submit any revisions, comments or additions to me.

As discussed during the meeting, AHTWG has been asked to give an update at the upcoming AMEC meeting. In preparation for that meeting, and to better advertise the need for updated hydrography in Alaska, we are asking that AHTWG members provide the following:

- ☐ A list of what updated hydrography will be used for
- ☐ Specific examples of the benefits of updated hydrography in the previous examples
- ☐ A list of “National Tools” that can’t be employed in Alaska because of the lack of quality data.

Please provide these lists by COB Friday, August 3, 2018

Thanks for your help,

-Kacy

Kacy Krieger  
Alaska Hydrography Coordinator  
Alaska Center for Conservation Science  
University of Alaska Anchorage  
3211 Providence Drive

Anchorage, Alaska 99508

(208) 801-9869

--

Brian Wright

National Map Liaison - Alaska

US Geological Survey

4210 University Drive

Grace Hall, Room 228

Anchorage, AK 99508

Office/Cell: 907-201-0113

Email: [bwright@usgs.gov](mailto:bwright@usgs.gov)

--

David Wigglesworth

Deputy ARD/Fish & Aquatic Conservation

US FWS Region 7

1011 East Tudor Rd

Anchorage, AK 99503

direct: 907-786-3925

cell: 907-301-3943

email: [david\\_wigglesworth@fws.gov](mailto:david_wigglesworth@fws.gov)

--

Brian Wright

National Map Liaison - Alaska

US Geological Survey

4210 University Drive

Grace Hall, Room 228

Anchorage, AK 99508

Office/Cell: 907-201-0113

Email: [bwright@usgs.gov](mailto:bwright@usgs.gov)

--

David Wigglesworth  
Deputy ARD/Fish & Aquatic Conservation  
US FWS Region 7  
1011 East Tudor Rd  
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direct: 907-786-3925  
cell: 907-301-3943  
email: [david\\_wigglesworth@fws.gov](mailto:david_wigglesworth@fws.gov)

--

John Trawicki  
Water Resources Branch Chief  
National Wildlife Refuge System, Alaska  
U.S. Fish and Wildlife Service  
1011 E. Tudor Road  
Anchorage, AK 99503  
Work: (907) 786-3474  
Mobile: (907) 360-1656

"The single biggest problem with communication is the illusion that it has taken place"  
George Bernard Shaw

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]; Steve Berendzen[steve\_berendzen@fws.gov]; Bud Cribley[bud\_cribley@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-15T16:26:34-04:00  
**Importance:** Normal  
**Subject:** External comments  
**Received:** 2019-03-15T16:27:43-04:00  
[2019-03-13-Coalition-Group-Leasing-DEIS-Comment-Letter-FINAL.pdf](#)

FYI. Will send along copies of other comments as they are shared with us.

**To:** Greg Siekaniec[greg\_siekaniec@fws.gov]  
**Cc:** Steve Berendzen[steve\_berendzen@fws.gov]; Bud Cribley[bud\_cribley@fws.gov]  
**From:** Wendy Loya  
**Sent:** 2019-03-15T16:36:45-04:00  
**Importance:** Normal  
**Subject:** RE: External comments  
**Received:** 2019-03-15T16:37:18-04:00  
[Arctic NWR leasing science letter 2019 03 07.pdf](#)  
[amstrup-review-of-the-sae-proposal-for-seismic-exploration-on-the-coastal-plain-copy.pdf](#)

Here is the Scientists' letter on DEIS and the Polar Bear Int'l report on Seismic proposal for your information

Dr. Wendy M. Loya  
Arctic Program Coordinator  
US Fish and Wildlife Service, Office of Science Applications  
Anchorage, Alaska  
907.786.3532 (office)  
907.227.2942 (mobile)

---

**From:** Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>  
**Sent:** Friday, March 15, 2019 12:31 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Subject:** Re: External comments

Do you have the scientist letter that Stan Senner sent? Polar bear international concerning seismic?

Sent from my iPhone

On Mar 15, 2019, at 12:26 PM, Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)> wrote:

FYI. Will send along copies of other comments as they are shared with us.

<2019-03-13-Coalition-Group-Leasing-DEIS-Comment-Letter-FINAL.pdf>

**From:** [Wendy Loya](#)  
**To:** [Drew Crane](#); [John Trawicki](#)  
**Subject:** FW: SAE Plan of Operations Questions  
**Date:** Tuesday, May 22, 2018 1:36:32 PM  
**Attachments:** [SAE seismic questions 5.22.2018.pdf](#)

---

Hi Drew and John,

Drew, can you make sure to share this with anyone in FES involved in MMPA/ESA related to Coastal Plain Seismic?

John, do you want to share with NWRS leadership and relevant staff?

Thank you,  
Wendy

Dr. Wendy M. Loya, Coordinator  
Office of Science Applications -Arctic Program  
US Fish and Wildlife Service  
Anchorage, Alaska  
907.786.3532 (office)  
907.277.2942 (mobile)

**From:** Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>  
**Sent:** Tuesday, May 22, 2018 1:16 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Cc:** Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>  
**Subject:** Fwd: SAE Plan of Operations Questions

Hi Wendy,

We just received this copy of the letter BLM sent to the seismic applicant requesting additional information. It answers some of the questions we discussed this morning (including when the 90-day clock starts). Please distribute as you see fit.

Thank you,  
Joanna

---

Joanna L. Fox  
Deputy Refuge Manager  
Arctic National Wildlife Refuge  
101 12th Avenue, Room 236  
Fairbanks, AK 99701  
(907) 456-0549

Follow us on Facebook!  
[www.facebook.com/arcticnationalwildliferefuge](http://www.facebook.com/arcticnationalwildliferefuge)

*"Do what you can, with what you have, where you are." -- Theodore Roosevelt*

----- Forwarded message -----

From: Wixon, Donna <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Date: Tue, May 22, 2018 at 1:00 PM

Subject: Fwd: SAE Plan of Operations Questions

To: Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>

Cc: Sarah LaMarr <[slamarr@blm.gov](mailto:slamarr@blm.gov)>, Shelly Jacobson <[njones@blm.gov](mailto:njones@blm.gov)>

Hi Steve and Joanna,

Attached is a copy of the questions we sent to SAExploration.

Thanks,

Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office  
907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)

----- Forwarded message -----

From: **Wixon, Donna** <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Date: Tue, May 22, 2018 at 11:35 AM

Subject: SAE Plan of Operations Questions

To: Suzan Simonds <[ssimonds@saexploration.com](mailto:ssimonds@saexploration.com)>

Cc: Shelly Jacobson <[njones@blm.gov](mailto:njones@blm.gov)>

Good Morning Sue,

Attached please find a letter and questions about the seismic permit that SAExploration has requested from the BLM for the 1002 area.

Please let me know if you have any questions about our questions as you work through them.

Thanks,

Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office



907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)



BUREAU OF LAND MANAGEMENT  
Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709-3816  
<http://www.blm.gov/ak>



May 22, 2018

In reply refer to:  
FF097424  
3152.00 (AKR000)

Ms. Suzan Simonds  
Permit and Regulatory Manager  
SAExploration Inc.  
8240 Sandlewood Place, Suite 102  
Anchorage, Alaska 99507

Subject: Oil and Gas Geophysical Exploration Application

Dear Ms. Simonds,

Title II of the Tax Cuts and Jobs Act of 2017 directed the Secretary of Interior to establish and administer a competitive oil and gas program within the Coastal Plain of Alaska. Because the Bureau of Land Management (BLM) manages the National Petroleum Reserve in Alaska (NPR-A) pursuant to the Naval Petroleum Reserves Production Act (1976), the BLM has been identified as the lead agency for permitting oil and gas related activities in the Arctic National Wildlife Refuge Coastal Plain area, including seismic exploration activities. Within the BLM the Arctic District Office has been tasked to process seismic applications for the area.

On April 19, 2018 the Alaska BLM State Office received an application from SAExploration to conduct seismic activity in the 1002 area of the Alaska National Wildlife Refuge. On May 3, 2018 the BLM Arctic District received a nonconfidential version of the plan of operations. BLM and USFWS met on May 4<sup>th</sup> to discuss the proposed action.

The regulations that cover the proposed action are 43 CFR 3152, Exploration in Alaska. Part 3152.1 provides information on what is required to be submitted as part of the application. SAExploration has provided information for items a thru f. Part f requires a plan for conducting the exploration activities. While SAExploration has submitted a plan of operations, the plan does not provide enough information for the BLM to adequately evaluate impacts of the proposed action on the environment as required by the National Environmental Policy Act (NEPA).

Please see attached list of questions entitled: "Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO) BLM/USFWS Comments and Questions." We would ask that you respond to the questions and comments as soon as possible so that we may begin the NEPA process on the proposed action. Once BLM receives the answers to the attached questions we will start the 90 day review clock as required by 43 CFR 3152.2 a. and notify you if the 90 days cannot be met and refine our estimation of time needed to process your application

If you have any questions please contact Donna Wixon of my staff at 907-474-2301.

Sincerely,  
Nichelle Jones, Manager



Arctic District Office

Enclosures (1):

Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO) BLM/USFWS Comments and Questions

# **Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO): BLM/USFWS Comments and Questions**

## **General comments:**

1. What kind of lighting will be needed - tall light posts for equipment and storage areas; aircraft operations, localized lighting for worker camps, seismic line work, etc?
2. What is the normal and peak operating decibel levels of the camp generator and hours of operation each day or 24/7?
3. What are the total miles of seismic trails planned?
4. Will SAExploration Inc. be submitting a more detailed map of the actual proposed area of survey? This would greatly help in addressing impacts.
5. Does SAExploration, Inc. plan to avoid native allotments entirely?

## **Section 4.0 Environmental Management**

1. Please provide a write up of how you are doing things differently based on lessons learned from the past.
2. What are the steepest slopes that you would be conducting activity on and how do you propose to protect soil and vegetation?

## **Section 5.0 Cultural Interface**

1. This section mentions coordination with Kaktovik, what about Arctic Village and Venetie?
2. Applicant needs to submit a Subsistence Plan that meets the requirements of the 2013 Record of Decision (ROD) Best Management Practice (BMP) H-1 and also include:
  - Precise meeting dates and locations.
  - The names of and contact information for subsistence representatives and the biologist hired by SAE to work with the panel.
  - Reporting on mitigation measures and conflict avoidance agreements, if any, developed through such consultation.
  - Documentation of notification to allotment owners and camps and cabins users.
  - Procedures necessary to facilitate access by subsistence users to conduct their activities.
3. Applicant needs to follow the requirements of BMP H-2.

## **Section 6.0 Oversight Panel <sup>1</sup>**

1. When will the oversight Panel be formed?
2. How many people will be on the panel?
3. What types of people will be on the panel?
4. Will its members be residents of Kaktovik only?
5. Will the panel only report to Kaktovik?

---

<sup>1</sup> BLM would like to set up a meeting in June or July to discuss.

6. Does “cultural sites” refer to archaeological, historic, and/or traditional land use sites? If so, will this subsistence observer also be an archaeologist with access to the Alaska Heritage Resources Survey (AHRS) database (maintained by the Alaska State Historic Preservation Office) and the Traditional Land Use Inventory (TLUI) site within the study area (maintained by the North Slope Borough Department of Planning and Community Services)?

## **Section 7.2 Training Process**

1. Please provide an Orientation Program Plan following NPR-A BMP I-1 for BLM’s approval.

## **Section 8.0 Permit Requirements**

1. In table please include ESA Consultation under BLM
2. In table, under ADFG and Fish Habitat Permits, please add stream/river crossings.
3. In table under other approvals what lease holders are in the area?
4. What public outreach has taken place prior to application submittal, or as of today’s date?<sup>2</sup>

## **Section 9.0 Mobilization and Access**

1. “The crews will mobilize to existing gravel pads which will allow access to the tundra and provide a resupply area for the crews” (Page 7: SAExploration 2018). These gravel pads are not identified in the POO – whether inside the 1002 area boundary or adjacent to it. Where are the gravel pads and travel corridors? Locations of ingress and egress? Please submit a map showing ingress and egress with land status layer.
2. SAE states "SAE will attempt to coordinate with companies to use any existing or planned trails." There are no existing trails in the permit area, what other companies are you referring to?
3. How close does the campsite need to be to the area you are working in?
4. What criteria will be used to determine if snow depth and coverage is adequate to minimize damage to the tundra vegetation?
5. Does SAE have a contingency plan should snow depth and cover not be adequate to minimize soil compaction and vegetation damage?
6. Please provide routes and what type of activity, storage, etc. that will occur at locations within the permit area.
7. Please provide a description of the current camp move practices and how they would help to protect the tundra.
8. Are there ice or snow roads between Dalton Highway and Point Thompson that you could travel on to reduce tundra damage? If not, could you travel some of the distance on sea ice?

---

<sup>2</sup> BLM would like to set up a meeting in June/July to discuss.

9. What are the operating plans and environmental protection protocols for tundra travel? How will these protocols differ for different snow and soil conditions and for travel on steep slopes, areas with sensitive soil/vegetation types, and near special areas (e.g. groundwater-fed springs, overflow ice, ice-hummocks, and waterbodies that may support fish?
10. For each type of activity/equipment (e.g. camp moves, resupplies, snow machine access, refueling, transport of fuel and hazardous chemicals), describe what the environmental regulations/limits will be for the following:
  - a. What is the maximum slope that operations for each type of activity/equipment would occur on? This information will allow us analyze the potential for impacts of different activities (e.g. fuel storage, transport of hazardous materials, camp moves, seismic) would be occurring on steep slopes.
  - b. What are the criteria for snow and soil characteristics that will be required for each type of activity/equipment? Will these criteria vary with slope and type of soil and vegetation?
11. Please provide the following information broken down in a table and linkable to GIS format along with a map:
  - a. Proposed route distance
  - b. Timing
  - c. Type of activity (e.g. resupply, camp move)
  - d. Type of equipment (e.g. vehicle type, sled, skis)
  - e. Weight of vehicle/equipment empty
  - f. Weight of equipment/vehicle fully loaded.
  - g. Pounds per square inch (PSI) pressure of vehicle, sled, or skis empty
  - h. Pounds per square inch (PSI) pressure of vehicle, sled, or skis fully loaded (note – this especially important for sleds or vehicles that haul large volumes of water or fuel, kitchen and bath units, etc.)
  - i. Total footprint of all vehicle or other equipment in contact with ground
  - j. Type of tire (tracked versus wheeled)
  - k. Track material (e.g. steel versus rubber)
  - l. Are tracks cleated or uncleated? Number of times a particular route would be exposed to a particular PSI from a particular vehicle, sled, or skis.
  - m. Maximum slope that this equipment would travel on and at what weights (minimum and maximum)
  - n. Snow depth requirements for this type of vehicle/equipment
  - o. Freezing depth requirements for this type of vehicle/equipment
  - p. Are hazardous material transported on this type of equipment?
  - q. Is more than 500 gallons of fuel be transported on this type of vehicle/equipment?
12. How and where will snow be gathered and moved for construction of snow trails and ramps?
13. How far can snow be transported for trail making?
14. What are the topographic and other criteria that elicit the need for creating snow ramps?
15. Verify that you would be prepacking snow trails.

16. What vehicles would be used for prepacking?
17. What equipment would be used for moving and placing snow?
18. How many resupply trips will be needed along routes?
19. How many vehicles and what type will be involved in resupply trips?
20. Will resupply vehicles use existing trails?
21. For the expected size and shape of the grid area, how many miles of camp move trails would there be within the work area (not including miles of access to reach the edge of the project area)?

## **Section 10.0 Survey and Ice Check**

1. What does low snow years mean exactly? If it means they will ensure that enough snow cover is present for equipment movements, then what are the minimum snow depths? Will tundra freeze-down be quantified prior to and/or during operations?
2. What provisions are there for the possibility that snow conditions deteriorate before the train returns?
3. Where would snow surveys be done in order to decide when exploration could begin?<sup>3</sup>
4. How will SAE gather data on frost and snow conditions?
5. There can be large expanses with no snow cover in the 1002 Area. What are the contingency plans in the event extensive areas with low snow cover and/or unfrozen ground are encountered?
6. What Lakes, rivers or sea ice would be traveled across?

## **Section 11.0 River Crossings (and lake)**

1. This element of the operations cannot just be permitted with ADF&G. In addition to ADF&G FHPs, the BLM & FWS must evaluate this activity as part of the NEPA process. The BLM already has some Best Management Practices (in the 2012 NPR-A IAP) related to stream/river crossings that can be used for guidance, but site specific evaluations will be necessary to determine if these BMPs or a modified version of the BMPs are most appropriate for this landscape. (Comment not question).
2. Describe how deep/steep banks would be crossed.
3. The POO provides no specific information on accessing water, water requirements, or ice bridge locations. Please provide.
4. Please provide a map that shows stream and lake crossings with a table that identifies the latitude and longitude of the corresponding crossings.
5. What are the proposed locations for ice bridges? Where will water for construction of ice bridges come from?
6. Does SAE propose any baseline monitoring of ice depth, winter water volume, invertebrates, fish, and water chemistry
7. If a crossing needs to be reinforced/built up for supporting equipment, where will liquid water come from? The BLM currently does not allow liquid water to be removed from rivers during the winter. If liquid water may need to be removed from lakes to build any

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<sup>3</sup> BLM would like to set up a meeting in June/July to discuss

“ice bridges”, then the volumes would need to be accounted for in the lake water use request to the BLM/FWS for evaluation in the EA and in ADF&G FHPs and ADNR Temporary Water Use Permits.

8. Would the removal of snow for this purpose only occur on areas of grounded ice (from lakes and/or rivers)?
9. Would the removal of ice aggregate from grounded ice areas on a river be requested?

## **Section 12.0 Willow Protocol**

1. What criteria will be used to identify location and size of sensitive willow areas?
2. Will other vegetation types sensitive to seismic activities be considered when designing and constructing snow roads and trails? (Sensitive vegetation types include moist tussock tundra and low shrub vegetation categories.)
3. Please provide a weed plan following requirements of the NPR-A BMP M-2 for BLM Approval.

## **Section 13.0 Recording Operations (and sound)**

1. What is the frequency, intensity, and duration of vibroseis?
2. What is the proximity to non-fish bearing and fish bearing waterbodies?
3. Provide the location of waterbodies and table of information of the proximity to non-fish bearing and fish bearing waterbodies.
4. With the 3D seismic, is there a distance that a line could be altered if needed for some reason without compromising the data?
5. Please verify that vibrators would not be operating on lakes or rivers.
6. If vibroseis shots will be made over liquid water under ice, the permittee needs to review the following document and indicate how they would implement or otherwise address recommendations made to reduce potential impacts to fish.  
Morris, W., and J. Winters. 2005. Fish Behavioral and Physical Responses to Vibroseis Noise, Prudhoe Bay, Alaska 2003. Technical Report No. 05-02. Alaska Department of Natural Resources, Office of Habitat and Permitting.
7. What is SOS Methodology?

## **Section 14.0 Camp Facilities**

1. How many camp areas will be used?
2. How many days on average will a camp be on a site?
3. How much water will be required for camp each day?
4. What are the water requirements each year for this project?
5. Provide a more detailed description of grey water discharge
6. What is the maximum gradient the tracked tractors can pull the camp sleds?
7. Section 14 states: “If existing airstrips are within the project area those area may be utilized to allow personnel, food and fuel to be delivered to the work area”. Are there existing airstrips in the project area?
8. What is the predetermined route?



9. What is the Vsat communication system?

## **Section 15.0 Water Withdrawal (from lakes)**

1. Would snow for drinking water only be removed from grounded ice areas?
2. Water volume (liquid water and ice aggregate) requests must be made for each specific lake that might be used, for evaluation in the EA.
3. What information does SAE plan to collect or compile for planned use lakes.<sup>4</sup>

## **Section 16.0 Temporary Snow Air Strips**

1. Are you proposing to use water and or ice chips to prepare landing strips on lakes?
2. When lakes cannot be used as airstrips, what is the site prep for tundra air strips?
3. What equipment is involved in creating and maintaining airstrips?
4. We need to know which specific lakes might be used for an airstrip, the size of the airstrip, the procedure for building and maintaining an airstrip, and the intended placement and orientation.
5. If airstrips are built on lakes, additional data collection may be required to provide data regarding the extent of additional freeze-down under the airstrip, as compared to the remainder of the lake.
6. What is the operating plan for working in areas that fixed-wing aircraft cannot access? Is there a need for helicopter access?
7. How many crew swaps will be carried out? i.e. how many times will an airstrip be used per week?
8. What type of aircraft will be used? Wheeled or skis?
9. Section 16 states: "SAE will create a flat area on predetermined grounded, frozen lakes, or tundra to serve as landing strip to receive the aircraft for crew changes." This is in the Temporary Snow Airstrips section. Will tundra airstrips be built of snow or will ice be needed to make the airstrip?

## **Section 17.0 Fuel Supply and Storage**

1. How much fuel will be used per day?
2. How much fuel will be used for each year of the project?
3. What are the proposed locations for refueling and fuel storage?
4. What is the maximum amount of fuel that will be stored at a particular location? How many of these locations will there be at a given time and during the entire course of the project?
5. The POO states that the refueling distance from waterbodies would be 100 feet. The BLM NPR-A BMP requires 500 ft distance and we will consider this requirement for this project. We allow a deviation from the 500 ft. in the NPR-A because of the high density/close proximity of so many lakes that makes it impractical in many areas.

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<sup>4</sup> BLM would like to set up a meeting in June/July to discuss.

6. Provide a copy of the SPCC plan(s) for this project with site-specific information included. Until it is complete provide:  
The size, type, and number of fuel storage tanks or other containers.  
What type of equipment/supplies will be available on site to respond to a spill?  
Describe any training requirements for employees handling fuel.
7. Since there will be no refueling within a certain distance of any waterbody, what is the protocol for aerial fuel delivery, should it be needed. Will fuel be delivered in drums or will a tanker be used?

## **Section 18.0 Waste Management**

1. What are the volumes and proposed locations of discharge of gray water? How many gray water discharge locations will there be?
2. Provide a copy of your APDES permit, and any requirements it may have for treatment before discharge.
3. Provide a hazardous waste plan following the requirements of the NPR-A BMP A-3.
4. Provide a Comprehensive Waste Management Plan following the requirements of the NPR-A BMP A-2.
5. What types of wastes are anticipated to be generated by seismic operations?

## **Section 19.0 Wildlife**

1. What is the intensity and wavelength of sound of equipment?

## **20.0 Historic and Cultural Resources**

1. Is SAE implying that buffers for historic and cultural resources be determined from a point on the map that indicates the general vicinity of these resources or will the buffer be drawn from the actual area that resources cover?
2. In response to the “if required,” in addition to background research of documented (“known”) cultural (historic, prehistoric, and TLUI) sites, SAE Exploration should conduct archaeological field surveys of all proposed travel routes and survey locations prior to the proposed seismic survey.<sup>5</sup>
3. The 500 foot minimum avoidance boundary around all cultural sites is adequate for seismic exploration. However, does SAExploration plan to consider the boundaries of all sites within the proposed seismic testing areas?
4. Most of the sites in both the AHRS and TLUI are referenced geospatially by a 1-dimensional point that is typically somewhere near the center of a 2-dimensional area. Sometimes cultural remains within a site can be distributed over hundreds of meters, thus extending beyond a roughly 150 meter (500 foot) buffer. SAExploration should not only survey for undocumented sites within the proposed seismic study areas, but also consider sites documented in the AHRS and TLUI databases and that are within the proposed seismic study areas. These sites should be included in the 2018 cultural field survey,

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<sup>5</sup> BLM would like to set up a meeting in June/July to discuss.

where archaeologists should at minimum map the boundaries (i.e. the extent of cultural remains within a site) of sites within the seismic study areas that are spatially referenced by a point. Site buffers should then extend 500 feet from the site boundary.

## **Appendix D:**

1. Request more photos, including camp sleighs, long haul fueler, Case/Steiger tractor, CAT dozer and CAT loader.

## **Appendix F: Wildlife Interaction Plan**

1. In the SAE plan of operations, “heavy equipment” and “seismic activity” with regard to wildlife interactions needs to be further defined. For example, if there is a one mile avoidance area for a polar bear den, does that apply to laying of recording devices by hand or smaller vehicle, or just to the large vibroseis activity? For example, does a one mile avoidance area mean that no personnel, equipment, gear or anything else will come within one mile of a polar bear den? Does this apply to seal birthing dens and grizzly bear dens as well?
2. “A polar bear den detection survey shall be conducted prior to activities occurring in polar bear denning habitat during the maternal denning period (November to mid-April).” How will this survey be conducted?
3. Will all suitable denning habitat within the entire 1002 area be surveyed?
4. What is the survey design, operating procedure and resulting accuracy in identifying denning sites? Are these surveys done prior to any other activity or occupation of an area including caching equipment or fuel or conducting reconnaissance surveys to assess ice conditions, locations for camp moves, etc?<sup>6</sup>
5. The data provided for polar bear numbers in the southern Beaufort Sea is out of date (Page 23 Polar Bears: SAExploration 2018).
  - a. Current estimate of polar bears in the Southern Beaufort Sea population is estimated to be 900 and declining (see Bromaghian 2010)
  - b. Global population is estimated to be 22,000 – 31,000 with an average of 26,000 (see FWS 5-year review 2017)
6. “Aircraft will avoid flying over ideal Polar Bear habitat including but not limited to sea ice and barrier islands.” Please define what is considered to be “ideal” polar bear habitat.
7. “Vessels and aircraft will avoid areas in which subsistence hunting is being conducted.” Are vessels being used for this project? Is so please describe.
8. “The Project Manager and wilderness guides have overall responsibility.” What are “wilderness guides” (also called wildlife guide in some places in the document)? Please describe training and responsibilities. This is not a position that was described in the polar bear section of this plan.
9. If the bear takes refuge near or in a vehicle and does not appear likely to move, crew HSE will be notified depending on the location of operation. No action will be taken unless

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<sup>6</sup> BLM would like to set up a meeting in June/July to discuss.

authorized by the AKFG or their designated agents.” Assuming that AKFG is the Alaska Department of Fish and Game (ADFG), please correct in all locations in document.

10. Field Operating Procedure Polar Bear Protocol

- a. In numbers 1 and 7 of this protocol include the distance that must be maintained from known densities.

**From:** [Fox, Joanna](#)  
**To:** [Stephen Arthur](#); [Christopher Latty](#); [Burkart, Greta](#); [Hollis Twitchell](#); [Roger Kaye](#)  
**Cc:** [Steve Berendzen](#)  
**Subject:** Fwd: Agenda for Thursday May 3rd Coastal Plain EIS Scoping Meeting  
**Date:** Wednesday, May 2, 2018 11:12:17 AM  
**Attachments:** [NPRA IAP EIS Table 2.3 Stips and BMPs by Resource.docx](#)  
[SO3355.pdf](#)  
[Section 20001.pdf](#)  
[Participants\\_CoastalEIS\\_IntScopAgnda\\_20180503.docx](#)

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Good morning,

Those of us who are not traveling to Anchorage to attend this all-day internal scoping meeting tomorrow have been invited to join local BLM staff at their office tomorrow. They have a room and a bridge set up to the Anchorage location. Though times have been set up in the agenda for specific areas of expertise, we're asking all of you to be available to attend the welcome and program overview, as well as the time slot allotted for your area of expertise. It would be ideal if folks can plan to participate all day, as there will be considerable overlap among many of the topics. However, we recognize some of you may have conflicts that will not allow you to be there all day.

As Wendy suggested, please plan to arrive as prepared as possible with substantive comments about issues of concern related to your area of expertise. It would also be wise to read through the resource assessment documents Wendy sent yesterday so you can re-familiarize yourself with the data gaps and needs that were identified in them.

Thanks much!  
Joanna

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*"Do what you can, with what you have, where you are." -- Theodore Roosevelt*

----- Forwarded message -----

**From:** **Wendy Loya** <[Wendy\\_loya@fws.gov](mailto:Wendy_loya@fws.gov)>  
**Date:** Tue, May 1, 2018 at 8:26 AM  
**Subject:** Agenda for Thursday May 3rd Coastal Plain EIS Scoping Meeting  
**To:** Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>, Doug Damberg <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>, Mitch Ellis <[mitch\\_ellis@fws.gov](mailto:mitch_ellis@fws.gov)>, Socheata Lor <[socheata\\_lor@fws.gov](mailto:socheata_lor@fws.gov)>, Mary Colligan <[mary\\_colligan@fws.gov](mailto:mary_colligan@fws.gov)>, Patrick Lemons <[patrick\\_lemons@fws.gov](mailto:patrick_lemons@fws.gov)>, Eric Taylor <[eric\\_taylor@fws.gov](mailto:eric_taylor@fws.gov)>, Richard Lanctot <[richard\\_lanctot@fws.gov](mailto:richard_lanctot@fws.gov)>, Carl Johnson <[carl\\_johnson@fws.gov](mailto:carl_johnson@fws.gov)>, Joshua Ream <[joshua\\_ream@fws.gov](mailto:joshua_ream@fws.gov)>, Andrea Medeiros <[andrea\\_medeiros@fws.gov](mailto:andrea_medeiros@fws.gov)>, Sara Boario <[sara\\_boario@fws.gov](mailto:sara_boario@fws.gov)>, Stephanie Brady <[stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov)>, Tracy Fischbach

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Dear FWS colleagues,

Attached you will find the agenda for the Coastal Plain oil and Gas Leasing Program EIS Internal Scoping meeting for FWS and the State of Alaska (and any other Cooperating Agencies identified by Thursday) to be hosted by BLM and the contractor hired to assist with the EIS. You are invited to attend all or part of the meeting either in person or via teleconference. We do hope that everyone can join/call in for the opening session from 8:30 am – 9:15 for introductions and Program Overview. The 1002 Team has then identified slots during the day where we think your expertise best fits, and so please see the attached agenda for when we hope you can participate. I do expect that the schedule could deviate from the timeline, likely running late, so please be as flexible as you can.

If you are not able to join during the time of your expertise, don't fret: we expect that FWS will be generating scoping comments to share with BLM and the contractor before the end of the public scoping period as we will not have all relevant expertise available or ready on Thursday. More about that after Thursday's meeting.

If you are able to join, please be as prepared as you can with substantive comments about issues of concern related to your area of expertise. Reviewing the Resource Assessments FWS completed would be helpful, and I will make those available to all staff, BLM and the contractors via Google docs or similar later today in addition to already being on the R7 Common Drive 1002ArcticRefuge folder. This is our first opportunity to identify analyses that we believe should be completed in the EIS with regards to leasing lands for exploration and development in the 1002 area, **with the ultimate goal of having the right stipulations and best management practices in place to protect natural resources, where needed.**

Again, refer to the attached document that describes the NPRA stips/BMPs by subject. Also including attachments with Tax Act Language for the Coastal Plain and SO 3355 about

expedited NEPA.

BLM Alaska State Office, Anchorage, AK Denali  
Conference Room

Dial-in Phone: (b) (5) CIP

Passcode: (b) (5) CIP

Don't hesitate to contact me or any of the other 1002 Points of Contact with questions (Steve B, Joanna, John T, Rick (for Eric) or Carl),

Wendy

Dr. Wendy M. Loya, Coordinator

Office of Science Applications -Arctic Program

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## REVIEW OF NRPA IAP EIS Table 2-3 (BLM 2012)

NRPA IAP EIS Table 2-3 (Vol. 1, pages 42-111, hereafter NRPA BMP/ROPs) has been reformatted from current categories:

- A. Waste prevention, handling, disposal, spills, and public safety
- B. Water use for permitted activities
- C. Winter overland moves and seismic work
- D. Oil and gas exploratory drilling
- E. Facility design and construction
- F. Use of aircraft for permitted activities
- G. Oil and gas field abandonment
- H. Subsistence consultation for permitted activities
- I. Orientation programs associated with permitted activities
- J. Endangered Species Act – Section 7 consultation process
- K. Additional protections that apply to select biologically sensitive areas
- L. Summer vehicle tundra access
- M. General wildlife and habitat protection

...into the following categories, which more closely align with natural resource management:

- 1. Soils, vegetation and biotic communities
- 2. Fisheries and water quality
- 3a. Terrestrial mammals I: bears
- 3b. Terrestrial mammals II: caribou
- 3c. Terrestrial mammals III: other species
- 3d. Wildlife general considerations (all species)
- 4. Birds (all species)
- 5. Wilderness recreational values
- 6. Restoration and rehabilitation of abandoned oilfields



## 1. SOILS, VEGETATION AND BIOTIC COMMUNITIES

Protect stream banks, minimize compaction of soils, and minimize the breakage, abrasion, compaction, or displacement of vegetation.

- a. Ground operations shall be allowed only when frost and snow cover are at sufficient depths to protect the tundra. Ground operations shall cease when the spring snowmelt begins (approximately May 5 in the foothills area where elevations reach or exceed 500 feet and approximately May 15 in the northern coastal areas). The exact dates will be determined by the authorized officer.
- b. Low-ground-pressure vehicles shall be used for on-the-ground activities off ice roads or pads. Low-ground-pressure vehicles shall be selected and operated in a manner that eliminates direct impacts to the tundra by shearing, scraping, or excessively compacting the tundra mat. Note: This provision does not include the use of heavy equipment such as front-end loaders and similar equipment required during ice road construction.
- c. Bulldozing of tundra mat and vegetation, trails, or seismic lines is prohibited; however, on existing trails, seismic lines or camps, clearing of drifted snow is allowed to the extent that the tundra mat is not disturbed.
- d. To reduce the possibility of ruts, vehicles shall avoid using the same trails for multiple trips unless necessitated by serious safety or superseding environmental concern. This provision does not apply to hardened snow trails for use by low-ground-pressure vehicles such as Rolligons.
- e. The location of ice roads shall be designed and located to minimize compaction of soils and the breakage, abrasion, compaction, or displacement of vegetation. Offsets may be required to avoid using the same route or track in the subsequent year.
- f. Motorized ground-vehicle use within the Colville River Special Area associated with overland moves, seismic work, and any similar use of heavy equipment shall be minimized within an area that extends 1 mile west or northwest of the bluffs of the Colville River, and 2 miles on either side of the Kogosukruk and Kikiakrorak rivers and tributaries of the Kogosukruk River from Apr 15 through Aug 5, with the exception that use will be minimized in the vicinity of gyrfalcon nests beginning Mar 15. Such use will remain 0.5 mile away from known raptor nesting sites, unless authorized by the authorized officer.

Minimize surface impacts from exploratory drilling.

Construction of permanent or gravel oil and gas facilities shall be prohibited for exploratory drilling. Use of a previously constructed road or pad may be permitted if it is environmentally preferred.

Protect subsistence use and access to subsistence hunting and fishing areas and minimize the impact of oil and gas activities on air, land, water, fish and wildlife resources.

All roads must be designed, constructed, maintained, and operated to create minimal environmental impacts and to protect subsistence use and access to subsistence hunting and fishing areas. The authorized officer will consult with appropriate federal, State, and North Slope Borough regulatory and resources agencies prior to approving construction of roads. Subject to approval by the authorized officer, the construction, operation and maintenance of oil and gas field roads is the responsibility of the lessee unless the construction, operation, and maintenance of roads are assumed by the appropriate governing entity.

Minimize the impact of mineral materials mining activities on air, land, water, fish, and wildlife resources.

Gravel mine site design and reclamation will be in accordance with a plan approved by the authorized officer. The plan shall be developed in consultation with appropriate federal, State, and North Slope Borough regulatory and resource agencies and consider:

- a. Locations outside the active floodplain.
- b. Design and construction of gravel mine sites within active floodplains to serve as water reservoirs for future use.
- c. Potential use of the site for enhancing fish and wildlife habitat.
- d. Potential storage and reuse of sod/overburden for the mine site or at other disturbed sites on the North Slope.

## 2. FISHERIES AND WATER QUALITY

### Maintain populations of, and adequate habitat for, fish and invertebrates.

Withdrawal of unfrozen water from rivers and streams during winter is prohibited. The removal of ice aggregate from  $\leq 4$ -feet deep may be authorized from rivers on a site-specific basis.

### Maintain natural hydrologic regimes in soils surrounding lakes and ponds, and maintain populations of, and adequate habitat for, fish, invertebrates, and waterfowl.

Withdrawal of unfrozen water from lakes and the removal of ice aggregate from  $\leq 4$ -feet deep may be authorized on a site-specific basis depending on water volume and depth and the waterbody's fish community. Current water use requirements are:

- (a) lakes with sensitive fish (i.e., any fish except ninespine stickleback or Alaska blackfish); unfrozen water available for withdrawal is limited to 15% of calculated volume deeper than 7 feet; only ice aggregate may be removed from lakes that are  $\leq 7$ -feet deep.
- (b) Lakes with only non-sensitive fish (i.e., ninespine stickleback or Alaska blackfish): unfrozen water available for withdrawal is limited to 30% of calculated volume deeper than 5 feet; only ice aggregate may be removed from lakes that are  $\leq 5$  feet.
- (c) Lakes with no fish present, regardless of depth: water available for use is limited to 35% of total lake volume.
- (d) In lakes where unfrozen water and ice aggregate are both removed, the total use shall not exceed the respective 15%, 30%, or 35% volume calculations.
- (e) Additional modeling or monitoring may be required to assess water level and water quality conditions before, during, and after water use from any fish-bearing lake or lake of special concern.
- (f) Any water intake structures in fish bearing or non-fish bearing waters shall be designed, operated, and maintained to prevent fish entrapment, entrainment, or injury. Note: All water withdrawal equipment must be equipped and must utilize fish screening devices approved by the ADF&G.
- (g) Compaction of snow cover or snow removal from fish-bearing waterbodies shall be prohibited except at approved ice road crossings, water pumping stations on lakes, or areas of grounded ice.

### Avoid additional freeze-down of deep-water pools harboring over-wintering fish and invertebrates used by fish.

Travel up and down streambeds is prohibited unless it can be demonstrated that there will be no additional impacts from such travel to over-wintering fish or the invertebrates they rely on. Rivers, streams, and lakes shall be crossed at areas of grounded ice whenever possible.

### Minimize the effects of high-intensity acoustic energy from seismic surveys on fish.

- a. When conducting vibroseis-based surveys above potential fish overwintering areas (water 6 feet deep or greater, ice plus liquid depth), operators shall follow recommendations by Morris and Winters (2005): only a single set of vibroseis shots should be conducted if possible; if multiple shot locations are required, these should be conducted with minimal delay; multiple days of vibroseis activity above the same overwintering area should be avoided if possible.
- b. When conducting air gun-based surveys in freshwater, operators shall follow standard marine mitigation measures that are applicable to fish (e.g., MMS 2006): operators will use the lowest sound levels feasible to accomplish their data-collection needs; ramp-up techniques will be utilized (ramp-up involves the gradual increase in emitted sound levels beginning with firing a

single air gun and gradually adding air guns until the desired operating level of the full array is obtained).

- c. When conducting explosive-based surveys, operators shall follow setback distances from fish-bearing waterbodies based on requirements outlined by ADF&G (1991).

Protect fish-bearing rivers, streams, and lakes from blowouts and minimize alteration of riparian habitat.

Exploratory drilling is prohibited in rivers and streams, as determined by the active floodplain, and fish-bearing lakes.

Protect fish-bearing waterbodies, water quality, and aquatic habitats.

Permanent oil and gas facilities, including roads, airstrips, and pipelines, are prohibited upon or within 500 feet as measured from the ordinary high watermark of fish-bearing waterbodies. Essential pipeline and road crossings will be permitted on a case-by-case basis.

Construction camps are prohibited on frozen lakes and river ice. Siting of construction camps on river sand and gravel bars is allowed and encouraged. Where leveling of trailers or modules is required and the surface has a vegetative mat, leveling shall be accomplished through blocking rather than use of a bulldozer.

Maintain free passage of marine and anadromous fish and protect subsistence use and access to subsistence hunting and fishing.

Causeways and docks are prohibited in river mouths or deltas. Artificial gravel islands and bottom-founded structures are prohibited in river mouths or active stream channels on river deltas. Causeways, docks, artificial islands, and bottom-founded drilling structures shall be designed to ensure free passage of marine and anadromous fish and to prevent significant changes to nearshore oceanographic circulation patterns and water quality characteristics. A monitoring program, developed in consultation with appropriate Federal, State, and North Slope Borough regulatory and resource agencies, shall be required to address the objectives of water quality and free passage of fish.

Reduce the potential for ice-jam flooding, impacts to wetlands and floodplains, erosion, alteration of natural drainage patterns, and restriction of fish passage.

Stream and marsh crossings shall be designed and constructed to ensure free passage of fish, reduce erosion, maintain natural drainage, and minimize adverse effects to natural stream flow. Note: Bridges, rather than culverts, are the preferred method for crossing rivers. When necessary, culverts can be constructed on smaller streams, if they are large enough to avoid restricting fish passage or adversely affecting natural stream flow.

Maintain natural spring runoff patterns and fish passage, avoid flooding, prevent streambed sedimentation and scour, protect water quality and protect stream banks.

Crossing of waterway courses shall be made using a low-angle approach. Crossings that are reinforced with additional snow or ice ("bridges") shall be removed, breached, or slotted before spring breakup. Ramps and bridges shall be substantially free of soil and debris.

Ensure the passage of fish at stream crossings.

To ensure that crossings provide for fish passage, all proposed crossing designs shall adhere to the BMPs *Stream Crossing Design Procedure for Fish Streams on the North Slope Coastal Plain* (McDonald

et al. 1994); *Fundamentals of Culvert Design for Passage of Weak-Swimming Fish* (Behlke et al. 1991); and, other peer-reviewed or generally accepted BMPs. To adhere to these BMPs, at least 3 years of hydrologic and fish data shall be collected by the lessee for any proposed crossing of a stream whose structure is designed to occur, wholly or partially, below the stream's ordinary high watermark. These data shall include, but are not limited to, the range of water levels (highest and lowest) at the location of the planned crossing, and the seasonal distribution and composition of fish populations using the stream.

Minimize the disruption of natural flow patterns and changes to water quality; the disruption of natural functions resulting from the loss or change to vegetative and physical characteristics of floodplain and riparian areas; the loss of spawning, rearing or over-wintering habitat for fish; the loss of cultural and paleontological resources; the loss of raptor habitat; impacts to subsistence cabin and campsites; the disruption of subsistence activities; and impacts to scenic and other resource values.

Permanent oil and gas facilities, including gravel pads, roads, airstrips, and pipelines, are prohibited in the streambed and adjacent to the rivers listed below at the distances identified. (Gravel mines may be located within the active floodplain consistent with BMP E-8). On a case-by case basis, and in consultation with federal, State, and North Slope Borough regulatory and resource agencies (as appropriate, based on agency legal authority and jurisdictional responsibility), essential pipeline and road crossings to the main channel will be permitted through setback areas. The above setbacks may not be practical within river deltas. In these situations, permanent facilities shall be designed to withstand a 200-year flood event. In the below list, if no upper limit for the setback is indicated, the setback extends to the head of the stream as identified in the National Hydrography Dataset.

- a. Colville River: a 1-mile setback (2-mile setback in Alternatives B-1 and B-2) from the boundary of NPRA where the river determines the boundary along the Colville River as determined by cadastral survey to be the highest high watermark on the left (western or northern) bank and from both banks ordinary high watermark where BLM-manages both sides of the river up through T5S, R30W, U.M. Above that point to its source at the juncture of Thunder and Storm creeks the setback will be 0.5 mile. Note: The planning area excludes conveyed Native lands along the lower reaches of the Colville River. Development of road crossings intended to support oil and gas activities shall be consolidated with other similar projects and uses to the maximum extent possible. Note: This provision does not apply to intercommunity or other permanent roads constructed with public funds for general transportation purposes, though the BLM would encourage minimal use of the setback area. This preserves the opportunity to plan, design, and construct public transportation systems to meet the economic, transportation, and public health and safety needs of the State of Alaska and/or communities within National Petroleum Reserve-Alaska.
- b. Ikpikpuk River: a 0.5-mile setback from of the ordinary high watermark of the Ikpikpuk River extending from the mouth south to section 19, T7N, R11W, U.M. From section 19, T7N, R11W, U.M., to section 4, T3N, R12W, U.M., a 1-mile setback is required. Beginning at section. 4, T3N, R12W, U.M., a 0.5-mile setback from the centerline (1 mile total) will be required to the confluence of the Kigalik River and Maybe Creek. In Alternative B-1 and B-2, the setback would be 2 miles from the ordinary high watermark from the mouth of the river upstream through T7 N, R11W, U.M.; above that point the setback would be the same as described above in Alternative B-1 and 1 mile in Alternative B-2.
- c. Miguakiak River: a 0.5-mile setback from the bank's ordinary high watermark.
- d. Kikiakrorak and Kogosukruk Rivers: A 1-mile setback from the top of the bluff (or ordinary high watermark if there is no bluff) on the Kikiakrorak River downstream from T2N., R4W, U.M. and on the Kogosukruk River (including Branch of Kogosukruk River, Henry Creek, and two unnamed tributaries off the southern bank) downstream from T2N, R3W, U.M. In Alternatives B-1 and B-2, the setback would be 2 miles from the top of the bluff (or bank if there is no bluff) for the same waterbodies. The setback from these streams in Alternatives B-1 through D in the named

townships and further upstream as applicable will be 0.5 mile from the top of the bluff or bank if there is no bluff.

- e. Fish Creek: a 3-mile setback from the bank's highest high watermark of the creek downstream from the eastern edge of section 31, T11N, R1E., U.M. and a 0.5-mile setback from the bank's highest high watermark farther upstream.
- f. Judy Creek: a 0.5-mile setback from the banks' ordinary high watermark.
- g. Ublutuooh (TiJJmiasuugvik) River: a 0.5-mile setback from the ordinary high water mark.
- h. Alaktak River: a 0.5-mile (1 mile for Alternative B-2) setback from the ordinary high water mark.
- i. Chipp River: a 0.5-mile (1 mile for Alternative B-2) setback from the ordinary high water mark.
- j. Oumalik River: a 0.5-mile setback from the Oumalik River ordinary high water mark from the mouth upstream to section 5, T8N, R14W, U.M., and a 0.5-mile setback in and above section 5, T8N, R14W, U.M.
- k. Titaluk River: a 0.5-mile setback from the centerline. In Alternatives B-1 and B-2, the setback would be 2 miles from the centerline from its confluence with the Ikpiuk River upstream through T7N, R12W, U.M.; above that point the setback would be the same as described above.
- l. Kigalik River: a 0.5-mile setback from the ordinary high water mark.
- m. Maybe Creek: a 0.5-mile setback from the ordinary high water mark.
- n. Topagoruk River: a 0.5-mile (1 mile for Alternative B-2) setback from the ordinary high water mark.
- o. Ishuktak Creek: a 0.5-mile setback from the ordinary high water mark.
- p. Meade River: a 0.5-mile (1 mile for Alternative B-2) setback from the ordinary high water mark on
- q. BLM-managed lands.
- r. Usuktuk River: a 0.5-mile setback (1 mile for Alternative B-2) from the ordinary high water mark on BLM-managed lands.
- s. Pikroka Creek: a 0.5-mile setback from the ordinary high water mark.
- t. Nigisaktuvik River: a 0.5-mile (1 mile for Alternative B-2) setback from the Nigisakturik River ordinary high water mark upstream from the confluence with the Meade River to section 1, T11N, R25W, U.M. and a 0.5-mile setback further upstream.
- u. Inaru River: a 0.5-mile (1 mile for Alternative B-2) setback from the ordinary high water mark.
- v. Kucheak Creek: a 0.5-mile setback from the ordinary high water mark.
- w. Avalik River: a 0.5-mile (1 mile for Alternative B-2) setback from the ordinary high water mark.
- x. Niklavik Creek: a 0.5-mile setback from the ordinary high water mark.
- y. Kugrua River: a 0.5-mile setback from the ordinary high water mark.
- z. Kungok River: a 0.5-mile (1 mile for Alternative B-2) setback from the ordinary high water mark on BLM-managed lands.

*Note - NRPA BMP/ROPs listings beyond this point omitted as there is little application to the 1002 area, and as such, specific sensitive areas need to be identified with specific protective measures.*

### **3a. TERRESTRIAL MAMMALS I: BEARS**

Protect grizzly bear, polar bear, and marine mammal denning and/or birthing locations.

- a. Cross-country use of heavy equipment and seismic activity is prohibited within 0.5 mile of occupied grizzly bear dens identified by the ADF&G unless alternative protective measures are approved by the authorized officer in consultation with the ADF&G.
- b. Cross-country use of heavy equipment and seismic activity is prohibited within 1 mile of known or observed polar bear dens or seal birthing lairs. Operators near coastal areas shall conduct a survey for potential polar bear dens and seal birthing lairs and consult with the FWS and/or NOAA, as appropriate, before initiating activities in coastal habitat between 30 Oct and 15 Apr.

### **3b. TERRESTRIAL MAMMALS II: CARIBOU (CAH/PCH)**

Minimize disruption of caribou movement and subsistence use.

Pipelines and roads shall be designed to allow the free movement of caribou and the safe, unimpeded passage of the public while participating in subsistence activities. Listed below are the accepted design practices:

- a. Above-ground pipelines shall be elevated a minimum of 7 feet as measured from the ground to the bottom of the pipeline at vertical support members.
- b. In areas where facilities or terrain may funnel caribou movement, ramps over pipelines, buried pipelines, or pipelines buried under roads may be required by the authorized officer after consultation with Federal, State, and North Slope Borough regulatory and resource agencies (as appropriate, based on agency legal authority and jurisdictional responsibility).
- c. A minimum distance of 500 feet between pipelines and roads shall be maintained. Separating roads from pipelines may not be feasible within narrow land corridors between lakes and where pipelines and roads converge on a drill pad. Where it is not feasible to separate pipelines and roads, alternative pipeline routes, designs and possible burial within the road will be considered by the authorized officer.
- d. Above-ground pipelines shall have a non-reflective finish.

### **3c. TERRESTRIAL MAMMALS III: OTHER SPECIES**

Subsidized Predators: Avoidance of human-caused increases in populations of predators of ground-nesting birds.

- a. Lessee shall utilize best available technology to prevent facilities from providing nesting, denning, or shelter sites for ravens, raptors, and foxes. The lessee shall provide the authorized officer with an annual report on the use of oil and gas facilities by ravens, raptors, and foxes as nesting, denning, and shelter sites.
- b. Feeding of wildlife is prohibited and will be subject to non-compliance regulations.

### **3d. WILDLIFE - GENERAL CONSIDERATIONS (multiple species)**

Minimize the effects of low-flying aircraft on wildlife, subsistence activities, and local communities.

The lessee shall ensure that aircraft used for permitted activities maintain altitudes according to the following guidelines (Note - this BMP is not intended to restrict flights necessary to survey wildlife to gain information necessary to meet the stated objectives of the stipulations and best management practices. However, flights necessary to gain this information will be restricted to the minimum necessary to collect such data):



- a. Aircraft shall maintain an altitude of at least 1,500 feet above ground level when within 0.5 mile of cliffs identified as raptor nesting sites from 15 Apr through 15 Aug and within 0.5 mile of known Gyrfalcon nest sites from 15 Mar to 15 Aug, unless doing so would endanger human life or violate safe flying practices. Permittees shall obtain information from the BLM necessary to plan flight routes when routes may go near falcon nests.
- b. Aircraft shall maintain an altitude of at least 1,000 feet above ground level (except for takeoffs and landings) over caribou winter ranges from 1 Dec through 1 May 1, unless doing so would endanger human life or violate safe flying practices. Caribou wintering areas will be defined annually by the authorized officer. The BLM will consult directly with the ADF&G in annually defining caribou winter ranges.
- c. Land user shall submit an aircraft use plan as part of an oil and gas exploration or development proposal. The plan shall address strategies to minimize impacts to subsistence hunting and associated activities, including but not limited to the number of flights, type of aircraft, and flight altitudes and routes, and shall also include a plan to monitor flights. Proposed aircraft use plans should be reviewed by appropriate Federal, State, and borough agencies. Consultations with these same agencies will be required if unacceptable disturbance is identified by subsistence users. Adjustments, including possible suspension of all flights, may be required by the authorized officer if resulting disturbance is determined to be unacceptable. The number of takeoffs and landings to support oil and gas operations with necessary materials and supplies should be limited to the maximum extent possible. During the design of proposed oil and gas facilities, larger landing strips and storage areas should be considered to allow larger aircraft to be employed, resulting in fewer flights to the facility.
- d. Use of aircraft, especially rotary wing aircraft, near known subsistence camps and cabins or during sensitive subsistence hunting periods (spring goose hunting and fall caribou and moose hunting) should be kept to a minimum.
- e. Aircraft used for permitted activities shall maintain an altitude of at least 2,000 feet AGL (except for takeoffs and landings) over the Teshekpuk Lake Caribou Habitat Area from 20 May through 20 Aug, unless doing so would endanger human life or violate safe flying practices. Aircraft use (including fixed wing and helicopter) by oil and gas lessees in the Goose Molting Area (Maps 2-3K or 2-4K) should be minimized from 20 May through 20 Aug, unless doing so would endanger human life or violate safe flying practices.
- f. Aircraft used for permitted activities shall maintain an altitude of at least 2,000 feet AGL (except for takeoffs and landings) over the Utukok River Uplands Special Area from 20 May through 20 Aug, unless doing so would endanger human life or violate safe flying practices.
- g. Hazing of wildlife by aircraft is prohibited. Pursuit of running wildlife is hazing. If wildlife begins to run as an aircraft approaches, the aircraft is too close and must break away.
- h. Fixed wing aircraft used as part of a BLM-authorized activity along the coast shall maintain minimum altitude of 2,000 feet and a 0.5-mile buffer from walrus haulouts, unless doing so would endanger human life or violate safe flying practices. Helicopters used as part of a BLM authorized activity along the coast shall maintain minimum altitude of 3,000 feet and a 1-mile buffer from walrus haulouts, unless doing so would endanger human life or violate safe flying practices.
- a. Aircraft used as part of a BLM-authorized activity along the coast and shore fast ice zone shall maintain minimum altitude of 3,000 feet and a buffer of 1 mile from aggregations of seals, unless doing so would endanger human life or violate safe flying practices.



#### 4. BIRDS

Prevention of migrating waterfowl, including species listed under the Endangered Species Act, from striking oil and gas and related facilities during low light conditions.

Illumination of all structures between 1 Aug and 31 Oct shall be designed to direct artificial exterior lighting inward and downward, rather than upward and outward, unless otherwise required by the FAA.

Minimize the take of bird species, particularly those listed under the Endangered Species Act and ~~BLM Special-Status Species~~ FWS *Birds of Conservation Concern* (FWS 2008) from direct or indirect interaction with oil and gas facilities.

In accordance with the guidance below, before the approval of facility construction, aerial surveys of the following species shall be conducted within any area proposed for development.

##### Special Conditions in Spectacled and/or Steller's Eiders Habitats

- a. Surveys shall be conducted by the lessee for at least 3 years before authorization of construction, if such construction is within the FWS North Slope eider survey area and at least 1 year outside that area. Results of aerial surveys and habitat mapping may require additional ground nest surveys. Spectacled and/or Steller's eider surveys shall be conducted following accepted BLM-protocol. Information gained from these surveys shall be used to make infrastructure siting decisions as discussed in subparagraph b, below.
- b. If spectacled and/or Steller's eiders are determined to be present within the proposed development area, the applicant shall work with the FWS and BLM early in the design process to site roads and facilities in order to minimize impacts to nesting and brood-rearing eiders and their preferred habitats. Such consultation shall address timing restrictions and other temporary mitigating measures, location of permanent facilities, placement of fill, alteration of eider habitat, aircraft operations, and management of high noise levels.
- c. To reduce the possibility of spectacled and/or Steller's Eiders colliding with above-ground utility lines (power and communication), such lines shall either be buried in access roads or suspended on vertical support members except in rare cases which are to be few in number and limited in extent. Exceptions are limited to the following situations, and must be reported to the FWS when exceptions are authorized:
  1. Overhead power or communication lines may be allowed when located entirely within the boundaries of a facility pad;
  2. Overhead power or communication lines may be allowed when engineering constraints at the specific and limited location make it infeasible to bury or connect the lines to a vertical support member; or
  3. Overhead power or communication lines may be allowed in situations when human safety would be compromised by other methods.
- d. To reduce the likelihood of spectacled and/or Steller's Eiders colliding with communication towers, towers should be located, to the extent practicable, on existing pads and as close as possible to buildings or other structures, and on the east or west side of buildings or other structures if possible. Support wires associated with communication towers, radio antennas, and other similar facilities, should be avoided to the extent practicable. If support wires are necessary, they should be clearly marked along their entire length to improve visibility to low-flying birds. Such markings shall be developed through consultation with the FWS.

Avoid and reduce temporary impacts to productivity from disturbance near Steller's and/or Spectacled Eider nests.

Ground-level activity (by vehicle or on foot) within 200 meters of occupied Steller's and/or Spectacled Eider nests, from 1 Jun through 15 Aug, will be restricted to existing thoroughfares, such as pads and roads. Construction of permanent facilities, placement of fill, alteration of habitat, and introduction of high noise levels within 200 meters of occupied Steller's and/or spectacled eider nests will be prohibited. In instances where summer (1 Jun through 15 Aug) support/construction activity must occur off existing thoroughfares, FWS-approved nest surveys must be conducted during mid-June prior to the approval of the activity. Collected data will be used to evaluate whether the action could occur based on employment of a 200-meter buffer around nests or if the activity would be delayed until after mid-August once ducklings are mobile and have left the nest site. The BLM will also work with the FWS to schedule oil spill response training in riverine, marine, and inter-tidal areas that occurs within 200 meters of shore outside sensitive nesting/brood-rearing periods or conduct nest surveys. The protocol and timing of nest surveys for Steller's and/or Spectacled Eiders will be determined in cooperation with the FWS, and must be approved by the FWS. Surveys should be supervised by biologists who have previous experience with Steller's and/or Spectacled Eider nest surveys.

#### Special Conditions in Yellow-billed Loon Habitats

- a. Aerial surveys shall be conducted by the lessee for at least 3 years before authorization of construction of facilities proposed for development which are within 1 mile of a lake 25 acres or larger in size. These surveys along shorelines of large lakes shall be conducted following accepted BLM protocol during nesting in late Jun and during brood rearing in late Aug.
- b. Should yellow-billed loons be present, the design and location of facilities must be such that disturbance is minimized. The default standard mitigation is a 1-mile buffer around all recorded nest sites and a minimum 1,625-foot (500-meter) buffer around the remainder of the shoreline. Development will generally be prohibited within buffers unless no other option exists.

#### Raptors: prevent or minimize the loss of nesting habitat for cliff nesting.

- a. Removal of greater than 100 cubic yards of bedrock outcrops, sand, and/or gravel from cliffs shall be prohibited.
- b. Any extraction of sand and/or gravel from an active river or stream channel shall be prohibited unless preceded by a hydrological study that indicates no potential impact by the action to the integrity of the river bluffs.

#### Raptors: prevent or minimize the loss due to electrocution by powerlines.

Comply with the most up-to-date industry-accepted suggested practices for raptor protection on powerlines. Current accepted standards were published in *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (Avian Power Line Interaction Committee as updated and warranted).

#### Protections for Birds

- a. To reduce the possibility of birds colliding with above-ground utility lines (power and communication), such lines shall either be buried in access roads or suspended on vertical support members except in rare cases, which are to be few in number and limited in extent. Exceptions are limited to the following situations:
  1. Overhead power or communication lines may be allowed when located entirely within the boundaries of a facility pad;
  2. Overhead power or communication lines may be allowed when engineering constraints at the specific and limited location make it infeasible to bury or connect the lines to a vertical support member; or

3. Overhead power or communication lines may be allowed in situations when human safety would be compromised by other methods.
- b. To reduce the likelihood of birds colliding with communication towers, towers should be located, to the extent practicable, on existing pads and as close as possible to buildings or other structures, and on the east or west side of buildings or other structures if possible. Support wires associated with communication towers, radio antennas, and other similar facilities, should be avoided to the extent practicable. If support wires are necessary, they should be clearly marked along their entire length to improve visibility to low-flying birds. Such markings shall be developed through consultation with the FWS.

## 5. WILDERNESS RECREATIONAL VALUES

Manage permitted activities to meet Visual Resource Management (VRM) class objectives described below.

**Class I:** Natural ecological changes and very limited management activity are allowed. The level of change to the characteristic landscape should be very low and must not attract attention.

**Class II:** The level of change to the characteristic landscape should be low. Management activities may be seen, but should not dominate the view of the casual observer. Any changes should repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

**Class III:** The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

**Class IV:** The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize impacts through location and design by repeating form, line, color, and texture.

At the time of application for construction of permanent facilities, the lessee/permittee shall, after consultation with the authorized officer, submit a plan to best minimize visual impacts, consistent with the VRM class for the lands on which facilities would be located. A photo simulation of the proposed facilities may be a necessary element of the plan.

## 6. RESTORATION AND REHABILITATION OF ABANDONED OILFIELDS

Ensure long-term reclamation of land to its previous condition and use.

Prior to final abandonment, land used for oil and gas infrastructure—including but not limited to well pads, production facilities, access roads, and airstrips—shall be reclaimed to ensure eventual restoration of ecosystem function. The leaseholder shall develop and implement an abandonment and reclamation plan approved by the BLM. The plan shall describe short-term stability, visual, hydrological, and productivity objectives and steps to be taken to ensure eventual ecosystem restoration to the lands' previous hydrological, vegetative, and habitat condition. The BLM may grant exceptions to satisfy stated environmental or public purposes.

NRPA IAP EIS (BLM 2012) 6Apr2018



THE SECRETARY OF THE INTERIOR  
WASHINGTON

ORDER NO. 3355

Subject: Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807, "Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects"

**Sec. 1 Purpose.** This Order is intended to: 1) immediately implement certain improvements to National Environmental Policy Act (NEPA) reviews conducted by the Department of the Interior (Department); 2) begin assessment of additional such opportunities; and 3) begin implementation of Executive Order 13807 of August 15, 2017, "Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects" (E.O. 13807).

**Sec. 2 Authorities.** This Order is issued under the authority of section 2 of Reorganization Plan No. 3 of 1950 (64 Stat. 1262), as amended. Other statutory authorities for this Order include, but are not limited to, NEPA, 42 U.S.C. 4321-4347.

**Sec. 3 Background.** The Department has broad responsibilities to manage Federal lands and resources for the public's benefit. The NEPA applies to the execution of many of the Department's responsibilities with the goal of ensuring that information regarding environmental impacts is available to decisionmakers and the public before decisions are made. The NEPA accomplishes this goal by requiring Federal agencies to prepare an Environmental Impact Statement (EIS) for major Federal actions significantly affecting the quality of the human environment.

Both the Department and the Council on Environmental Quality (CEQ) have issued regulations to implement NEPA. Because the purpose of NEPA's requirements is not the generation of paperwork, but the adoption of sound decisions based on an informed understanding of environmental consequences, the regulations encourage agencies to: 1) focus on issues that truly matter rather than amassing unnecessary detail; 2) reduce paperwork, including by setting appropriate page limits; 3) discuss briefly issues that are not significant; and 4) prepare analytic (rather than encyclopedic) documents, among other measures.

In recognition of the impediments to efficient development of public and private projects that can be created by needlessly complex NEPA analysis, I am issuing this Order to enhance and modernize the Department's NEPA processes, with immediate focus on bringing even greater discipline to the documentation of the Department's analyses and identifying opportunities to further increase efficiencies.

This NEPA-streamlining effort dovetails with E.O. 13807. Among other requirements, E.O. 13807 requires CEQ to take actions to enhance and modernize the Federal environmental review process and to form an inter-agency working group to identify agency-specific

impediments to efficient and effective reviews for covered infrastructure projects. This Order begins implementation of E.O. 13807 in the context of the Department's overall effort to streamline the NEPA process.

#### Sec. 4 **Directives.**

##### a. Setting Page and Timing Limitations for Environmental Impact Statements.

(1) To implement the longstanding directives in 43 C.F.R. 46.405, and in 40 C.F.R. 1500.4 and 1502.7, all EISs 1) for which a bureau is the lead agency and 2) that have not reached the drafting stage shall not be more than 150 pages or 300 pages for unusually complex projects, excluding appendices. Approval of the Assistant Secretary with responsibility for the matter, in coordination with the Solicitor, is required to produce an EIS exceeding the above stated page limitations. In instances of EISs prepared with bureaus serving as co-leads, each responsible Assistant Secretary shall approve any deviations from this policy. To meet the page limitations, each preparer should focus on various techniques such as tiering or incorporation by reference.

(2) To ensure timely completion of EISs, and consistent with the timelines established for major infrastructure projects in E.O. 13807, each bureau shall have a target to complete each Final EIS for which it is the lead agency within 1 year from the issuance of a Notice of Intent (NOI) to prepare an EIS. The initial timeline must be developed by the lead bureau before issuing the NOI in accordance with 43 C.F.R. 46.240, taking into account all relevant timing factors listed therein, including any constraints required by cooperating agencies. An updated timeline should be prepared as needed during the development of the EIS (e.g., at the completion of scoping or if additional time is provided for public comment). Timelines exceeding the target by more than 3 months must be approved by the Assistant Secretary with responsibility for the matter. In instances of EISs prepared with bureaus serving as co-leads, each responsible Assistant Secretary must approve any deviations from this policy.

b. Setting Target Page and Timing Limitations for the Preparation of Environmental Assessments. Within 30 days, each bureau head shall provide to the Deputy Secretary through its supervising Assistant Secretary a proposal for target page limitations and time deadlines for the preparation of environmental assessments. Any common impediments to achieving the proposed targets should also be identified. In developing its proposal, each bureau should consider guidance from CEQ on the page length of environmental assessments. (Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18,026, 18,037, Question and Answer 36a. (Mar. 23, 1981)).

##### c. Additional NEPA-Streamlining Review.

(1) The Deputy Secretary will coordinate a review of the Department's NEPA procedures to identify additional ways to streamline the completion of NEPA responsibilities. The review will include, but is not limited to, the following areas:



(a) bureau/office NEPA regulations, policies, guidance, and processes to identify: 1) impediments to efficient and effective reviews; 2) best practices and whether they can be implemented more widely; and 3) whether the Department should consider establishing additional categorical exclusions or revising current ones;

(b) requirements and process improvements under Title 41 of the Fixing America's Surface Transportation (FAST) Act, 42 U.S.C. 4370m-1(c)(1)(D), to determine whether any best practices can be broadly applied, including to projects beyond the terms of the FAST Act;

(c) requirements and process improvements required by E.O. 13807, to determine whether any best practices can be broadly applied, including to any projects beyond the terms of E.O. 13807; and

(d) CEQ NEPA regulations and guidance to assess whether to recommend changes to facilitate agency processes.

(2) Within 30 days of the effective date of this Order, each Assistant Secretary, in coordination with bureau heads, should provide recommendations for actions to streamline the NEPA process to include potential regulatory revisions, development of revised or additional categorical exclusions, revised or new guidance or policies, and recommendations on streamlining the siting process.

d. Implementation of E.O. 13807. The Deputy Secretary will also coordinate implementation of E.O. 13807.

(1) In order to begin implementation of E.O. 13807, each Assistant Secretary, in coordination with the bureau heads, is hereby directed to identify:

(a) potential impediments to efficient and effective reviews for infrastructure and develop an action plan to address such impediments as a subset of the review required in Sec. 4c(1)(a) above;

(b) potential actions that could be taken by CEQ to facilitate a review of major infrastructure projects, as a subset of the review required in Sec. 4c(1)(d) above; and

(c) pending proposals for major infrastructure projects, as defined in E.O. 13807 and that are not yet the subject of a NOI issued by the Department, that could be candidates for the "One Federal Decision" process.

(2) Within 30 days of the effective date of this Order, each Assistant Secretary, in coordination with the bureau heads, should provide the information requested in Sec. 4d(1)(a)-(c) above.

**Sec. 5 Implementation.** The Deputy Secretary is responsible for implementing all aspects of this Order, in coordination with the Solicitor and the Assistant Secretaries.



**Sec. 6 Effect of the Order.** This Order is intended to improve the internal management of the Department. This Order and any resulting report or recommendations are not intended to, and do not, create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its departments, agencies, instrumentalities or entities, its officer or employees, or any other person. To the extent there is any inconsistency between the provisions of this Order and any Federal laws or regulations, the laws or regulations will control.

**Sec. 7 Expiration Date.** This Order is effective immediately and will remain in effect until it is amended, superseded, or revoked, whichever occurs first.

Date: AUG 31 2017

Deputy Secretary  


“(ii) reserves (other than deficiency, contingency, or unearned premium reserves) for life and health insurance risks and life and health insurance claims with respect to contracts providing coverage for mortality or morbidity risks.

“(B) LIMITATIONS ON AMOUNT OF LIABILITIES.—Any amount determined under clause (i) or (ii) of subparagraph (A) shall not exceed the lesser of such amount—

“(i) as reported to the applicable insurance regulatory body in the applicable financial statement described in paragraph (4)(A) (or, if less, the amount required by applicable law or regulation), or

“(ii) as determined under regulations prescribed by the Secretary.

“(4) OTHER DEFINITIONS AND RULES.—For purposes of this subsection—

“(A) APPLICABLE FINANCIAL STATEMENT.—The term ‘applicable financial statement’ means a statement for financial reporting purposes which—

“(i) is made on the basis of generally accepted accounting principles,

“(ii) is made on the basis of international financial reporting standards, but only if there is no statement that meets the requirement of clause (i), or

“(iii) except as otherwise provided by the Secretary in regulations, is the annual statement which is required to be filed with the applicable insurance regulatory body, but only if there is no statement which meets the requirements of clause (i) or (ii).

“(B) APPLICABLE INSURANCE REGULATORY BODY.—The term ‘applicable insurance regulatory body’ means, with respect to any insurance business, the entity established by law to license, authorize, or regulate such business and to which the statement described in subparagraph (A) is provided.”.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2017.

**SEC. 14502. REPEAL OF FAIR MARKET VALUE METHOD OF INTEREST EXPENSE APPORTIONMENT.**

(a) IN GENERAL.—Paragraph (2) of section 864(e) is amended to read as follows:

“(2) GROSS INCOME AND FAIR MARKET VALUE METHODS MAY NOT BE USED FOR INTEREST.—All allocations and apportionments of interest expense shall be determined using the adjusted bases of assets rather than on the basis of the fair market value of the assets or gross income.”.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to taxable years beginning after December 31, 2017.

## TITLE II

**SEC. 20001. OIL AND GAS PROGRAM.**

(a) DEFINITIONS.—In this section:

(1) COASTAL PLAIN.—The term “Coastal Plain” means the area identified as the 1002 Area on the plates prepared by

the United States Geological Survey entitled “ANWR Map – Plate 1” and “ANWR Map – Plate 2”, dated October 24, 2017, and on file with the United States Geological Survey and the Office of the Solicitor of the Department of the Interior.

(2) SECRETARY.—The term “Secretary” means the Secretary of the Interior, acting through the Bureau of Land Management.

(b) OIL AND GAS PROGRAM.—

(1) IN GENERAL.—Section 1003 of the Alaska National Interest Lands Conservation Act (16 U.S.C. 3143) shall not apply to the Coastal Plain.

(2) ESTABLISHMENT.—

(A) IN GENERAL.—The Secretary shall establish and administer a competitive oil and gas program for the leasing, development, production, and transportation of oil and gas in and from the Coastal Plain.

(B) PURPOSES.—Section 303(2)(B) of the Alaska National Interest Lands Conservation Act (Public Law 96–487; 94 Stat. 2390) is amended—

(i) in clause (iii), by striking “and” at the end;

(ii) in clause (iv), by striking the period at the end and inserting “; and”; and

(iii) by adding at the end the following:

“(v) to provide for an oil and gas program on the Coastal Plain.”.

(3) MANAGEMENT.—Except as otherwise provided in this section, the Secretary shall manage the oil and gas program on the Coastal Plain in a manner similar to the administration of lease sales under the Naval Petroleum Reserves Production Act of 1976 (42 U.S.C. 6501 et seq.) (including regulations).

(4) ROYALTIES.—Notwithstanding the Mineral Leasing Act (30 U.S.C. 181 et seq.), the royalty rate for leases issued pursuant to this section shall be 16.67 percent.

(5) RECEIPTS.—Notwithstanding the Mineral Leasing Act (30 U.S.C. 181 et seq.), of the amount of adjusted bonus, rental, and royalty receipts derived from the oil and gas program and operations on Federal land authorized under this section—

(A) 50 percent shall be paid to the State of Alaska;

and

(B) the balance shall be deposited into the Treasury as miscellaneous receipts.

(c) 2 LEASE SALES WITHIN 10 YEARS.—

(1) REQUIREMENT.—

(A) IN GENERAL.—Subject to subparagraph (B), the Secretary shall conduct not fewer than 2 lease sales area-wide under the oil and gas program under this section by not later than 10 years after the date of enactment of this Act.

(B) SALE ACREAGES; SCHEDULE.—

(i) ACREAGES.—The Secretary shall offer for lease under the oil and gas program under this section—

(I) not fewer than 400,000 acres area-wide in each lease sale; and

(II) those areas that have the highest potential for the discovery of hydrocarbons.

(ii) SCHEDULE.—The Secretary shall offer—

(I) the initial lease sale under the oil and gas program under this section not later than 4 years after the date of enactment of this Act; and

(II) a second lease sale under the oil and gas program under this section not later than 7 years after the date of enactment of this Act.

(2) RIGHTS-OF-WAY.—The Secretary shall issue any rights-of-way or easements across the Coastal Plain for the exploration, development, production, or transportation necessary to carry out this section.

(3) SURFACE DEVELOPMENT.—In administering this section, the Secretary shall authorize up to 2,000 surface acres of Federal land on the Coastal Plain to be covered by production and support facilities (including airstrips and any area covered by gravel berms or piers for support of pipelines) during the term of the leases under the oil and gas program under this section.

**SEC. 20002. LIMITATIONS ON AMOUNT OF DISTRIBUTED QUALIFIED OUTER CONTINENTAL SHELF REVENUES.**

Section 105(f)(1) of the Gulf of Mexico Energy Security Act of 2006 (43 U.S.C. 1331 note; Public Law 109–432) is amended by striking “exceed \$500,000,000 for each of fiscal years 2016 through 2055.” and inserting the following: “exceed—

“(A) \$500,000,000 for each of fiscal years 2016 through 2019;

“(B) \$650,000,000 for each of fiscal years 2020 and 2021; and

“(C) \$500,000,000 for each of fiscal years 2022 through 2055.”.

**SEC. 20003. STRATEGIC PETROLEUM RESERVE DRAWDOWN AND SALE.**

(a) DRAWDOWN AND SALE.—

(1) IN GENERAL.—Notwithstanding section 161 of the Energy Policy and Conservation Act (42 U.S.C. 6241), except as provided in subsections (b) and (c), the Secretary of Energy shall draw down and sell from the Strategic Petroleum Reserve 7,000,000 barrels of crude oil during the period of fiscal years 2026 through 2027.

(2) DEPOSIT OF AMOUNTS RECEIVED FROM SALE.—Amounts received from a sale under paragraph (1) shall be deposited in the general fund of the Treasury during the fiscal year in which the sale occurs.

(b) EMERGENCY PROTECTION.—The Secretary of Energy shall not draw down and sell crude oil under subsection (a) in a quantity that would limit the authority to sell petroleum products under subsection (h) of section 161 of the Energy Policy and Conservation Act (42 U.S.C. 6241) in the full quantity authorized by that subsection.

# Coastal Plain Oil and Gas Leasing Program EIS

## Internal Scoping Meeting Agenda

May 3, 2018

BLM Alaska State Office, Anchorage, AK  
Denali Conference Room

Dial-in Phone: (b) (5) CIP  
Passcode: (b) (5) CIP

### Desired Outcomes

- ☐ Understanding of program background, purpose and need, proposed action, and overall schedule
- ☐ Understanding of the issues of concern
- ☐ Identify connected, cumulative, or similar actions with program
- ☐ Identify data gaps/data needs
- ☐ General EIS outline and content
- ☐ Details on external scoping and public meetings
- ☐ Next steps and action items

| Time          | Agenda Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | FWS Reps                                                                                                                                                                                                                          |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:30 – 8:45   | Welcome and Introductions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                   |
| 8:45 – 9:15   | Program Overview <ul style="list-style-type: none"> <li><input type="checkbox"/> Goal of program / kick-off message (BLM/EMPSi)</li> <li><input type="checkbox"/> Summary of program to date / Section 20001 Tax Act (BLM)</li> <li><input type="checkbox"/> Program area and decision space (BLM)</li> <li><input type="checkbox"/> Purpose and need/proposed action (BLM)</li> <li><input type="checkbox"/> Expectations for the EIS / SO 3355 (BLM/EMPSi)</li> <li><input type="checkbox"/> Public scoping</li> <li><input type="checkbox"/> Schedule (BLM/EMPSi)</li> </ul> | All Subject Matter<br>Experts identified for<br>the day plus...<br>Steve B<br>Joanna<br>Doug<br>Mitch<br>Soch<br>Mary/Patrick<br>Eric/Rick<br>Carl/Josh<br>Andrea/Sara<br>Stephanie<br>Tracy<br>John T<br>John M<br>Drew<br>Wendy |
| 9:15 – 10:00  | Renewable Resources Issues and Data Discussion. Includes, <ul style="list-style-type: none"> <li><input type="checkbox"/> Air quality/climate</li> <li><input type="checkbox"/> Water resources/hydrology</li> <li><input type="checkbox"/> Geology/soils/permafrost</li> </ul>                                                                                                                                                                                                                                                                                                 | John<br>Greta<br>Josh Rose<br>Angela Matz<br>Randy<br>Rick<br>Tim Allen (NRPC)<br>Catherine Collins (NRPC)<br>Jill Webster (NRPC)<br>Tamara McCandless<br>(NRPC)                                                                  |
| 10:00 – 10:10 | BREAK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |





|               |                                                                                                                                                                                                                                                      |                                                                                                       |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 10:10 – 11:00 | Renewable Resources Issues and Data Discussion. Includes,<br><input type="checkbox"/> Cultural/historic resources<br><input type="checkbox"/> Subsistence<br><input type="checkbox"/> Paleontological resources                                      | Hollis<br>Carl/Josh Ream<br>Ed                                                                        |
| 11:00 – 12:15 | Renewable Resources Issues and Data Discussion. Includes,<br><input type="checkbox"/> Vegetation<br><input type="checkbox"/> Wildlife, fish, aquatic species<br><input type="checkbox"/> Special status species<br><input type="checkbox"/> Wildfire | Randy<br>Greta<br>Steve A<br>Chris Latty<br>Eric/Rick<br>Ryan Wilson<br>Christopher P<br>Peter<br>Ted |
| 12:15 – 1:15  | LUNCH                                                                                                                                                                                                                                                |                                                                                                       |
| 1:15 – 2:00   | Human Environment and Special Designations. Includes,<br><input type="checkbox"/> Recreation<br><input type="checkbox"/> Transportation and access<br><input type="checkbox"/> Noise<br><input type="checkbox"/> Visual                              | Tracy-in training<br>Jen Reed-out of town<br>Alfredo<br>Susan LaKonski<br>Roger                       |

| Time        | Agenda Item                                                                                                                                                          | Facilitator(s)                            |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|             | <input type="checkbox"/> Special Designations                                                                                                                        | Ryan and Christopher                      |
| 2:00 – 2:45 | Non-Renewable Resources. Includes,<br><input type="checkbox"/> Petroleum<br><input type="checkbox"/> Sand and gravel<br><input type="checkbox"/> Hazardous materials | Patrick O'Dell<br>(Denver)<br>Angela Matz |
| 2:45 – 2:55 | BREAK                                                                                                                                                                |                                           |
| 2:55 – 3:45 | Socioeconomics. Includes,<br><input type="checkbox"/> Socioeconomics<br><input type="checkbox"/> Environmental justice                                               | Hollis<br>Carl<br>Joshua Ream             |
| 3:45 – 4:15 | Connected, cumulative, or similar actions                                                                                                                            | John Martin                               |
| 4:15 – 4:30 | Next Steps and Actions                                                                                                                                               |                                           |
| 4:30        | END FOR DAY                                                                                                                                                          |                                           |



**From:** [Wixon, Donna](#)  
**To:** [Lonnie Bryant](#); [Sarah LaMarr](#); [Sarah Conn](#); [Joanna Fox](#); [Robert Brumbaugh](#); [John Trawicki](#); [Christopher Latty](#); [Hollis Twitchell](#); [Stephanie Brady](#); [Joshua Rose](#); [Roger Kaye](#); [Serena Sweet](#); [Ted Swem](#); [Greta Burkart](#); [Joseph Keeney](#); [Murphy, Ted](#); [Steve Berendzen](#); [kdebenham](#); [Terra Meares](#); [Stacey](#); [Stephen Arthur](#); [Shelly Jacobson](#); [Wendy Loya](#); [Richard Kemnitz](#); [Debbie](#); [Matthew Whitman](#); [Timothy Vosburgh](#); [Lynnda Kahn](#); [Mary Colligan](#)  
**Subject:** Seismic Application and updated Agenda - Friday May 4  
**Date:** Thursday, May 3, 2018 7:26:45 PM  
**Attachments:** [Final Agenda Coastal Plain Seismic Meeting.docx](#)  
[Marsh Creek Plan of Operations V8.1 F.pdf](#)

---

Hello All,

I am attaching the seismic application that we just received and an updated agenda.

See you tomorrow.

Thank-you,

Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
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907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)

| Time        | Agenda Item                                                                                                                                               | Facilitator(s)                   |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| 10:30-10:40 | Welcome and Introductions<br>Goal of Meeting                                                                                                              | Shelly Jones<br>Ted Murphy       |
| 10:40-10:45 | Application/<br>Proposed Action                                                                                                                           | Donna Wixon                      |
| 10:45-11:30 | EA <ul style="list-style-type: none"> <li>• Process Overview</li> <li>• Roles and Responsibilities</li> <li>• BMPs from NPR-A Seismic Projects</li> </ul> | Serena Sweet<br><br>Donna Wixon  |
| 11:30-12:00 | Seismic Overview <ul style="list-style-type: none"> <li>• BLM Regulations</li> <li>• Seismic Equipment/Operations</li> </ul>                              | Rob Brumbaugh<br><br>Donna Wixon |
| 12:00-12:20 | Polar Bear Consultation                                                                                                                                   | USFWS                            |
| 12:20-12:30 | Next Steps                                                                                                                                                | All                              |
| 12:30       | Adjourn                                                                                                                                                   |                                  |

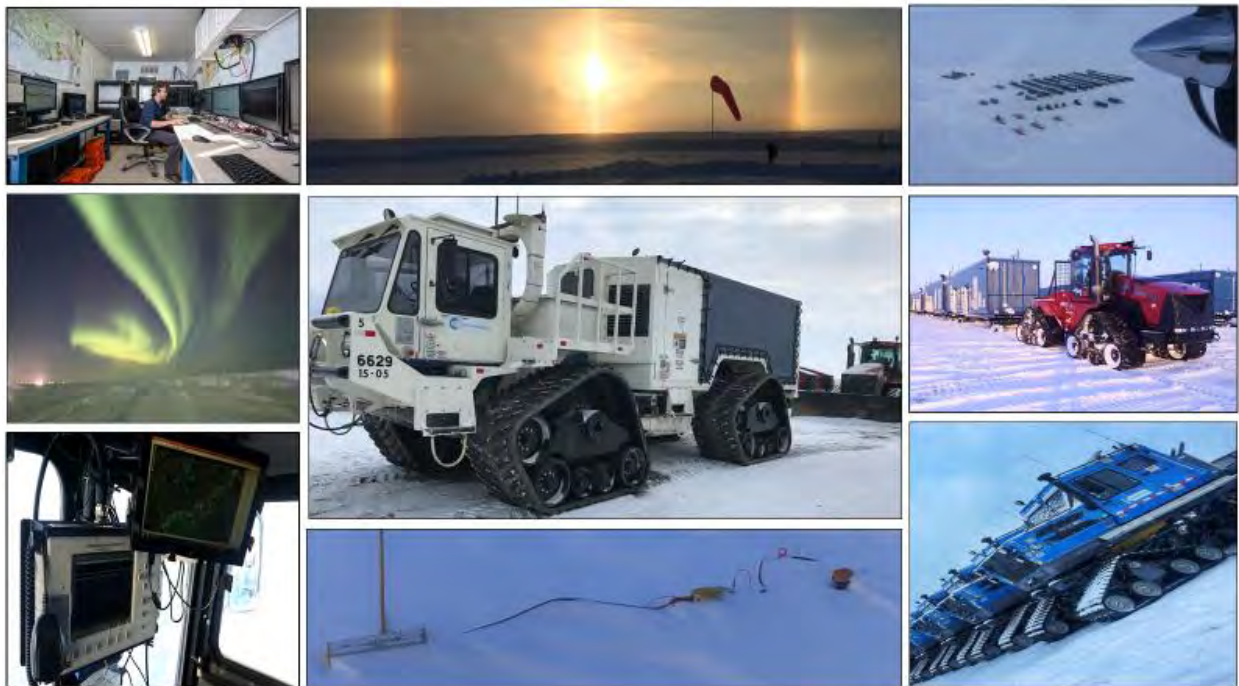


# Marsh Creek 3D

## PLAN OF OPERATIONS WINTER SEISMIC SURVEY

Submitted by:

SAExploration, Inc.  
8240 Sandlewood Pl- Suite 102  
Anchorage, AK 99507



## Table of Contents

|      |                                                |    |
|------|------------------------------------------------|----|
| 1.0  | Introduction.....                              | 3  |
| 2.0  | Scope.....                                     | 3  |
| 3.0  | Location .....                                 | 3  |
| 4.0  | Environmental Management .....                 | 4  |
| 5.0  | Cultural Interface .....                       | 5  |
| 6.0  | Oversight Panel .....                          | 5  |
| 7.0  | Crew Integrity .....                           | 5  |
| 8.0  | Permit Requirements.....                       | 6  |
| 9.0  | Mobilization and Access .....                  | 7  |
| 10.0 | Survey and Ice check .....                     | 8  |
| 11.0 | River Crossings .....                          | 8  |
| 12.0 | Willow Protocol .....                          | 8  |
| 13.0 | Recording Operations.....                      | 9  |
| 14.0 | Camp Facilities .....                          | 9  |
| 15.0 | Water Withdrawal .....                         | 10 |
| 16.0 | Temporary Snow Airstrips .....                 | 10 |
| 17.0 | Fuel Supply and Storage .....                  | 11 |
| 18.0 | Waste Management.....                          | 11 |
| 19.0 | Wildlife .....                                 | 12 |
| 20.0 | Historic and Cultural Resources.....           | 12 |
| 21.0 | Communication & Supervision.....               | 12 |
| 22.0 | Appendices.....                                | 14 |
|      | Appendix A: Project Area Maps .....            | 15 |
|      | Appendix B: Equipment List Per Crew.....       | 17 |
|      | Appendix C: Example of Mobilization Route..... | 18 |
|      | Appendix D: Equipment Pictures.....            | 19 |
|      | Appendix E: Example of Temporary Airstrip..... | 22 |
|      | Appendix F: Wildlife Interaction Plan .....    | 23 |

# Marsh Creek Plan of Operations

## *Winter Plan of Operations 2018 Project Description*

### **1.0 Introduction**

SAExploration, Inc (SAE), along with our partners, Arctic Slope Regional Corporation (ASRC) and Kaktovik Iñupiat Corporation (KIC), is pleased to submit their plan of operations for the Marsh Creek 3D Program. Together ASRC, KIC, and SAE, through its joint venture with the Kuukpik Corporation (Kuukpik-SAE), are in the process of forming a joint venture, Iñupiat Geophysical Partnership, LLC. SAE is requesting permits on behalf of its partners to conduct a seismic survey within the 1002 Area of the Arctic National Wildlife Refuge (ANWR) beginning during the winter season of 2018-2019 initially. SAE will be the operator conducting seismic operations during open tundra travel winter season within this boundary with an estimated start date of December 10<sup>th</sup>, 2018 with ice checking and continuing until the close of tundra or the sea ice deteriorates. Land ownership within this boundary area is primarily federal lands that fall within the Arctic National Wildlife Refuge 1002 area, Native Corporation land owned by ASRC and KIC, and private lands all within the North Slope Borough.

### **2.0 Scope**

SAE is proposing to acquire seismic data from within ANWR with the opening of the coastal plain area (1002) for oil exploration. SAE would like to be the entity that initiates the exploration phase of the 1002 Area, this area represents the interests of the people of the local communities. SAE will use the best available technology, to acquire better quality and higher resolution seismic data, using new recording methodology to image potential targets for future lease sales. SAE would support two (2) crews each winter season for two (2) winter seasons to complete the acquisition of the seismic program. This plan of operations will cover the winter seasons of 2018-2019 and 2019-2020, starting approximately December 1<sup>st</sup> each winter season and ending on May 31<sup>st</sup>, or tundra closure.

### **3.0 Location**

The survey permit area encompasses approximately 2602 sq. miles. The project area will include parts, or all the following townships:

All of:

U003N034E, U003N035E, U003N036E, U004N031E, U004N032E, U004N033E  
U004N034E, U004N035E, U004N036E, U004N037E, U005N024E, U005N025E  
U005N026E, U005N027E, U005N028E, U005N029E, U005N030E, U005N031E  
U005N032E, U005N033E, U005N034E, U005N035E, U005N036E, U005N037E  
U006N024E, U006N025E, U006N026E, U006N027E, U006N028E, U006N029E  
U006N030E, U006N031E, U006N032E, U006N033E, U006N034E, U006N035E

U006N036E, U006N037E, U006N038E, U007N024E, U007N025E, U007N026E  
U007N027E, U007N031E, U007N032E, U007N033E, U007N034E, U007N035E  
U007N036E, U007N037E, U008N025E, U008N026E, U008N033E, U008N034E  
U008N035E, U008N036E,

Part of:

U009N024E, U009N025E, U009N026E, U009N032E, U009N033E, U009N034E  
U009N035E, U009N036E, U008N024E, U008N027E, U008N028E, U008N030E  
U008N031E, U008N032E, U008N037E, U008N038E, U007N023E, U007N028E  
U007N029E, U007N030E, U007N038E, U007N039E, U006N023E, U006N039E  
U006N040E, U005N023E, U005N038E, U005N039E, U005N040E, U004N038E  
U004N039E, U003N037E, U003N038E

The program areas are defined by the enclosed boundary map in Appendix A.

## 4.0 Environmental Management

This partnership is dedicated to minimizing the effect of our operations on the environment. We are unified in a commitment to environmental excellence and continuous improvement. We will constantly assess our impact on the environment, and will apply what we have learned over the past several years to each new project.

“Environmental management is not just the job of a few specialists - it is a crucial and integral part of our day-to-day business and an environmental culture for our seismic projects.” Our experience on the tundra and sea ice has enabled us to manage and develop equipment and procedure to minimize environmental impact caused by seismic operations. This type of health, safety and environment (HSE) management has enable us to successfully implement many environmental improvements a few are listed below:

- Reduce the number of equipment on the tundra, through new technology, thereby has reduced the total environmental impact of the crew.
- The use of articulating, rubber tracked, low ground pressure vehicles has minimized the compaction of the tundra and risk of damage when vehicles are turning.
- Reduced vehicle size
- Many modifications of seismic equipment have minimized the risk of hydrocarbon spills to the tundra.
  - o Containments systems
  - o High resolution rear mounted vehicle monitoring cameras, aids in spill detection.
  - o Daily and weekly maintenance of equipment.
  - o Daily equipment inspections.
  - o Hourly equipment walk-arounds.
  - o The use of biodegradable, environmentally sensitive products is number one priority when operating in delicate regions such as the NPRA and ANWR. This includes lubricants, hydraulic fluids, greases and glycol that

have readily biodegradable based oils that are virtually non-toxic, still delivering maximum protection to our equipment aiding in preventing breakdowns.

## **5.0 Cultural Interface**

SAE will coordinate its seismic activities with the local communities and villages to mitigate and to prevent potential conflicts when operating in close proximity of subsistence users. Prior to the commencement of the 2018-2019 and 2019-20 winter seasons, representatives will hold a meeting with the village of Kaktovik to discuss the planned activities. These discussions will include text and visual documentation of the crew's activities, as well as the project boundaries. It is anticipated that as a result of these meetings various protocols and procedures can be developed and implemented which will allow both subsistence and exploration activities to co-exist with respect to this project. Any subsistence hunting and fishing that will be in the area of operations can be documented at this time with the help of community members. All meetings will be documented and kept on file as a resource during and after activities. We are dedicated to enhance, sustain and develop locally based economic and employment opportunities for Borough businesses and residents.

## **6.0 Oversight Panel**

An oversight panel for subsistence and the native community of Kaktovik will be developed to address subsistence issues and will report back to the communities near the project area and the agencies overseeing the project. This oversight panel will have the charter for the following:

- Meet with the Kaktovik Native Community prior to the season start to discuss the concerns.
- Document past subsistence activities in the area.
- Work with a biologist hired by SAE on any wildlife or environmental issues.
- Conduct scouting with a local subsistence representative from the community.
- Staff a subsistence observer on each crew-each shift to scout with the survey team and consult on any unknown subsistence or cultural sites.
- Address any key issues with communities.
  - o “An issue is a significant opportunity, problem, factor or trend or a challenge to our mission, direction, way of doing business, or culture”.

## **7.0 Crew Integrity**

SAE's commitment at all levels to continue “Raising the Bar” for HSE awareness is paying off. Our health and safety goal is to achieve a zero-accident rating consistently. Over the past six seasons and more than 4,769,424 man hours we have not recorded a lost time accident. We attribute a portion of this success to the following critique:

## **7.1 Our Hiring Process:**

- We work to attract and hire the best in the industry to operate the crew.
- A comprehensive pre-employment screening for new hires.
- Prospective employees are administered a drug and alcohol screening test.
- Prospective employees must complete a Physical exam and Functional Capacity Exam.
- Prospective employees complete an eight-hour Health, Safety and Environmental orientation and task specific training as well as a competency assessment while on the crew.

## **7.2 Our Training Process:**

- The operations are controlled with high quality, experienced arctic personnel.
- Provide unique employment opportunities for its employees.
- Engages its employees in operations outside the seismic sector.
- Holds an Annual HSE Seminar for the full crew.
- Comprehensive online SAE training and testing.
- Hold daily orientation and safety briefings (for each shift) accounting for: hazards which could be encountered, other conflicting operations, daily conditions, and review of the day before and the day ahead.
- Tailgate meetings are held to review procedures in areas of known hazard or where operational requirements have changed from those expected.
- Annual training for employees, including:
  - o Remote medicine training
  - o Arctic survival training
  - o first aid/CPR
  - o Hazard recognition, rating and mitigation seminars
  - o NSTC refreshers
  - o Hazwoper training
  - o Hazcom awareness training
  - o Behavior based safety awareness training
  - o Wildlife interaction training
  - o Permit stipulation reviews

## **8.0 Permit Requirements**

Provided below is a list of permits, approvals, authorizations and supporting documents required for the operations described in this Plan. Land ownership for this program includes Federal, Native Corporation (ASRC and Kaktovik Iñupiat Corporation) and private holdings all within the North Slope Borough.

| Agency                                                                     | Authorization                                                                      |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Federal Government                                                         |                                                                                    |
| Bureau of Land Management                                                  | Geophysical Exploration Permit                                                     |
| US Fish and Wildlife Service                                               | Incidental Harassment Authorization (IHA), Polar Bear                              |
| North Slope Borough                                                        |                                                                                    |
| Planning Department                                                        | Land Management Development Permit for seismic: Landing Strips: Mobilization Route |
| IHLC Department                                                            | Form 600                                                                           |
| TLUI Department                                                            | Administrative Approval form 400                                                   |
| ICAS Department                                                            | Coordination                                                                       |
| State of Alaska                                                            |                                                                                    |
| Alaska Department of Natural Resources, State Historic Preservation Office | Letter of Concurrence                                                              |
| Department of Natural Resources, Division of Mining Land and Water         | Temporary Water Use Permit (if necessary)<br>Tundra Travel Permit                  |
| Alaska Department of Environmental Conservation                            | Kitchen<br>Potable Water Permits<br>Discharge Permits                              |
| State of Alaska Fish and Game                                              | Fish Habitat Permit<br>Water Withdrawal Permit (if necessary)                      |
| Other Approvals                                                            |                                                                                    |
| Lease Holders                                                              | Letter of Non-Objection                                                            |
| Kaktovik Inupiat Corporation                                               | Letter of Non-Objection                                                            |
| Arctic Slope Regional Corporation (ASRC)                                   | Letter of Non-Objection                                                            |
| Native Allotments                                                          | "No go buffers" placed around lands.                                               |

## 9.0 Mobilization and Access

SAE will stage equipment from existing facilities in Deadhorse. Camp and equipment will be trucked via road infrastructure to a point of access to the tundra or sea ice (See Appendix C). The crews will mobilize to existing gravel pads which will allow access to the tundra and provide a resupply area for the crews. All mobile equipment will have a navigation system installed for logistics and hazard identification. Tracked and wheeled tundra vehicles will be used to transport the sled camp along the tundra. The camp will remain close to the survey activities and will move every 2-5 days depending on the survey progress and snow cover. When the survey is completed each season, the camp

and equipment will travel along the tundra or sea ice to gravel pad for offloading and then trucked back to our Deadhorse pad location. Snow packed trails will be made throughout the project area, these trails will be used for the purpose of less environmental impact and crew travel /re-supply. The location of these trails will depend on snow coverage and terrain conditions. SAE will attempt to coordinate with companies to use any existing or planned trails.

## **10.0 Survey and Ice check**

Surveyors will establish survey controls by setting up a base station; controls will be set with a satellite navigation system transported by tracked vehicles. One of the highest risk potentials for arctic operations is properly verifying the integrity of the ice. This will be done by “ice checking units” consisting of a Tucker vehicle capable of supporting 24 hour operations. Snow machines may also be used for survey and ice check operations. The survey units will be equipped with ground penetrating radar systems (GPR), which are extremely accurate on fresh water. In addition, each ice check unit is equipped with battery operated ice auger which is used to verify the calibration of the GPR, measure ice depths on sea ice, or verify if depths where the GPR units cannot reach. Freeboard testing (ice stabilization) is also be conducted when working on floating ice to insure the ice has the strength to safely hold the equipment. Preliminary trails or snail trails will be established for every foot that the vibrators must travel on the sea ice, lakes or rivers, which will minimize the potential for breaking through the ice. Survey will also map each hazard that is discovered and placed into Tiger-Nav which is a navigation system that allows each vehicle to display the program area, hazards and avoidance areas.

In low snow years, snow surveys will be conducted to substantiate depths and will be recorded for equipment movement efforts

## **11.0 River Crossings**

There may be areas where we encounter floating ice which may not safely support the weight of some equipment. In these cases, SAE will permit this activity with State of Alaska Department of Fish & Game, to apply water to increase the thickness of the ice to establish temporary river crossings. There also may be areas on rivers, streams and lakes that need to be protected with snow for traversing from tundra to ice for crossing. SAE will make snow ramps in these areas and establish that the ice is grounded or the ice is of sufficient ice depth to cross. This will eliminate any impact to river banks and or tundra.

## **12.0 Willow Protocol**

SAE is committed to operate in a manner that all its operations or activities do not damage or affect the social, cultural or community in the areas where we work. If it is determined that willows are in the area, SAE has developed a willow protocol that ensures willow areas are mapped and defined by size. Willow areas will first be identified via aerial photos and possibly snow machines, the areas will then be placed



on maps. It is the responsibility of the survey manager to ensure that willow areas are recorded on the hazard maps and appropriate markings are in place. During the ground truthing of willows, Subsistence Representatives will be responsible for assisting in identifying sensitive willow areas and defining size. Survey will mark trials to be follow by the crews if it is determined that the area is accessible.

### **13.0 Recording Operations**

The method of acquisition is Random Source Driven Acquisition (RSD) combined with a Compressive Sensing design. Seismic operations will be conducted utilizing rubber tracked/buggy vibrators and wireless, autonomous recording channels (nodes). Vibrators will typically operate within a distinct area proximal to each other. Vibrator source points will be located along source lines every 41.25 feet. Geophone receiver lines will run perpendicular to source lines, and both source and receiver lines are spaced approximately 660 feet apart. Geophones will be located along source lines every 165 feet. Up to 20 receiver lines could be placed on the ground at one time. Wireless nodes and geophones will be laid out by crews on foot and through the use of rubber tracked tundra travel approved vehicles. Each station will be placed individually and will be surveyed by GPS upon deployment. Upon retrieval, all GPS data is then entered into a database.

Using the RSD methodology, multiple vibrators can collect data at the same time. This methodology means that only a single vibrator is required to travel down any source line, thereby reducing risk compaction or damage to the tundra. Vibrators will only operate on snow covered tundra or grounded sea ice.

Recording Operations continue for 24 hours per work day and are based on two 12 hour shifts. Communications with the crews while out in the field will be via VHF radio systems and wireless data transfer radios.

### **14.0 Camp Facilities**

Each camp can accommodate up to 150 - 160 persons. Equipment included at camp stations will include long haul fuel tractors, remote fuelers, water maker, incinerator, resupply and survival sleigh, tractors, loaders and tuckers.

Sanitary conditions in the kitchen and diner and washrooms will be maintained in full compliance with governmental regulations.

Grey water will be filtered to meet the discharge requirements of the Alaska Department of Environmental Conservation (ADEC) Alaska Pollutant Discharge Elimination System (APDES) permit prior to discharge. SAE holds a current APDES discharge permit for this purpose.

Due to the size of the project, SAE may use 2 camps and 2 crews at different locations within the project area for logistical purposes. The mobilization of the camp or camps will be from the existing gravel roads, starting off a gravel pad. A pre-determined route will be used to move equipment to the project location. Camp trails during project will be scouted out in advance by project manager to avoid hazards and measure snow depth. To mitigate any tundra damage the sleigh camp could be moved up to 2 miles every few days, this will depend on the weather, snow covering and the advancement of the project.

The SAE HSE advisor and the local hire subsistence representative will revisit every camp site, after camp has moved on, to review the area and sign-off that no damage occurred.

During the active work season, crews will travel to the camp area by personnel carrier tundra travel. If existing airstrips are within the project area those area may be utilized to allow personnel, food and fuel to be delivered to the work area.

## **15.0 Water Withdrawal**

Potable water will be produced at camp with a skid-mounted snow melter. Water is produced by melting snow or if it is a low snow year this can be supplemented by withdrawing water from lakes, it is then processed through our ADEC approved water system. SAE will identify lakes and will be permitted if used. If lakes are used, SAE has fish and game approved water withdrawal pumps that will be utilized during this process. If there is not an adequate source of snow, water may need to be transported to each camp from an approved source.

## **16.0 Temporary Snow Airstrips**

The project will need airstrips to transport crews on crew change days. Having temporary airstrips will save several hours of tundra travel. SAE will create a flat area on predetermined grounded, frozen lakes, or tundra to serve as landing strip to receive the aircraft for crew changes. An advance scouting trip will be identifying grounded lakes and or tundra locations that can be used for this purpose. The landing strip will only be on areas that have adequate space for safely landing aircraft. On lakes, a rubber tracked Steiger with a blade will clear the snow down to ice approximately 75 feet wide and 2300 to 3500 feet long for the aircraft to land. Black bags filled with snow will be placed along the side of the berm to delineate the edge of landing strip along with lighting.

After crew has mobilized and initial scouting has been done lakes which may support this operation will be documented for possible airstrip locations. The GPS location of the landing strip will be documented.

The strips will be used for landing and will not be maintained unless the same location is needed again. After use of the strip is no longer necessary, the crews will inspect the location and record that area that was used by GPS location to be included in the final reporting. An example of airstrip is listed in Appendix E.

## **17.0 Fuel Supply and Storage**

SAE will be using long haul sleigh tanks for fueling. All fuel will be ultra-low sulfur for vehicles and equipment. Fuel will be delivered using over land Rolligon or rubber tracked carriers. In the event the supply is disrupted by weather or other unforeseen events fuel may have to be delivered by aircraft, SAE will use temporary airstrips for these occasions. An advance scouting trip will assist SAE in identifying existing airstrips if any that can be used for this purpose. Off-loading fuel from aircraft will be done in accordance with SAE's fueling procedure. Fueling storages and fueling activity will be located at least 100 feet from any water body. All equipment fuel locations will be tracked and recorded. SAE fueling procedures include spill management practices such as drip pan placement under any vehicle parked and placement of vinyl liners with foam dikes under all valves or connections to diesel fuel tanks. All fuel tanks are double-wall tank construction. Fuel dye is added to all fuel as part of spill detection. All spills, no matter what the size are tracked and cleaned up by SAE and used for spill prevention operations. We also hold a Spill Prevention Countermeasure Control (SPCC) plan for our fueling and fuel storage operations associated with seismic operations. This SPCC plan is site specific and will be amended for each new project. All reportable spills will be communicated through the proper agencies and reporting requirements.

## **18.0 Waste Management**

Food waste generated by the field operations will be stored in vehicles until the end of the shift. The garbage will then be consolidated at camp in wildlife resistance containers for further disposal. All food waste generated in camp will also be collected and stored in the same consolidation area. A skid-mounted incinerator will be used for daily garbage waste. This equipment falls within the regulatory requirements of 40 CFR 60. This cyclonator will use on an average 1 to 2 gallons of fuel per hour while in use. The use of electricity is for the motor to the unit that maintains the air to fuel mixture. SAE will collect data to provide the required records on a calendar basis of description and weight of camp wastes burned.

Any wastes generated by seismic operations will be properly stored and disposed of in accordance with applicable permit stipulations and SAE controls. Food waste is continually incinerated to avoid attracting wildlife. Gray water generated from the mobile camp will be discharged according general permit AKG332000 and 18 AAC 83.210 and NPDES discharge limits. Toilets are "PACTO" type to eliminate "black water". Ash from the incinerator will be back-hauled to the North Slope Borough

disposal facility in Deadhorse. The sleigh camp will move approximately every two to five days depending on weather conditions. An inspection by the HSE Advisor will be done after camp has left to ensure that the area is clean of all debris.

## **19.0 Wildlife**

Wildlife that may be in the area during the winter season are owls, ravens, arctic fox, wolverine, musk ox, and, possibly, over-wintering caribou, ringed seals, and polar bears. Grizzly bears also inhabit the general area in the project, but are likely to be inactive during the winter season. Polar Bears may be seen along the coastal areas and out on the sea ice. Although encounters with Polar Bears or Grizzly bears are unlikely, SAE and its contractors will exercise caution during the project. Should a Grizzly Bear or Polar Bear be encountered, SAE would follow the procedures as outlined in our comprehensive Wildlife Interaction Plan that is approved by the ADF&G and USFWS. Food and food waste will be kept inside vehicles while out in field. All Polar Bear sightings will be reported to the USFWS as per the authorization from USFWS. Any type of bear dens, suspected or confirmed will be reported to the USFWS or ADF&G agency personnel.

SAE will work with agencies to avoid and minimize interactions with wildlife; this includes abiding by relevant regulations and obtaining required authorizations. Our Wildlife Interaction Plan is listed in Appendix F.

## **20.0 Historic and Cultural Resources**

SAE and its partners have commissioned a Cultural Resources Study to identify the historic and cultural resources in the program area. The Cultural Resources Study will inform SAE's activities. Cultural resources known and new that fall within the mapped area will have avoidance buffers placed around them. If required, an Archeological study will be permitted through the appropriate agencies and conducted approximately August 2018. Any known existing studies will be reviewed. SAE will not be accessing any native allotments without permission of the owners. A licensed archeologist will work with the NSB, State of Alaska and the Refuge manager to review existing records. The studies will include the use of the Alaska Heritage Resource Survey (AHRs) database, maintained by the Alaska Department of Natural Resources (ADNR) and the Traditional Land Use Inventory (TLUI) database, maintained by the NSB.

Previously recorded and any new AHRs sites will not be affected by any of the proposed seismic activities. All areas will have 500-foot buffers placed around them as a non-activity zone. These buffers will be placed in our Tiger Nav system and placed on maps to ensure no vehicles enter avoidance areas.

## **21.0 Communication & Supervision**

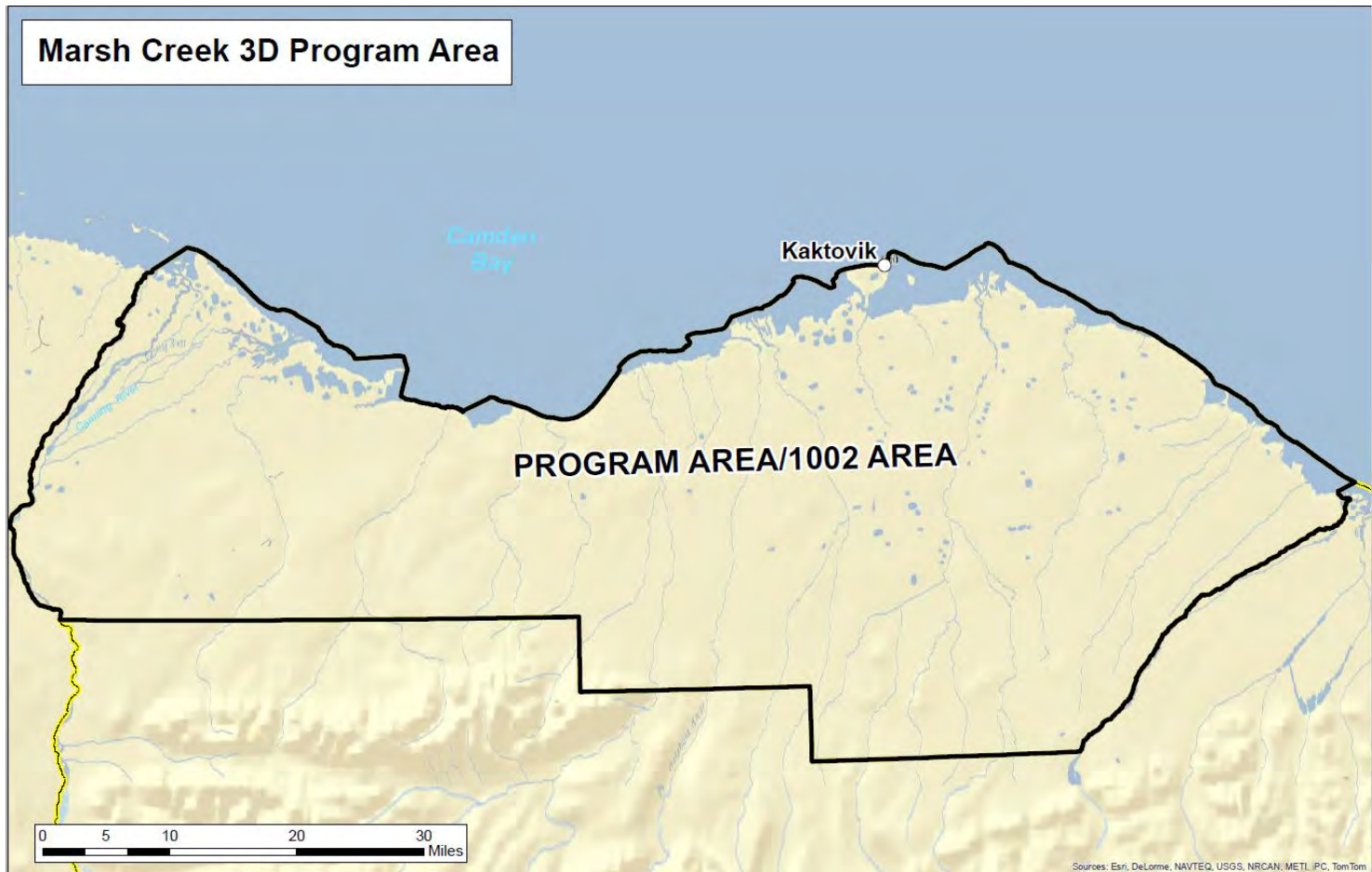
The following personnel at SAE can be contacted for information during the permitting survey program are:

|                                                                                                   |
|---------------------------------------------------------------------------------------------------|
| <p>Ted Smith<br/> Operations Supervisor<br/> 907-522-4499<br/> 907-301-5434 cell</p>              |
| <p>Suzan Simonds<br/> Permits and Regulatory Manager<br/> 907-522-4499<br/> 907-331-8140 cell</p> |
| <p>Rick Trupp<br/> General Manager of Alaska<br/> 907-522-4499</p>                                |
| <p>Oversight Panel<br/> Suzan Simonds<br/> 907-522-4499<br/> 907-331-8140</p>                     |

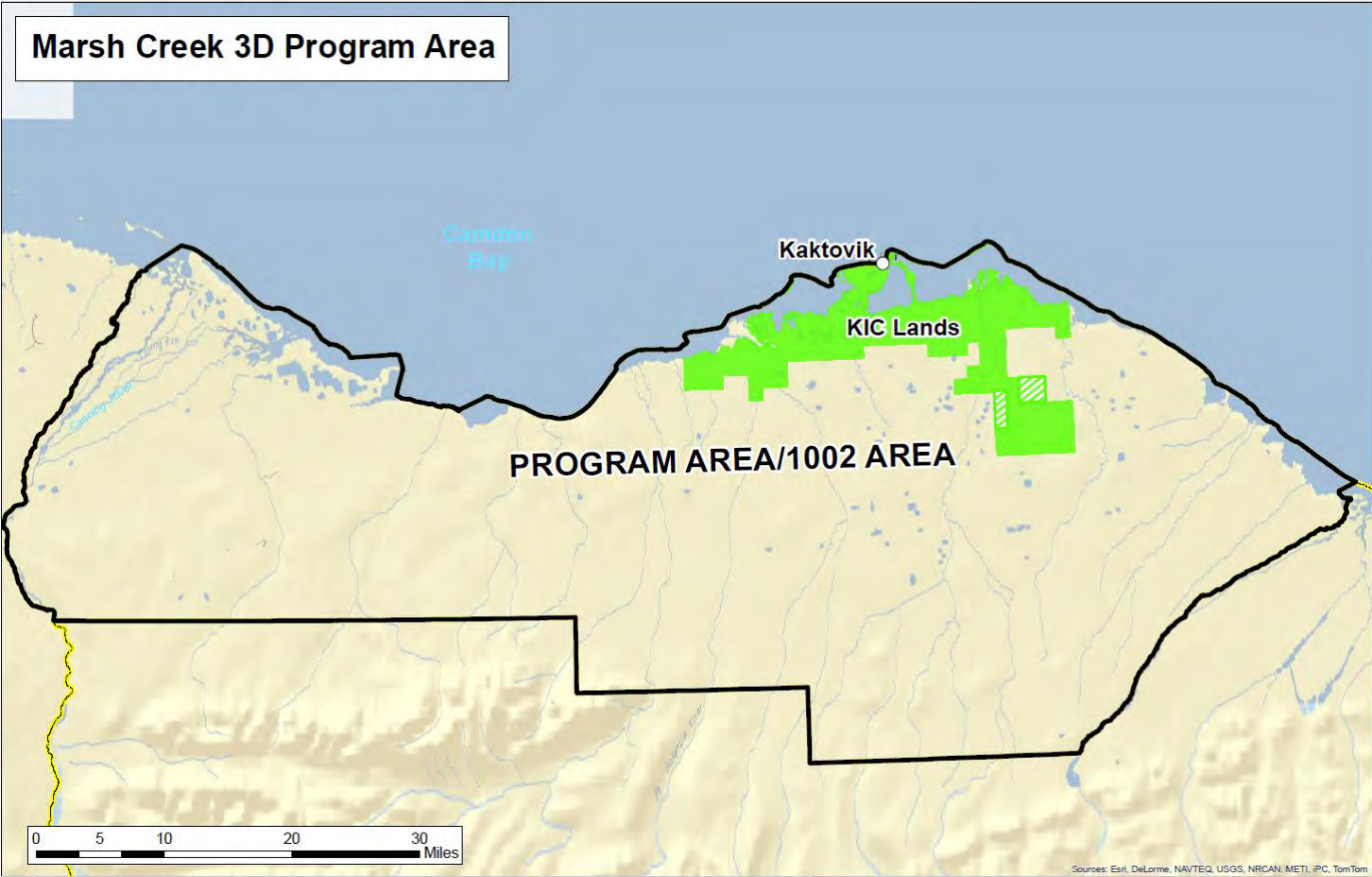
## 22.0 Appendices

|              |                                   |
|--------------|-----------------------------------|
| Appendix A - | Project Area Maps                 |
| Appendix B - | Equipment List                    |
| Appendix C - | Example Map of Mobilization Route |
| Appendix D-  | Equipment Pictures                |
| Appendix E-  | Example of Temporary Airstrip     |
| Appendix F-  | Wild Life Interaction Plan        |

Project Area



Project Area with Land Status





## Appendix B: Equipment List Per Crew

| Equipment list per crew            | Qty | Model or Similar       |
|------------------------------------|-----|------------------------|
| <b>Crew Transportation</b>         |     |                        |
| Tucker Snow Cat                    | 12  | 1644                   |
| Tucker Ice Cat                     | 8   | 1644                   |
| Tucker Personnel Carrier           | 3   | 1600                   |
| GPS Base Station                   | 3   | Hagglund               |
|                                    |     | Trailer                |
| Vibe Tender                        | 2   | Tucker Trailer         |
| Mechanic Field Shop                | 1   | Tucker Trailer         |
| Node Charging Shack                | 3   | Tucker Trailer         |
| Recorder                           | 1   | Tucker Trailer         |
| Taco                               | 6   | Trailer                |
| Survival Trailer                   | 2   | Tucker Trailer         |
| GSX Nodes                          | TBD | GSX-1                  |
| Batteries                          | TBD | BX10                   |
| Sensor                             | TBD | Arctic Base            |
| AHV-IV Vibrators                   | 12  | Commander (PLS-364)    |
| <b>Crew Camp/Support Equipment</b> |     |                        |
| Sleigh Camp                        | 1   | 150 Man                |
| Fuel Tanks/Fuel Stations           | 7   | 3,000 / 4000<br>Gallon |
| Long Haul Fueler                   | 4   | 4,000 Gallon           |
| Rolligons                          | 1   |                        |
| Case/Steiger Tractors              | 9   | 535                    |
| CAT Dozer                          | 2   | D7G                    |
| CAT loader                         | 1   | 977H                   |

## Appendix C: Example of Mobilization Route



## Appendix D: Equipment Pictures



### NODES

#### Cable-Free/Radio-Free Autonomous Data Recording Seismic Recorder (GSX)



**Tucker**





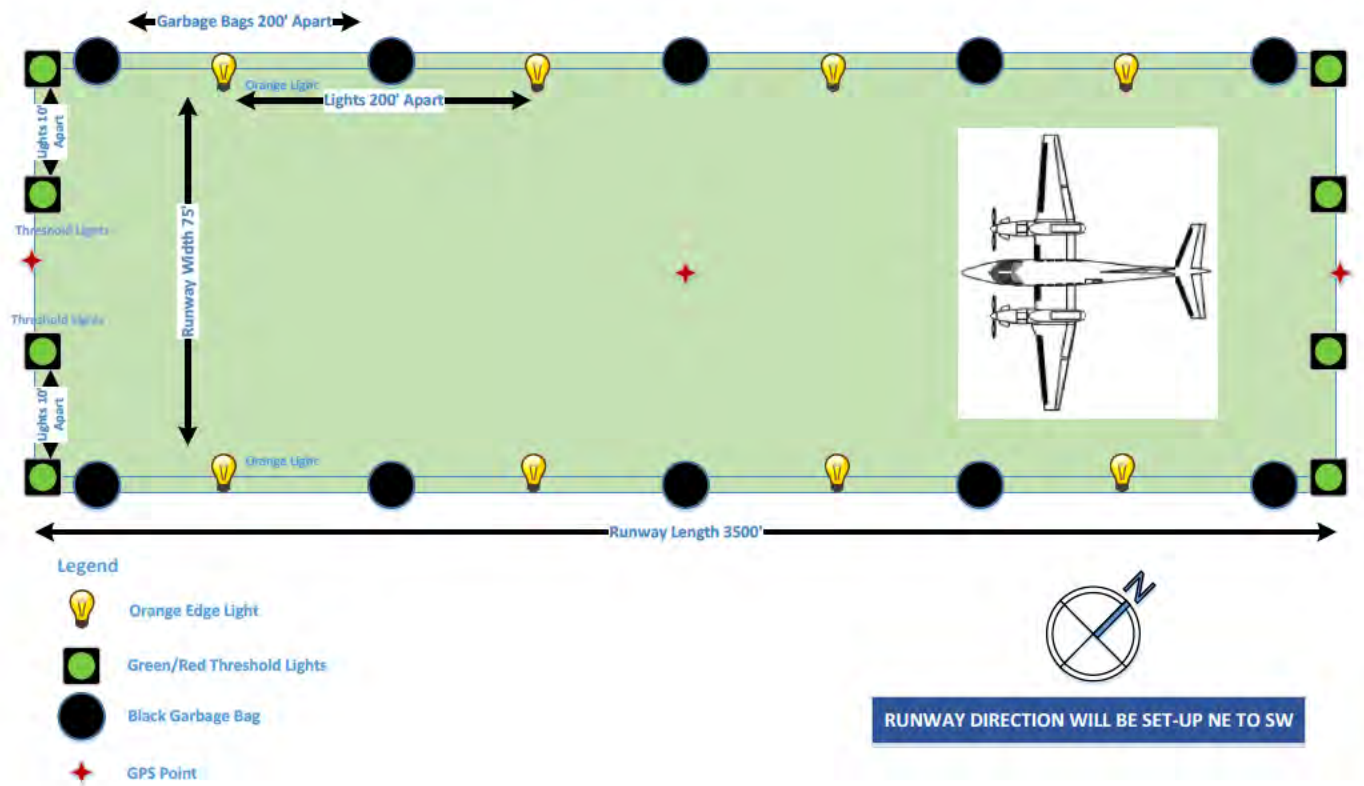
**Approximately 90,000 pounds with Tracks, 60,000 with tires  
AHV4 Commander Vibrator (Source Equipment)**





**Vibe rectangular baseplate**

## Appendix E: Example of Temporary Airstrip



## Wildlife Interaction Plan

**Purpose:** To provide guidelines for assuring the prompt reporting, investigation, and documentation of Polar Bears, sightings or incidents involving animals that are protected by the Marine Mammal Protection Act of 1972. This plan also covers reporting of Brown Bears, or any other wildlife that seismic crews may come in contact with during operations. This plan is intended to meet the requirement of a site specific Polar Bear awareness and interaction plan as required by 50 Code of Federal Regulations (CFR) 18.124(c)(3) and to meet the requirements for a Letter of Authorization (LOA) for the non-lethal, incidental and Non-intentional take of Polar Bear. Any permit stipulations that may be requested by permitting agencies will be added to this document as necessary.

**Polar Bears:** The United States Fish and Wildlife Service estimates that approximately 1,500 Polar Bears occur in the southern Beaufort Sea (SBS). Worldwide there are approximately 20,000 to 25,000 Polar Bears. During the summer months, Polar Bears typically remain on the southern edge of the sea ice. However, they are also known to swim long distances, haul out onto ice flows and barrier islands and can occasionally be found on the coast. It is expected that Polar Bears will be encountered on ice, in the water and on barrier islands,

**Responsibility:** The Project Manager have overall responsibility. They are responsible for coordination and implementation of all surveillance or monitoring personnel who deal with wildlife/human encounters, sightings and reporting on the North Slope.

### Procedure:

Crews will be trained to maintain a constant level of awareness for the potential conflict with Polar Bears. In areas where high potential of conflict exists, SAE will evaluate and if required, place a dedicated watch for Polar Bears in the area of operations. This is not to say that a continuous watch is not always in effect but rather that the crew will have a dedicated person or persons for oversight in areas of known activity. A Polar Bear education program will be given to all workers at a pre-job conference or on-site prior to the start of operations or at commencement of employment on the North Slope. Polar Bear awareness refresher briefings will be held as part of regular safety briefings. A dedicated Health, Safety and Environment (HSE) Advisor will be based with the survey crew for the duration of the seismic program, and workers will be instructed to notify the Project Manager, or HSE Advisor immediately whenever a bear is detected. All personnel will be aware of the restrictions regarding "taking" of Polar Bears as described by the Marine Mammals Protection Act. When a bear is in the immediate area of the crew location, workers will stay inside vehicles or aircraft and away from the bear. Approaching a bear for taking pictures or any other reason is strictly forbidden. USFWS will be called

immediately.

***Land based activities:***

1. A polar bear den detection survey shall be conducted prior to activities occurring in polar bear denning habitat during the maternal denning period (November to mid-April). All personnel must use caution when operating near polar bear denning habitat during the denning period.
2. When a Polar Bear is detected near any part of the operation, any employee (permanent, temporary, or contract) or visitor shall immediately notify the Project Manager, or HSE Advisor. They shall then notify the Permits Manager.
3. The priority is the protection of human life. The second priority is to avoid any situation in which a bear will be harmed.
4. In a camp situation, the lead person with crew shall radio Project Manager/Administrative Office. The Administrative Office will sound the "air horn" with 5 short blasts and make a radio announcement on all crew channels of the sighting. At the sound of the air horn, EVERYONE is to go to the nearest vessel, helicopter, or vehicle and remain inside with doors and windows secured until the ALL CLEAR is given over the radio. The all clear signal is a long blast on the "air horn".
5. In the field, drivers of each vehicle will advise the personnel they are responsible for and have them get inside the vehicles and wait until further notice.
6. If the bear takes refuge near or in a vehicle and does not appear likely to move, crew HSE will be notified depending on the location of operation. No action will be taken unless authorized by the USFWS or their designated agents.
7. When a sighting is made by a standalone vehicle, such as the survey crew, they must not approach the bear further. The crew will notify the Project Manager, HSE Advisor radio to alert them. The crew must avoid the bear and if necessary cease operations until the bear has left the area.
8. Personnel must remain at least a one-half mile distance in all directions for brown bears and 1-mile distance in all directions from any known polar bear. The radio announcement must indicate whether this will be necessary or not. An all-clear signal will be sounded when the area is determined to be safe.
9. SAE must observe a 1.6 km (1 mi) operational exclusion zone around all known polar bear dens during the denning season (November-April, or until the female and cubs leave the areas). Should previously unknown occupied dens be discovered within 1.6 km (1 mi) of activities, work must cease and the Service contacted for guidance.
10. After any individual sighting or interaction with Polar Bears during operations



on the North Slope, a Polar Bear Sighting Report shall be completed by the HSE Advisor. The SAE Permits Manager will forward this report to the Office of Marine Mammals Management, Christopher Putnam 786-3810 by phone and or 786-3816 by fax, within 24 hours.

***Aircraft:***

1. Aircraft will not operate within 0.5 miles of Polar Bears.
2. Aircraft will avoid flying over ideal Polar Bear habitat including but not limited to sea ice and barrier islands.
3. When marine mammals are encountered, aircraft will not operate below 1,500ft unless the aircraft is engaged in marine mammal monitoring, approaching, landing, taking off, or as conditions allow.
4. Plan all aircraft routes to minimize any potential conflict with active or anticipated polar bear subsistence hunting activity as determined through community consultations.

***Subsistence Hunting:***

1. SAE will employ a subsistence advisor to reduce impacts on Polar Bear subsistence hunting.
2. Vessels and aircraft will avoid areas in which subsistence hunting is being conducted.

***Reporting:***

*Polar Bears:* When a Polar Bear is observed or crew member they shall immediately notify the HSE and Permits Manager who will be responsible for filling out the Polar Bear report form. Reports of sightings will be sent to the USFWS on a regular basis through the Permits Manager.

Reports will be sent to:

Christopher Putnam  
USFWS-Marine Mammals Section  
1011 East Tudor Road  
Anchorage, AK 99503  
Telephone: 907-786-3800  
Fax: 907-786-3816

**Brown Bears :** (*Ursus americanus*) are the most abundant and widely distributed of the three species of North American bears.

**Responsibility:** The Project Manager and wilderness guides have overall responsibility. They are responsible for coordination and implementation of all surveillance who deal with wildlife/human encounters, sightings and reporting.

**Procedure:**

Crews will be trained to maintain a constant level of awareness for the potential conflict with bears. In areas where high potential of conflict exists, SAE will evaluate and if required, place a dedicated wilderness guides in the area of operations. This is not to say that a continuous watch is not always in effect but rather that the crew will have a dedicated wildlife guide for oversight in areas of known activity. Bear education program will be given to all workers at a pre-job conference or on-site prior to the start of operations or at commencement of employment. Bear awareness refresher briefings will be held as part of regular safety briefings. A dedicated Health, Safety and Environmental (HSE) Advisor will be based with the survey crew for the duration of the seismic program, and workers/wilderness guides will be instructed to notify the Project Manager or HSE Advisor whenever a bear is sighted by use of a hazard card. When a bear is in the immediate area of the crew location, workers will stay inside vehicles or aircraft and away from the bear. Approaching a bear for taking pictures or any other reason is strictly forbidden.

- 1 When a bear is detected near any part of the operation, any employee (permanent, temporary, or contract) or visitor shall immediately notify the Project Manager or HSE Advisor.
- 2 The first priority is the protection of human life. The second priority is to avoid any situation in which a bear will be harmed.
3. In a camp situation, the lead person with crew shall radio Project Manager/Administrative Office. The Administrative Office will sound the "air horn" with 5 short blasts and make a radio announcement on all crew channels of the sighting. At the sound of the air horn, EVERYONE is to go to the nearest vessel, helicopter, or vehicle and remain inside with doors and windows secured until the ALL CLEAR is given over the radio. The all clear signal is a long blast on the "air horn".
4. In the field, drivers of each vehicle will advise the personnel they are responsible for and have them get inside the vehicles and wait until further notice. If no vehicles are near, the wilderness guide shall lead crew away from bear.
5. If the bear takes refuge near or in a vehicle and does not appear likely to move, crew HSE will be notified depending on the location of operation. No action will be taken unless authorized by the AKFG or their designated agents.
6. The crew must avoid the bear and if necessary cease operations until the bear has left the area. The bear's safe distance from the crew will determine by the

wilderness guide. The distance should be far enough as not to affect the bears behavior. The radio announcement must indicate whether this will be necessary or not. An all-clear signal will be sounded when the area is determined to be safe.

7. Personnel must report any active bear dens. These dens will be mapped and sent to AKFG. After any individual interaction with bears during operations, the Bear Sighting Report shall be completed by the HSE Advisor or the wilderness guide. The SAE Permits Manager will forward this report to the agencies which are listed in the permit stipulations of all permits within 24 hours.

### **Caribou / Foxes / Wolverines or Other wildlife:**

**Responsibility:** The Project Manager and wilderness guides have overall responsibility. They are responsible for coordination and implementation of all surveillance who deal with wildlife/human encounters, sightings and reporting.

### **Procedure:**

- 1 Avoid any interaction with wildlife.
- 2 Do not take any actions that would cause the animals to change course or behavior unless approved by Alaska Fish and Game
- 3 After any individual interaction with Caribou or other types of wildlife during operations, the Wildlife Sighting Report shall be completed by the HSE Advisor or the wilderness guide. The SAE Permits Manager will forward this report to the agencies which are listed in the permit stipulations of all permits.
- 4 If foxes or other wildlife take up shelter within camp area, notify the permits manager.
- 5 Feeding of animals is strictly prohibited.
- 6 There is no hunting or fishing allowed on project.

U.S. Fish And Wildlife Service  
Marine Mammals Management  
**POLAR BEAR SIGHTING REPORT**

Company: \_\_\_\_\_ LOA #: \_\_\_\_\_  
Date: \_\_\_\_\_ Observer Name: \_\_\_\_\_  
Time: \_\_\_\_\_ am / pm / 24 Phone/Email: \_\_\_\_\_

Location: \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ Datum: \_\_\_\_\_

Weather Conditions: Fog \_\_\_\_\_ Snow \_\_\_\_\_ Rain \_\_\_\_\_ Clear \_\_\_\_\_ Temperature \_\_\_\_\_ °F / °C

Wind Speed \_\_\_\_\_ mph / kts Wind Direction (from) \_\_\_\_\_ N NE E SE S SW W NW

Visibility: Poor \_\_\_\_\_ Fair \_\_\_\_\_ Good \_\_\_\_\_ Excellent \_\_\_\_\_

Total Number of Bears: \_\_\_\_\_ (total number of bears & how many of each type)

|         | adult | sub-adult | 2 year-old | yearling | cub of year |
|---------|-------|-----------|------------|----------|-------------|
| Male    | _____ | _____     | _____      | _____    | _____       |
| Female  | _____ | _____     | _____      | _____    | _____       |
| Unknown | _____ | _____     | _____      | _____    | _____       |

Closest Distance of Bear(s): from personnel \_\_\_\_\_ facility/vessel \_\_\_\_\_ m / yd / ft

Bear Behavior (Initial Contact): curious ignore aggressive walk run swim hunt feed rest other \_\_\_\_\_

Bear Behavior (After Contact): curious ignore aggressive walk run swim hunt feed rest other \_\_\_\_\_

Description of Encounter: \_\_\_\_\_

Duration of Encounter: \_\_\_\_\_ Possible Attractants Present: Y / N

Describe Attractants: \_\_\_\_\_

Deterrents Used & Distance: If Yes, submit report within 48 hours of incident

|                  |       |       |             |       |                     |       |       |             |       |
|------------------|-------|-------|-------------|-------|---------------------|-------|-------|-------------|-------|
| Vehicle          | Y / N | _____ | m / yd / ft | _____ | Spotlight/Headlight | Y / N | _____ | m / yd / ft | _____ |
| Horn/Siren/Noise | Y / N | _____ | m / yd / ft | _____ | Other (describe)    | Y / N | _____ | m / yd / ft | _____ |
| Crackershell     | Y / N | _____ | m / yd / ft | _____ |                     |       |       |             |       |
| Rubber Bullet    | Y / N | _____ | m / yd / ft | _____ |                     |       |       |             |       |
| Bean Bag         | Y / N | _____ | m / yd / ft | _____ |                     |       |       |             |       |

Report Sent To: FW7\_MMM\_REPORTS@FWS.GOV Date: \_\_\_\_\_ Time: \_\_\_\_\_

For further information contact USFWS Marine Mammal Office: 907-786-3800 or 1-800-362-5148

Jack Winters  
Habitat Biologist  
Division of Habitat  
Department of Fish and Game  
1300 College Road  
Fairbanks, Alaska 99701  
907-459-7285

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

### Bear Interaction Report

Location: \_\_\_\_\_  
\_\_\_\_\_

Observer name: \_\_\_\_\_

Weather conditions: Fog \_\_\_\_ Snow \_\_\_\_ Rain \_\_\_\_ Clear \_\_\_\_ Wind Speed \_\_\_\_  
Wind Direction \_\_\_\_ Approx. Temp \_\_\_\_

Total number of bears: \_\_\_\_ Sow/cubs \_\_\_\_/\_\_\_\_ Adult \_\_\_\_ Subadult \_\_\_\_

Estimated distance of bear from personnel/facility: \_\_\_\_/\_\_\_\_

Possible attractants present: \_\_\_\_\_

Bear behavior: Curious \_\_\_\_ Aggressive \_\_\_\_ Predatory \_\_\_\_ Other \_\_\_\_

Description of encounter: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Injuries sustained: Personnel \_\_\_\_\_

Bear \_\_\_\_\_

Deterrents used/distance: Vehicle \_\_\_\_ Noise-maker \_\_\_\_ Firearms \_\_\_\_  
Other \_\_\_\_

Duration of encounter: \_\_\_\_\_

Agency Contacts: \_\_\_\_\_ Time: \_\_\_\_\_ Date: \_\_\_\_\_

ADF&G \_\_\_\_\_ Time: \_\_\_\_\_ Date: \_\_\_\_\_

SAE \_\_\_\_\_ Time: \_\_\_\_\_ Date: \_\_\_\_\_

SAE Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Jack Winters  
Habitat Biologist  
Division of Habitat  
Department of Fish and Game  
1300 College Road  
Fairbanks, Alaska 99701  
907-459-7285

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Wildlife Sighting Report

Location: \_\_\_\_\_  
\_\_\_\_\_

Observer name: \_\_\_\_\_

Weather conditions: Fog      Snow      Rain      Clear      Wind Speed \_\_\_\_\_

Wind Direction      Approx. Temp \_\_\_\_\_

Total number of animals:      Type      /      Adult      Subadult \_\_\_\_\_

Estimated distance from personnel/facility: \_\_\_\_\_ / \_\_\_\_\_

Possible attractants present: \_\_\_\_\_

Animal behavior: Curious      Aggressive      Predatory      Other \_\_\_\_\_

Description of encounter: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Injuries sustained: Personnel \_\_\_\_\_

Animal \_\_\_\_\_

Deterrents used/distance: Vehicle \_\_\_\_\_ Noise-maker \_\_\_\_\_ Firearms \_\_\_\_\_  
Other \_\_\_\_\_

Duration of encounter: \_\_\_\_\_

Agency Contacts: \_\_\_\_\_ Time: \_\_\_\_\_ Date: \_\_\_\_\_

ADF&G \_\_\_\_\_ Time: \_\_\_\_\_ Date: \_\_\_\_\_

SAE \_\_\_\_\_ Time: \_\_\_\_\_ Date: \_\_\_\_\_

SAE Representative: \_\_\_\_\_ Date: \_\_\_\_\_

## **Field Operating Procedure Polar Bear Protocol**

**Purpose:** To provide guidelines for assuring the prompt reporting, investigation, and documentation of Polar Bear sightings or incidents involving animals that is protected by the Marine Mammal Protection Act of 1972.

**Scope:** This procedure applies to all sightings or interaction with Polar Bears occurring during operations on the North Slope.

**Responsibility:** The Project Manager and HSE Advisor have overall responsibility. They are responsible for coordination and implementation of all surveillance or monitoring personnel who deal with wildlife/human encounters or sightings on the North Slope.

### **Procedure:**

1. A polar bear den detection survey shall be conducted prior to activities occurring in polar bear denning habitat during the maternal denning period (November to mid-April). All personnel must use caution when operating near polar bear denning habitat during the denning period.
2. When a Polar Bear is detected near any part of the operation, any employee (permanent, temporary, or contract) or visitor shall immediately notify the Project Manager or HSE Advisor.
3. The first priority is the protection of human life. The second priority is to avoid any situation in which a bear will be harmed.
4. The Administrative Office will sound the "air horn" with 5 short blasts and make a radio announcement on all crew channels of the sighting. At the sound of the "air horn, EVERYONE in camp is to go to the nearest trailer or vehicle and remain inside with doors and windows secured until the ALL CLEAR is given over the radio. The all clear signal is a long blast on the "air horn".
5. In the field, drivers of each vehicle will advise the personnel they are responsible for and have them get inside the vehicles and wait until further notice.
6. If the bear takes refuge near, in, or under a trailer or vehicle and does not appear likely to move, crew HSE security will be notified depending on the location of operation. No action will be taken unless authorized by the USFWS or their designated agents. The District Manager and North Slope Security must be contacted at this time.
7. Areas which have been identified as possible denning sites will be avoided per the permit stipulations. (Typically, prior to mobilization, Polar Bear den locations are received and entered into our hazard mapping system.) Survey crew, trained in Polar

Bear awareness, will be responsible as the lead vehicles in the field to scout for possible additional locations and bring to the crew's attention at the daily safety meetings those locations. Possible locations will be staked in the field and entered on the hazard maps for the crew per permit stipulations. If a den is encountered protocols from USFW will be followed. Operations will then be evaluated and modifications to the operation will be implemented that will allow the avoidance of the denning site and the continuation of exploration activity.

8. When a sighting is made by a stand-alone vehicle, such as the survey crew, they must not approach the bear further. The crew will notify the Project Manager or HSE Advisor via radio to alert them. The crew must avoid the bear and if necessary cease operations until the bear has left the area. The bear's distance from camp will determine whether step 3(b) is required. All personnel must remain at least a one mile distance in all directions from any known bear dens. The radio announcement must indicate whether this will be necessary or not. An all-clear signal will be sounded when the area is determined to be safe.
9. After any individual sighting or interaction with Polar Bears during operations on the North Slope, a Polar Bear Sighting Report shall be completed by the HSE Advisor. The SAE Permits Manager will forward this report to the Office of Marine Mammals Management as listed in the plan of operations.
10. A skid-mounted incinerator will be used for solid waste incineration. All garbage that contains any food will be bagged, stored inside the facilities and incinerated on site two times per day. The resulting ash will be back hauled to the North Slope Borough disposal facility during the winter season.
11. Winter crews will be trained to maintain a constant level of awareness for the potential conflict with Polar Bears. In areas where high potential of conflict exists, SAE will evaluate and if required, place a dedicated watch for Polar Bears in the area of operations. This is not to say that a continuous watch is not always in effect but rather that the crew will have a dedicated person or persons for oversight in areas of known denning or activity. A Polar Bear education program will be given to all workers on-site prior to the start of operations or at commencement of employment on the North Slope. Polar Bear awareness refresher briefings will be held as part of regular safety briefings. A dedicated Health, Safety and Environmental (HSE) Advisor will be based at the camp for the duration of the winter seismic program, and workers will be instructed to notify the Project Manager or HSE Advisor immediately whenever a bear is detected. All personnel will be aware of the restrictions regarding "taking" of Polar Bears as described by the Marine Mammals Protection Act. Approaching a bear for taking pictures or any other reason is strictly forbidden.
12. Plan all aircraft routes to minimize any potential conflict with active or anticipated polar bear subsistence hunting activity as determined through community consultations.



Permits Manager will send reports to:

Christopher Putnam  
USFWS-Marine Mammals Section  
1011 East Tudor Road  
Anchorage, AK 99503  
Telephone: 907-786-3800  
Fax: 907-786-3816

**From:** [Fox, Joanna](#)  
**To:** [Alfredo Soto](#); [Christopher Latty](#); [Burkart, Greta](#); [Stephen Arthur](#); [Roger Kaye](#); [Joshua Rose](#); [Sarah Conn](#); [Swem, Ted](#); [Jennifer Reed](#); [John Martin](#); [Hollis Twitchell](#); [Steve Berendzen](#); [John Trawicki](#)  
**Cc:** [Bud Cribley](#); [Wendy Loya](#); [Lynnda Kahn](#); [stephanie brady](#); [Mitch Ellis](#)  
**Subject:** Information Request - deadline: noon, Thursday, May 10  
**Date:** Monday, May 7, 2018 2:06:21 PM  
**Attachments:** [Marsh Creek Plan of Operations V8.1 F.pdf](#)

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Good morning,

I will be coordinating a response to Donna's request for any additional information we believe is needed to fully evaluate the proposed seismic exploration action we discussed last Friday. I have attached the non-proprietary application for your convenience. Please review carefully and provide me any questions or additional information needs you'd like us to request of the applicant by noon Thursday, May 10. I'll compile what I receive into a single response, which will be provided to Donna by the Friday, May 11 deadline.

If I have missed anyone we should be seeking input from, please let me know.

Thank you!  
Joanna

---

Joanna L. Fox  
Deputy Refuge Manager  
Arctic National Wildlife Refuge  
101 12th Avenue, Room 236  
Fairbanks, AK 99701  
(907) 456-0549

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[www.facebook.com/arcticnationalwildliferefuge](http://www.facebook.com/arcticnationalwildliferefuge)

*"Do what you can, with what you have, where you are." -- Theodore Roosevelt*

----- Forwarded message -----

**From:** **Wixon, Donna** <[dwixon@blm.gov](mailto:dwixon@blm.gov)>  
**Date:** Mon, May 7, 2018 at 10:37 AM  
**Subject:** Information Request - DD Friday May 11  
**To:** Alfredo Soto <[alfredo\\_soto@fws.gov](mailto:alfredo_soto@fws.gov)>, Mitch Ellis <[Mitch\\_ellis@fws.gov](mailto:Mitch_ellis@fws.gov)>, Bud Cribley <[bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov)>, Christopher Latty <[christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov)>, Cindy Hamfler <[chamfler@blm.gov](mailto:chamfler@blm.gov)>, Debbie <[dnigro@blm.gov](mailto:dnigro@blm.gov)>, Greta Burkart <[greta\\_burkart@fws.gov](mailto:greta_burkart@fws.gov)>, Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>, John Trawicki <[john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)>, Joseph Keeney <[jkeeney@blm.gov](mailto:jkeeney@blm.gov)>, Joshua Rose <[joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov)>, kdebenham <[kdebenham@blm.gov](mailto:kdebenham@blm.gov)>, Lonnie Bryant <[lbryant@blm.gov](mailto:lbryant@blm.gov)>, Lynnda Kahn <[lynnda\\_kahn@fws.gov](mailto:lynnda_kahn@fws.gov)>, Matthew Whitman <[mwhitman@blm.gov](mailto:mwhitman@blm.gov)>, me <[dwixon@blm.gov](mailto:dwixon@blm.gov)>, Randy Goodwin <[rgoodwin@blm.gov](mailto:rgoodwin@blm.gov)>, Richard Kemnitz <[rkemnitz@blm.gov](mailto:rkemnitz@blm.gov)>, Robert Brumbaugh <[rbrumbau@blm.gov](mailto:rbrumbau@blm.gov)>, Roger Kaye <[roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov)>, Sarah Conn <[sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov)>, Sarah LaMarr <[slamarr@blm.gov](mailto:slamarr@blm.gov)>, Serena Sweet <[ssweet@blm.gov](mailto:ssweet@blm.gov)>, Shelly Jacobson <[njones@blm.gov](mailto:njones@blm.gov)>, Stacey <[sfritz@blm.gov](mailto:sfritz@blm.gov)>, Stephanie Brady <[stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov)>, Stephen Arthur <[stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Ted Murphy

<[t75murph@blm.gov](mailto:t75murph@blm.gov)>, Ted Swem <[ted\\_swem@fws.gov](mailto:ted_swem@fws.gov)>, Terra Meares  
<[tmeares@blm.gov](mailto:tmeares@blm.gov)>, Wendy Loya <[Wendy\\_loya@fws.gov](mailto:Wendy_loya@fws.gov)>, Timothy Vosburgh  
<[tvosburgh@blm.gov](mailto:tvosburgh@blm.gov)>

Hello All,

Thank-you for participating in the Seismic Application Meeting last Friday. Attached is a copy of the sign in sheet. There were a few people that missed the sign in sheet so I added some names. If you notice I missed anyone please let me know.

As we pointed out Friday, the application is missing information that is needed to evaluate the proposed action. Please send me any questions you have about the proposed action so that I may compile them and ask the company to supply answers.

I would like all of the questions by the end of the day Friday May 11.

Thank-you,  
Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office  
907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)

**From:** [Wendy Loya](#)  
**To:** [Drew Crane](#); [John Trawicki](#)  
**Subject:** FW: Arctic Refuge Coastal Plain: MOU for Leasing EIS and Project Initiation Letter for Seismic EA  
**Date:** Monday, May 21, 2018 12:29:05 PM  
**Attachments:** [PIL\\_Seismic EA May 18 2018 v2.docx](#)  
[DRAFT BLM-FWS MOU 5.15.18.docx](#)

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Keeping you two in the loop on the PIL for the seismic EA, Stephanie has been asked to review. Frightening timeline.

Also, the current MOU that BLM will take forth after Stephanie and Tracy had their final look.

Dr. Wendy M. Loya, Coordinator  
Office of Science Applications -Arctic Program  
US Fish and Wildlife Service  
Anchorage, Alaska  
907.786.3532 (office)  
907.277.2942 (mobile)

---

**From:** Wendy Loya <[Wendy\\_loya@fws.gov](mailto:Wendy_loya@fws.gov)>  
**Sent:** Monday, May 21, 2018 12:27 PM  
**To:** Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>; Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>  
**Subject:** Arctic Refuge Coastal Plain: MOU for Leasing EIS and Project Initiation Letter for Seismic EA

Hi Karen and Greg,

Steve and Joanna at Arctic Refuge have taken the lead on the Coastal Plain Seismic EA, and that process being administered separately at BLM from the Leasing EIS. There is so much to do for both that we do need different leadership, and I will work with Steve and Joanna to make sure the we have regular and consistent communication.

Attached are the 1) Draft Project Initiation Letter for the Seismic EA (PIL\_Seismic EA May 18 2018), which I wanted to share given the exceptionally short time line described...this one will move quickly; and 2) the Draft MOU for the Leasing EIS which has been through reviews by FWS, BLM and the solicitor and is now on its way back to the solicitor via BLM as it moves towards finalization (Draft BLM-FWS MOU 5.15.18).

Karen, I wanted you to have a chance to consider these prior to our meeting tomorrow (Tues 22<sup>nd</sup>).

Thank you,  
Wendy

Dr. Wendy M. Loya, Coordinator  
Office of Science Applications -Arctic Program  
US Fish and Wildlife Service  
Anchorage, Alaska  
907.786.3532 (office)  
907.277.2942 (mobile)

----- Forwarded message -----

From: **LaMarr, Sarah** <[slamarr@blm.gov](mailto:slamarr@blm.gov)>

Date: Fri, May 18, 2018 at 3:48 PM

Subject: Updated Seismic Project Initiation Letter and Schedule for Review

To: Nichelle Jones <[njones@blm.gov](mailto:njones@blm.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>,

Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>

Cc: "Wixon, Donna" <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Please review the updated schedule in the attached PIL. Thanks, s.

Sarah La Marr  
Bureau of Land Management  
Arctic District Office  
Fairbanks, Alaska  
907-474-2334 (desk)  
907-888-3407 (cell)  
[slamarr@blm.gov](mailto:slamarr@blm.gov)

**From:** [Wendy Loya](#)  
**To:** [Drew Crane](#); [John Trawicki](#)  
**Subject:** FW: SAE Plan of Operations Questions  
**Date:** Tuesday, May 22, 2018 1:36:32 PM  
**Attachments:** [SAE seismic questions 5.22.2018.pdf](#)

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Hi Drew and John,

Drew, can you make sure to share this with anyone in FES involved in MMPA/ESA related to Coastal Plain Seismic?

John, do you want to share with NWRS leadership and relevant staff?

Thank you,  
Wendy

Dr. Wendy M. Loya, Coordinator  
Office of Science Applications -Arctic Program  
US Fish and Wildlife Service  
Anchorage, Alaska  
907.786.3532 (office)  
907.277.2942 (mobile)

**From:** Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>  
**Sent:** Tuesday, May 22, 2018 1:16 PM  
**To:** Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>  
**Cc:** Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>  
**Subject:** Fwd: SAE Plan of Operations Questions

Hi Wendy,

We just received this copy of the letter BLM sent to the seismic applicant requesting additional information. It answers some of the questions we discussed this morning (including when the 90-day clock starts). Please distribute as you see fit.

Thank you,  
Joanna

---

Joanna L. Fox  
Deputy Refuge Manager  
Arctic National Wildlife Refuge  
101 12th Avenue, Room 236  
Fairbanks, AK 99701  
(907) 456-0549

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*"Do what you can, with what you have, where you are." -- Theodore Roosevelt*

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From: Wixon, Donna <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Date: Tue, May 22, 2018 at 1:00 PM

Subject: Fwd: SAE Plan of Operations Questions

To: Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>

Cc: Sarah LaMarr <[slamarr@blm.gov](mailto:slamarr@blm.gov)>, Shelly Jacobson <[njones@blm.gov](mailto:njones@blm.gov)>

Hi Steve and Joanna,

Attached is a copy of the questions we sent to SAExploration.

Thanks,  
Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office  
907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)

----- Forwarded message -----

From: **Wixon, Donna** <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Date: Tue, May 22, 2018 at 11:35 AM

Subject: SAE Plan of Operations Questions

To: Suzan Simonds <[ssimonds@saexploration.com](mailto:ssimonds@saexploration.com)>

Cc: Shelly Jacobson <[njones@blm.gov](mailto:njones@blm.gov)>

Good Morning Sue,

Attached please find a letter and questions about the seismic permit that SAExploration has requested from the BLM for the 1002 area.

Please let me know if you have any questions about our questions as you work through them.

Thanks,  
Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office

907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)





BUREAU OF LAND MANAGEMENT  
Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709-3816  
<http://www.blm.gov/ak>



May 22, 2018

In reply refer to:  
FF097424  
3152.00 (AKR000)

Ms. Suzan Simonds  
Permit and Regulatory Manager  
SAExploration Inc.  
8240 Sandlewood Place, Suite 102  
Anchorage, Alaska 99507

Subject: Oil and Gas Geophysical Exploration Application

Dear Ms. Simonds,

Title II of the Tax Cuts and Jobs Act of 2017 directed the Secretary of Interior to establish and administer a competitive oil and gas program within the Coastal Plain of Alaska. Because the Bureau of Land Management (BLM) manages the National Petroleum Reserve in Alaska (NPR-A) pursuant to the Naval Petroleum Reserves Production Act (1976), the BLM has been identified as the lead agency for permitting oil and gas related activities in the Arctic National Wildlife Refuge Coastal Plain area, including seismic exploration activities. Within the BLM the Arctic District Office has been tasked to process seismic applications for the area.

On April 19, 2018 the Alaska BLM State Office received an application from SAExploration to conduct seismic activity in the 1002 area of the Alaska National Wildlife Refuge. On May 3, 2018 the BLM Arctic District received a nonconfidential version of the plan of operations. BLM and USFWS met on May 4<sup>th</sup> to discuss the proposed action.

The regulations that cover the proposed action are 43 CFR 3152, Exploration in Alaska. Part 3152.1 provides information on what is required to be submitted as part of the application. SAExploration has provided information for items a thru f. Part f requires a plan for conducting the exploration activities. While SAExploration has submitted a plan of operations, the plan does not provide enough information for the BLM to adequately evaluate impacts of the proposed action on the environment as required by the National Environmental Policy Act (NEPA).

Please see attached list of questions entitled: "Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO) BLM/USFWS Comments and Questions." We would ask that you respond to the questions and comments as soon as possible so that we may begin the NEPA process on the proposed action. Once BLM receives the answers to the attached questions we will start the 90 day review clock as required by 43 CFR 3152.2 a. and notify you if the 90 days cannot be met and refine our estimation of time needed to process your application

If you have any questions please contact Donna Wixon of my staff at 907-474-2301.

Sincerely,  
Nichelle Jones, Manager



Arctic District Office

Enclosures (1):

Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO) BLM/USFWS Comments and Questions

# **Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO): BLM/USFWS Comments and Questions**

## **General comments:**

1. What kind of lighting will be needed - tall light posts for equipment and storage areas; aircraft operations, localized lighting for worker camps, seismic line work, etc?
2. What is the normal and peak operating decibel levels of the camp generator and hours of operation each day or 24/7?
3. What are the total miles of seismic trails planned?
4. Will SAExploration Inc. be submitting a more detailed map of the actual proposed area of survey? This would greatly help in addressing impacts.
5. Does SAExploration, Inc. plan to avoid native allotments entirely?

## **Section 4.0 Environmental Management**

1. Please provide a write up of how you are doing things differently based on lessons learned from the past.
2. What are the steepest slopes that you would be conducting activity on and how do you propose to protect soil and vegetation?

## **Section 5.0 Cultural Interface**

1. This section mentions coordination with Kaktovik, what about Arctic Village and Venetie?
2. Applicant needs to submit a Subsistence Plan that meets the requirements of the 2013 Record of Decision (ROD) Best Management Practice (BMP) H-1 and also include:
  - Precise meeting dates and locations.
  - The names of and contact information for subsistence representatives and the biologist hired by SAE to work with the panel.
  - Reporting on mitigation measures and conflict avoidance agreements, if any, developed through such consultation.
  - Documentation of notification to allotment owners and camps and cabins users.
  - Procedures necessary to facilitate access by subsistence users to conduct their activities.
3. Applicant needs to follow the requirements of BMP H-2.

## **Section 6.0 Oversight Panel <sup>1</sup>**

1. When will the oversight Panel be formed?
2. How many people will be on the panel?
3. What types of people will be on the panel?
4. Will its members be residents of Kaktovik only?
5. Will the panel only report to Kaktovik?

---

<sup>1</sup> BLM would like to set up a meeting in June or July to discuss.

6. Does “cultural sites” refer to archaeological, historic, and/or traditional land use sites? If so, will this subsistence observer also be an archaeologist with access to the Alaska Heritage Resources Survey (AHRS) database (maintained by the Alaska State Historic Preservation Office) and the Traditional Land Use Inventory (TLUI) site within the study area (maintained by the North Slope Borough Department of Planning and Community Services)?

## **Section 7.2 Training Process**

1. Please provide an Orientation Program Plan following NPR-A BMP I-1 for BLM’s approval.

## **Section 8.0 Permit Requirements**

1. In table please include ESA Consultation under BLM
2. In table, under ADFG and Fish Habitat Permits, please add stream/river crossings.
3. In table under other approvals what lease holders are in the area?
4. What public outreach has taken place prior to application submittal, or as of today’s date?<sup>2</sup>

## **Section 9.0 Mobilization and Access**

1. “The crews will mobilize to existing gravel pads which will allow access to the tundra and provide a resupply area for the crews” (Page 7: SAExploration 2018). These gravel pads are not identified in the POO – whether inside the 1002 area boundary or adjacent to it. Where are the gravel pads and travel corridors? Locations of ingress and egress? Please submit a map showing ingress and egress with land status layer.
2. SAE states "SAE will attempt to coordinate with companies to use any existing or planned trails." There are no existing trails in the permit area, what other companies are you referring to?
3. How close does the campsite need to be to the area you are working in?
4. What criteria will be used to determine if snow depth and coverage is adequate to minimize damage to the tundra vegetation?
5. Does SAE have a contingency plan should snow depth and cover not be adequate to minimize soil compaction and vegetation damage?
6. Please provide routes and what type of activity, storage, etc. that will occur at locations within the permit area.
7. Please provide a description of the current camp move practices and how they would help to protect the tundra.
8. Are there ice or snow roads between Dalton Highway and Point Thompson that you could travel on to reduce tundra damage? If not, could you travel some of the distance on sea ice?

---

<sup>2</sup> BLM would like to set up a meeting in June/July to discuss.

9. What are the operating plans and environmental protection protocols for tundra travel? How will these protocols differ for different snow and soil conditions and for travel on steep slopes, areas with sensitive soil/vegetation types, and near special areas (e.g. groundwater-fed springs, overflow ice, ice-hummocks, and waterbodies that may support fish?
10. For each type of activity/equipment (e.g. camp moves, resupplies, snow machine access, refueling, transport of fuel and hazardous chemicals), describe what the environmental regulations/limits will be for the following:
  - a. What is the maximum slope that operations for each type of activity/equipment would occur on? This information will allow us analyze the potential for impacts of different activities (e.g. fuel storage, transport of hazardous materials, camp moves, seismic) would be occurring on steep slopes.
  - b. What are the criteria for snow and soil characteristics that will be required for each type of activity/equipment? Will these criteria vary with slope and type of soil and vegetation?
11. Please provide the following information broken down in a table and linkable to GIS format along with a map:
  - a. Proposed route distance
  - b. Timing
  - c. Type of activity (e.g. resupply, camp move)
  - d. Type of equipment (e.g. vehicle type, sled, skis)
  - e. Weight of vehicle/equipment empty
  - f. Weight of equipment/vehicle fully loaded.
  - g. Pounds per square inch (PSI) pressure of vehicle, sled, or skis empty
  - h. Pounds per square inch (PSI) pressure of vehicle, sled, or skis fully loaded (note – this especially important for sleds or vehicles that haul large volumes of water or fuel, kitchen and bath units, etc.)
  - i. Total footprint of all vehicle or other equipment in contact with ground
  - j. Type of tire (tracked versus wheeled)
  - k. Track material (e.g. steel versus rubber)
  - l. Are tracks cleated or uncleated? Number of times a particular route would be exposed to a particular PSI from a particular vehicle, sled, or skis.
  - m. Maximum slope that this equipment would travel on and at what weights (minimum and maximum)
  - n. Snow depth requirements for this type of vehicle/equipment
  - o. Freezing depth requirements for this type of vehicle/equipment
  - p. Are hazardous material transported on this type of equipment?
  - q. Is more than 500 gallons of fuel be transported on this type of vehicle/equipment?
12. How and where will snow be gathered and moved for construction of snow trails and ramps?
13. How far can snow be transported for trail making?
14. What are the topographic and other criteria that elicit the need for creating snow ramps?
15. Verify that you would be prepacking snow trails.

16. What vehicles would be used for prepacking?
17. What equipment would be used for moving and placing snow?
18. How many resupply trips will be needed along routes?
19. How many vehicles and what type will be involved in resupply trips?
20. Will resupply vehicles use existing trails?
21. For the expected size and shape of the grid area, how many miles of camp move trails would there be within the work area (not including miles of access to reach the edge of the project area)?

## **Section 10.0 Survey and Ice Check**

1. What does low snow years mean exactly? If it means they will ensure that enough snow cover is present for equipment movements, then what are the minimum snow depths? Will tundra freeze-down be quantified prior to and/or during operations?
2. What provisions are there for the possibility that snow conditions deteriorate before the train returns?
3. Where would snow surveys be done in order to decide when exploration could begin?<sup>3</sup>
4. How will SAE gather data on frost and snow conditions?
5. There can be large expanses with no snow cover in the 1002 Area. What are the contingency plans in the event extensive areas with low snow cover and/or unfrozen ground are encountered?
6. What Lakes, rivers or sea ice would be traveled across?

## **Section 11.0 River Crossings (and lake)**

1. This element of the operations cannot just be permitted with ADF&G. In addition to ADF&G FHPs, the BLM & FWS must evaluate this activity as part of the NEPA process. The BLM already has some Best Management Practices (in the 2012 NPR-A IAP) related to stream/river crossings that can be used for guidance, but site specific evaluations will be necessary to determine if these BMPs or a modified version of the BMPs are most appropriate for this landscape. (Comment not question).
2. Describe how deep/steep banks would be crossed.
3. The POO provides no specific information on accessing water, water requirements, or ice bridge locations. Please provide.
4. Please provide a map that shows stream and lake crossings with a table that identifies the latitude and longitude of the corresponding crossings.
5. What are the proposed locations for ice bridges? Where will water for construction of ice bridges come from?
6. Does SAE propose any baseline monitoring of ice depth, winter water volume, invertebrates, fish, and water chemistry
7. If a crossing needs to be reinforced/built up for supporting equipment, where will liquid water come from? The BLM currently does not allow liquid water to be removed from rivers during the winter. If liquid water may need to be removed from lakes to build any

---

<sup>3</sup> BLM would like to set up a meeting in June/July to discuss

“ice bridges”, then the volumes would need to be accounted for in the lake water use request to the BLM/FWS for evaluation in the EA and in ADF&G FHPs and ADNR Temporary Water Use Permits.

8. Would the removal of snow for this purpose only occur on areas of grounded ice (from lakes and/or rivers)?
9. Would the removal of ice aggregate from grounded ice areas on a river be requested?

## **Section 12.0 Willow Protocol**

1. What criteria will be used to identify location and size of sensitive willow areas?
2. Will other vegetation types sensitive to seismic activities be considered when designing and constructing snow roads and trails? (Sensitive vegetation types include moist tussock tundra and low shrub vegetation categories.)
3. Please provide a weed plan following requirements of the NPR-A BMP M-2 for BLM Approval.

## **Section 13.0 Recording Operations (and sound)**

1. What is the frequency, intensity, and duration of vibroseis?
2. What is the proximity to non-fish bearing and fish bearing waterbodies?
3. Provide the location of waterbodies and table of information of the proximity to non-fish bearing and fish bearing waterbodies.
4. With the 3D seismic, is there a distance that a line could be altered if needed for some reason without compromising the data?
5. Please verify that vibrators would not be operating on lakes or rivers.
6. If vibroseis shots will be made over liquid water under ice, the permittee needs to review the following document and indicate how they would implement or otherwise address recommendations made to reduce potential impacts to fish.  
Morris, W., and J. Winters. 2005. Fish Behavioral and Physical Responses to Vibroseis Noise, Prudhoe Bay, Alaska 2003. Technical Report No. 05-02. Alaska Department of Natural Resources, Office of Habitat and Permitting.
7. What is SOS Methodology?

## **Section 14.0 Camp Facilities**

1. How many camp areas will be used?
2. How many days on average will a camp be on a site?
3. How much water will be required for camp each day?
4. What are the water requirements each year for this project?
5. Provide a more detailed description of grey water discharge
6. What is the maximum gradient the tracked tractors can pull the camp sleds?
7. Section 14 states: “If existing airstrips are within the project area those area may be utilized to allow personnel, food and fuel to be delivered to the work area”. Are there existing airstrips in the project area?
8. What is the predetermined route?

9. What is the Vsat communication system?

## **Section 15.0 Water Withdrawal (from lakes)**

1. Would snow for drinking water only be removed from grounded ice areas?
2. Water volume (liquid water and ice aggregate) requests must be made for each specific lake that might be used, for evaluation in the EA.
3. What information does SAE plan to collect or compile for planned use lakes.<sup>4</sup>

## **Section 16.0 Temporary Snow Air Strips**

1. Are you proposing to use water and or ice chips to prepare landing strips on lakes?
2. When lakes cannot be used as airstrips, what is the site prep for tundra air strips?
3. What equipment is involved in creating and maintaining airstrips?
4. We need to know which specific lakes might be used for an airstrip, the size of the airstrip, the procedure for building and maintaining an airstrip, and the intended placement and orientation.
5. If airstrips are built on lakes, additional data collection may be required to provide data regarding the extent of additional freeze-down under the airstrip, as compared to the remainder of the lake.
6. What is the operating plan for working in areas that fixed-wing aircraft cannot access? Is there a need for helicopter access?
7. How many crew swaps will be carried out? i.e. how many times will an airstrip be used per week?
8. What type of aircraft will be used? Wheeled or skis?
9. Section 16 states: "SAE will create a flat area on predetermined grounded, frozen lakes, or tundra to serve as landing strip to receive the aircraft for crew changes." This is in the Temporary Snow Airstrips section. Will tundra airstrips be built of snow or will ice be needed to make the airstrip?

## **Section 17.0 Fuel Supply and Storage**

1. How much fuel will be used per day?
2. How much fuel will be used for each year of the project?
3. What are the proposed locations for refueling and fuel storage?
4. What is the maximum amount of fuel that will be stored at a particular location? How many of these locations will there be at a given time and during the entire course of the project?
5. The POO states that the refueling distance from waterbodies would be 100 feet. The BLM NPR-A BMP requires 500 ft distance and we will consider this requirement for this project. We allow a deviation from the 500 ft. in the NPR-A because of the high density/close proximity of so many lakes that makes it impractical in many areas.

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<sup>4</sup> BLM would like to set up a meeting in June/July to discuss.



6. Provide a copy of the SPCC plan(s) for this project with site-specific information included. Until it is complete provide:  
The size, type, and number of fuel storage tanks or other containers.  
What type of equipment/supplies will be available on site to respond to a spill?  
Describe any training requirements for employees handling fuel.
7. Since there will be no refueling within a certain distance of any waterbody, what is the protocol for aerial fuel delivery, should it be needed. Will fuel be delivered in drums or will a tanker be used?

## **Section 18.0 Waste Management**

1. What are the volumes and proposed locations of discharge of gray water? How many gray water discharge locations will there be?
2. Provide a copy of your APDES permit, and any requirements it may have for treatment before discharge.
3. Provide a hazardous waste plan following the requirements of the NPR-A BMP A-3.
4. Provide a Comprehensive Waste Management Plan following the requirements of the NPR-A BMP A-2.
5. What types of wastes are anticipated to be generated by seismic operations?

## **Section 19.0 Wildlife**

1. What is the intensity and wavelength of sound of equipment?

## **20.0 Historic and Cultural Resources**

1. Is SAE implying that buffers for historic and cultural resources be determined from a point on the map that indicates the general vicinity of these resources or will the buffer be drawn from the actual area that resources cover?
2. In response to the “if required,” in addition to background research of documented (“known”) cultural (historic, prehistoric, and TLUI) sites, SAE Exploration should conduct archaeological field surveys of all proposed travel routes and survey locations prior to the proposed seismic survey.<sup>5</sup>
3. The 500 foot minimum avoidance boundary around all cultural sites is adequate for seismic exploration. However, does SAExploration plan to consider the boundaries of all sites within the proposed seismic testing areas?
4. Most of the sites in both the AHRS and TLUI are referenced geospatially by a 1-dimensional point that is typically somewhere near the center of a 2-dimensional area. Sometimes cultural remains within a site can be distributed over hundreds of meters, thus extending beyond a roughly 150 meter (500 foot) buffer. SAExploration should not only survey for undocumented sites within the proposed seismic study areas, but also consider sites documented in the AHRS and TLUI databases and that are within the proposed seismic study areas. These sites should be included in the 2018 cultural field survey,

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<sup>5</sup> BLM would like to set up a meeting in June/July to discuss.

where archaeologists should at minimum map the boundaries (i.e. the extent of cultural remains within a site) of sites within the seismic study areas that are spatially referenced by a point. Site buffers should then extend 500 feet from the site boundary.

## **Appendix D:**

1. Request more photos, including camp sleighs, long haul fueler, Case/Steiger tractor, CAT dozer and CAT loader.

## **Appendix F: Wildlife Interaction Plan**

1. In the SAE plan of operations, “heavy equipment” and “seismic activity” with regard to wildlife interactions needs to be further defined. For example, if there is a one mile avoidance area for a polar bear den, does that apply to laying of recording devices by hand or smaller vehicle, or just to the large vibroseis activity? For example, does a one mile avoidance area mean that no personnel, equipment, gear or anything else will come within one mile of a polar bear den? Does this apply to seal birthing dens and grizzly bear dens as well?
2. “A polar bear den detection survey shall be conducted prior to activities occurring in polar bear denning habitat during the maternal denning period (November to mid-April).” How will this survey be conducted?
3. Will all suitable denning habitat within the entire 1002 area be surveyed?
4. What is the survey design, operating procedure and resulting accuracy in identifying denning sites? Are these surveys done prior to any other activity or occupation of an area including caching equipment or fuel or conducting reconnaissance surveys to assess ice conditions, locations for camp moves, etc?<sup>6</sup>
5. The data provided for polar bear numbers in the southern Beaufort Sea is out of date (Page 23 Polar Bears: SAExploration 2018).
  - a. Current estimate of polar bears in the Southern Beaufort Sea population is estimated to be 900 and declining (see Bromaghian 2010)
  - b. Global population is estimated to be 22,000 – 31,000 with an average of 26,000 (see FWS 5-year review 2017)
6. “Aircraft will avoid flying over ideal Polar Bear habitat including but not limited to sea ice and barrier islands.” Please define what is considered to be “ideal” polar bear habitat.
7. “Vessels and aircraft will avoid areas in which subsistence hunting is being conducted.” Are vessels being used for this project? Is so please describe.
8. “The Project Manager and wilderness guides have overall responsibility.” What are “wilderness guides” (also called wildlife guide in some places in the document)? Please describe training and responsibilities. This is not a position that was described in the polar bear section of this plan.
9. If the bear takes refuge near or in a vehicle and does not appear likely to move, crew HSE will be notified depending on the location of operation. No action will be taken unless

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<sup>6</sup> BLM would like to set up a meeting in June/July to discuss.

authorized by the AKFG or their designated agents.” Assuming that AKFG is the Alaska Department of Fish and Game (ADFG), please correct in all locations in document.

10. Field Operating Procedure Polar Bear Protocol

- a. In numbers 1 and 7 of this protocol include the distance that must be maintained from known densities.

**From:** [Susan LaKowski](#)  
**To:** [Joanna Fox](#)  
**Cc:** [Roger Kaye](#); [christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov); [jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov); [Stephen Arthur](#); [greta\\_burkart@fws.gov](mailto:greta_burkart@fws.gov); [Hollis Twitchell](#); [joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov); [randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov); [Patrick O'dell](#); [Edward Decleva](#); [erin\\_carver@fws.gov](mailto:erin_carver@fws.gov); [ted\\_swem@fws.gov](mailto:ted_swem@fws.gov); [Wendy Loya](#); [drew\\_crane@fws.gov](mailto:drew_crane@fws.gov); [John Trawicki](#); [Stephanie Brady](#); [Steve Berendzen](#)  
**Subject:** Re: New Meeting?  
**Date:** Tuesday, May 29, 2018 5:57:34 PM

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That date works for me.



**Susan LaKowski**  
Realty Specialist  
(907) 786-3566

[susan\\_lakowski@fws.gov](mailto:susan_lakowski@fws.gov)

U.S. Fish & Wildlife Service  
Division of Realty  
1011 E. Tudor Road, MS-211  
Anchorage, AK 99503

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[FWS Region 7 Land Mapper](#) (Public version)  
[Region 7 GeoPDF Map Portal](#)

On Tue, May 29, 2018 at 3:49 PM Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)> wrote:

In response to some of the questions we asked, the seismic applicant would like to give a couple of presentations about how they conduct seismic work in the Arctic. They're proposing the first as an on-line webinar-type presentation, to be offered June 5 at 10 am. If this date and/or time will not fit into your schedule, will you please let me know asap? I'd like to give Donna an indication of how well this might work for us.

(Arctic Refuge staff - if need be we will change our standing bi-weekly staff meeting to accommodate this presentation).

Thanks!  
Joanna

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Joanna L. Fox  
Deputy Refuge Manager  
Arctic National Wildlife Refuge  
101 12th Avenue, Room 236  
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[www.facebook.com/arcticnationalwildliferefuge](https://www.facebook.com/arcticnationalwildliferefuge)

*"Do what you can, with what you have, where you are." -- Theodore Roosevelt*

----- Forwarded message -----

From: Wixon, Donna <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Date: Tue, May 29, 2018 at 3:26 PM

Subject: New Meeting?

To: Jones, Nichelle (Shelly) <[njones@blm.gov](mailto:njones@blm.gov)>

Cc: Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Fox, Joanna <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>, LaMarr, Sarah <[slamarr@blm.gov](mailto:slamarr@blm.gov)>, Robert Brumbaugh <[rbrumbau@blm.gov](mailto:rbrumbau@blm.gov)>

Good Afternoon,

I just spoke with Sue Simonds with SAE, she had some questions on our questions about the project. SAE has offered to give a couple of presentations about seismic to all of the people working on the EA. The first presentation would be an on-line skype presentation going over the basics of how SAE conducts seismic in the Arctic. They would like to do this June 5th. Does that seem like an okay day? Would 10am work?

On July 10, they would like to come to Fairbanks and give a presentation and/or answer questions. Would 11am work for this?

Once we decide on a date and time I will send out a meeting invite.

Thanks,

Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office  
907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)

On Tue, May 29, 2018 at 12:20 PM, Jones, Nichelle (Shelly) <[njones@blm.gov](mailto:njones@blm.gov)> wrote:

Hello All: We have a couple of us out this afternoon. In lieu of a meeting, I have the following update:

Donna sent the request for additional information last week. We also issued the PIL to the IDT members. I have a meeting with our state office on Thursday to get someone to cover the acoustic section. IDT members should be working on the affected environment and consequences sections.

The next milestones from the schedule are as follows:

**May 22-June 1** – Draft Affected Environment (FWS and Key BLM IDT members)

**May 31** – Deadline for applicant response to questions

**May 31-June 6** - Finalize Proposed Action and post to BLM ePlanning website (IDT Lead)

**June - November** –MMPA Incidental Take Regulations development (published in

Federal Register in November and final rule in January)

**June 6** – IDT Lead sends Proposed Action to team to draft Issue Statements.

See some of you at the scoping meeting for the CPLEIS this evening.

-Shelly

Shelly Jones  
Acting Manager  
Arctic District Office  
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**From:** [Chad Ricklefs](#)

**To:** [Amy Lewis](#); [Amy Cordle](#); [liz.sears@srbak.com](#); [Angie Adams](#); [jake.anders@srbak.com](#); [larsan@dowl.com](#); [sbishop@abrinc.com](#); [srb@srbak.com](#); [patrick.burden@norecon.com](#); [bburgess@abrinc.com](#); [Lindsay Chipman](#); [leah.cuyno@norecon.com](#); [mike.downs@norecon.com](#); [Kevin Doyle](#); [michael.fisher@norecon.com](#); [jfrost@abrinc.com](#); [Zoe Ghali](#); [Hayes, Miriam \(Nicole\)](#); [Peter Gower](#); [Derek Holmgren](#); [paul.lawrence@srbak.com](#); [ed.liebsch@hdrinc.com](#); [amorill@dowl.com](#); [Dan Morta](#); [Katie Patterson](#); [ppribyl@dowl.com](#); [aprichard@abrinc.com](#); [Kevin Rice](#); [don.schug@norecon.com](#); [jseigle@abrinc.com](#); [sean.teeter@hdrinc.com](#); [patricia.terhaar@hdrinc.com](#); [Meredith Zaccherio](#); [jon.zufelt@hdrinc.com](#); [wendy.loya@fws.gov](#); [steve.masterman@alaska.gov](#); [paul.decker@alaska.gov](#); [rbrumbau@blm.gov](#); [jchmielowski@blm.gov](#); [jgalluzz@blm.gov](#); [squyer@blm.gov](#); [kpeck@blm.gov](#); [remnitz@blm.gov](#); [r2king@blm.gov](#); [jkeeney@blm.gov](#); [tstclair@blm.gov](#); [memiller@nps.gov](#); [mwhitman@blm.gov](#); [ctburns@blm.gov](#); [craig.perham@boem.gov](#); [david.rogers@alaska.gov](#); [ejulianus@blm.gov](#); [sdallen@blm.gov](#); [dwixon@blm.gov](#); [rgoodwin@blm.gov](#); [thickaus@blm.gov](#); [slongan@blm.gov](#); [mmccrum@blm.gov](#); [kdebenham@blm.gov](#); [chillis@blm.gov](#); [chamfler@blm.gov](#); [patrick.odell@fws.gov](#); [joshua.rose@fws.gov](#); [paul.leonard@fws.gov](#); [edward.decleva@fws.gov](#); [peter.butteri@fws.gov](#); [tim.allen@fws.gov](#); [catherine.collins@fws.gov](#); [randy.i.brown@fws.gov](#); [christopher.latty@fws.gov](#); [eric.taylor@fws.gov](#); [ryan.r.wilson@fws.gov](#); [stephen.arthur@fws.gov](#); [hollis.twitchell@fws.gov](#); [carl.johnson@fws.gov](#); [joshua.ream@fws.gov](#); [susan.lakomski@fws.gov](#); [jennifer.reed@fws.gov](#); [angela.matz@fws.gov](#); [roger.kaye@fws.gov](#); [john.brewer@fws.gov](#); [john.w.martin@fws.gov](#)

**Subject:** [EXTERNAL] Coastal Plain Oil and Gas Leasing Program EIS: Affected Environment Kick-off

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Purpose: Coastal Plain Leasing EIS: Affected Environment Kick-off Teleconference

Access Number: (b) (5) CIP

Passcode: (b) (5) CIP

AGENDAS sent separately

**From:** [Berendzen, Steve](#)  
**To:** [Joanna Fox](#); [Stephen Arthur](#); [Hollis Twitchell](#)  
**Subject:** Fwd: FYI - Correspondence regarding ANWR  
**Date:** Tuesday, June 19, 2018 7:29:28 PM  
**Attachments:** [Canadian DipNote.pdf](#)  
[Government of Canada Submission - Coastal Plain Leasing EIS - Scoping Process - June 18 2018.pdf](#)

---

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

----- Forwarded message -----

From: **Castellanos, Gilbert** <[gilbert\\_castellanos@fws.gov](mailto:gilbert_castellanos@fws.gov)>  
Date: Tue, Jun 19, 2018 at 1:55 PM  
Subject: Fwd: FYI - Correspondence regarding ANWR  
To: Mitch Ellis <[mitch\\_ellis@fws.gov](mailto:mitch_ellis@fws.gov)>, Doug Damberg <[doug\\_damberg@fws.gov](mailto:doug_damberg@fws.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>  
Cc: Wendy Loya <[wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov)>

FYI-

----- Forwarded message -----

From: **Close, Ryan** <[ryan\\_close@ios.doi.gov](mailto:ryan_close@ios.doi.gov)>  
Date: Tue, Jun 19, 2018 at 8:05 AM  
Subject: FYI - Correspondence regarding ANWR  
To: Gloria Bell <[gloria\\_bell@fws.gov](mailto:gloria_bell@fws.gov)>, Gilbert Castellanos <[Gilbert\\_Castellanos@fws.gov](mailto:Gilbert_Castellanos@fws.gov)>, "Strylowski, Colin" <[cstrylowski@blm.gov](mailto:cstrylowski@blm.gov)>, Bud Cribley <[bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov)>, Victor Heilweil <[heilweil@usgs.gov](mailto:heilweil@usgs.gov)>, Ken Richkus <[ken\\_richkus@fws.gov](mailto:ken_richkus@fws.gov)>, Sarah Mott <[Sarah\\_P\\_Mott@fws.gov](mailto:Sarah_P_Mott@fws.gov)>  
Cc: David Downes <[david\\_downes@ios.doi.gov](mailto:david_downes@ios.doi.gov)>

Good afternoon everyone,

For your awareness, I'm sharing two documents that the USG recently received from Canada pertaining to possible energy development in ANWR. The first is a diplomatic note from Canada to DOS that outlines Canadian concerns about transboundary effects. The second is a letter from Canada to BLM (with similar content) in response to the notice of intent to prepare an EIS. Both seek consultation on this matter.

I don't have any further information on how DOS/DOI plan to respond to these documents, though Steve Wackowski is meeting with the State Department Canada desk tomorrow, and I presume these notes will be discussed.

I'll share any further information that comes my way.

Thanks,  
Ryan



Ryan Close  
Office of International Affairs  
U.S. Department of the Interior  
(202) 208-3004  
[www.doi.gov/intl](http://www.doi.gov/intl)

--

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Note No. WSHDC-5910

The Embassy of Canada to the United States of America presents its compliments to the Department of State of the United States of America and has the honor to refer to the implementation of provisions in the U.S. Tax Cuts and Jobs Act of 2017 requiring the Secretary of the Interior, acting through the Bureau of Land Management, to establish and administer a competitive oil and gas program for the leasing, development, production, and transportation of oil and gas in and from the Coastal Plain area of the Arctic National Wildlife Refuge (Coastal Plain).

The Government of Canada is concerned about the potential transboundary impacts of oil and gas exploration and development planned for the Coastal Plain, including impacts on shared species that migrate between our countries, as well as impacts on our Indigenous peoples, including their customary and traditional use of Porcupine Caribou. Canada is particularly concerned that proposed developments will have significant, long-term adverse impacts on the Porcupine Caribou herd and its habitat.

To ensure that Canada's concerns are considered, Canada has submitted comments in the public scoping process for the Leasing Environmental Impact Statement (Leasing EIS) to implement an oil and gas leasing program within the Coastal Plain. While Canada welcomes the



opportunity to contribute to the Leasing EIS process, it nevertheless views the process as distinct and separate from the treaty-based mechanisms for cooperation and consultation that Canada and the United States have concluded to protect migratory species. These include the 1987 *Agreement Between the Government of Canada and the Government of the United States of America on the Conservation of the Porcupine Caribou Herd* (Porcupine Caribou Agreement), the 2008 *Memorandum of Understanding between Environment and Climate Change Canada and the United States Department of the Interior for the Conservation and Management of Shared Polar Bear Populations*, and the 1916 *Convention for the Protection of Migratory Birds in the United States and Canada*. Canada and the United States have also both signed the multilateral 1973 *Agreement on the Conservation of Polar Bears*. Consistent with our countries' long history of cooperation and consultation to conserve shared species, as recognized in these agreements, the Government of Canada looks forward with strong interest to working with the United States to further convey our views.

The Government of Canada further notes that under Sec. 1005 of the *Alaska National Interest Lands Conservation Act*, the U.S. Secretary of the Interior is required to consult with the appropriate agencies of the Government of Canada in evaluating impacts of oil and gas exploration particularly with respect to the Porcupine Caribou herd.

Based on our countries' long history of transboundary cooperation for the protection of migratory species and the many instruments put in place to promote such cooperation, we seek your assurances that Canada will be informed and consulted as the leasing and post-lease activities, including seismic and drilling exploration, development, and transportation of oil and



gas in and from the Coastal Plain are considered. To this end Canada, invites United States' officials to meet with Canadian officials in order to provide Canada with information about the planned developments, share views, and identify opportunities for further consultation and sharing of relevant scientific research.

Canada would also like to note that the International Porcupine Caribou Board, formed under the Porcupine Caribou Agreement, is a key bilateral mechanism to advise the Governments of Canada and the United States on the impact of proposed development in the Coastal Plain and to share information and consider actions for the protection of the Porcupine Caribou herd and its habitat. Canada thanks the United States for its work supporting the Board and welcomed the recent news that the two remaining vacancies for U.S. members may be filled by late June and that the board could meet before the end of September. Canada welcomes this and looks forward to the opportunity to discuss this issue with the United States.

The Government of Canada avails itself of this opportunity to renew to the Department of State assurances of its highest consideration.

Washington, June 19, 2018



# Coastal Plain Oil and Gas Leasing Program EIS

## Internal Scoping Meeting Agenda

May 3, 2018

BLM Alaska State Office, Anchorage, AK  
Denali Conference Room

Dial-in Phone: (b) (5) CIP  
Passcode: (b) (5) CIP

### Desired Outcomes

- ☐ Understanding of program background, purpose and need, proposed action, and overall schedule
- ☐ Understanding of the issues of concern
- ☐ Identify connected, cumulative, or similar actions with program
- ☐ Identify data gaps/data needs
- ☐ General EIS outline and content
- ☐ Details on external scoping and public meetings
- ☐ Next steps and action items

| Time          | Agenda Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | FWS Reps                                                                                                                                                                                                                          |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:30 – 8:45   | Welcome and Introductions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                   |
| 8:45 – 9:15   | Program Overview <ul style="list-style-type: none"> <li><input type="checkbox"/> Goal of program / kick-off message (BLM/EMPSi)</li> <li><input type="checkbox"/> Summary of program to date / Section 20001 Tax Act (BLM)</li> <li><input type="checkbox"/> Program area and decision space (BLM)</li> <li><input type="checkbox"/> Purpose and need/proposed action (BLM)</li> <li><input type="checkbox"/> Expectations for the EIS / SO 3355 (BLM/EMPSi)</li> <li><input type="checkbox"/> Public scoping</li> <li><input type="checkbox"/> Schedule (BLM/EMPSi)</li> </ul> | All Subject Matter<br>Experts identified for<br>the day plus...<br>Steve B<br>Joanna<br>Doug<br>Mitch<br>Soch<br>Mary/Patrick<br>Eric/Rick<br>Carl/Josh<br>Andrea/Sara<br>Stephanie<br>Tracy<br>John T<br>John M<br>Drew<br>Wendy |
| 9:15 – 10:00  | Renewable Resources Issues and Data Discussion. Includes, <ul style="list-style-type: none"> <li><input type="checkbox"/> Air quality/climate</li> <li><input type="checkbox"/> Water resources/hydrology</li> <li><input type="checkbox"/> Geology/soils/permafrost</li> </ul>                                                                                                                                                                                                                                                                                                 | John<br>Greta<br>Josh Rose<br>Angela Matz<br>Randy<br>Rick<br>Tim Allen (NRPC)<br>Catherine Collins (NRPC)<br>Jill Webster (NRPC)<br>Tamara McCandless<br>(NRPC)                                                                  |
| 10:00 – 10:10 | BREAK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |





|               |                                                                                                                                                                                                                           |                                                                                                       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 10:10 – 11:00 | Renewable Resources Issues and Data Discussion. Includes, <ul style="list-style-type: none"> <li>□ Cultural/historic resources</li> <li>□ Subsistence</li> <li>□ Paleontological resources</li> </ul>                     | Hollis<br>Carl/Josh Ream<br>Ed                                                                        |
| 11:00 – 12:15 | Renewable Resources Issues and Data Discussion. Includes, <ul style="list-style-type: none"> <li>□ Vegetation</li> <li>□ Wildlife, fish, aquatic species</li> <li>□ Special status species</li> <li>□ Wildfire</li> </ul> | Randy<br>Greta<br>Steve A<br>Chris Latty<br>Eric/Rick<br>Ryan Wilson<br>Christopher P<br>Peter<br>Ted |
| 12:15 – 1:15  | LUNCH                                                                                                                                                                                                                     |                                                                                                       |
| 1:15 – 2:00   | Human Environment and Special Designations. Includes, <ul style="list-style-type: none"> <li>□ Recreation</li> <li>□ Transportation and access</li> <li>□ Noise</li> <li>□ Visual</li> </ul>                              | Tracy-in training<br>Jen Reed-out of town<br>Alfredo<br>Susan LaKonski<br>Roger                       |

| Time        | Agenda Item                                                                                                                                                | Facilitator(s)                            |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|             | □ Special Designations                                                                                                                                     | Ryan and Christopher                      |
| 2:00 – 2:45 | Non-Renewable Resources. Includes, <ul style="list-style-type: none"> <li>□ Petroleum</li> <li>□ Sand and gravel</li> <li>□ Hazardous materials</li> </ul> | Patrick O'Dell<br>(Denver)<br>Angela Matz |
| 2:45 – 2:55 | BREAK                                                                                                                                                      |                                           |
| 2:55 – 3:45 | Socioeconomics. Includes, <ul style="list-style-type: none"> <li>□ Socioeconomics</li> <li>□ Environmental justice</li> </ul>                              | Hollis<br>Carl<br>Joshua Ream             |
| 3:45 – 4:15 | Connected, cumulative, or similar actions                                                                                                                  | John Martin                               |
| 4:15 – 4:30 | Next Steps and Actions                                                                                                                                     |                                           |
| 4:30        | END FOR DAY                                                                                                                                                |                                           |



**From:** [Berendzen, Steve](#)  
**To:** [Wixon, Donna](#)  
**Cc:** [Joanna Fox](#); [Shelly Jacobson](#); [John Trawicki](#); [Loya, Wendy](#); [Stephanie Brady](#); [Sarah LaMarr](#); [Conn, Sarah](#); [Ted Swem](#); [Stephen Arthur](#); [Christopher Latty](#); [Greta Burkart](#); [Roger Kaye](#); [Joshua Rose](#); [Hollis Twitchell](#)  
**Subject:** Re: Friday Meeting Update  
**Date:** Wednesday, May 2, 2018 12:28:27 PM

---

Donna,

Thanks for the clarification. We expect to have 8 or 9 people attending from this office on Friday.

Sarah Conn and Ted Swem from the Fairbanks Field office plan to attend and will be able to address the polar bear consultation.

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

On Tue, May 1, 2018 at 4:31 PM, Wixon, Donna <[dwixon@blm.gov](mailto:dwixon@blm.gov)> wrote:

Sorry, I may have misunderstood what information you had been provided.

Last week I think you were on the phone call with Shelly, myself, the BLM State Office, ASRC, and SAEExploration in regard to the seismic application they submitted for the 1002 area. They submitted an application and stamped confidential on every page. We told them that we need an application with information that may be viewed by the public. BLM is tasked with leading the NEPA (Arctic District Office) in regard to the application. Ted Murphy (BLM Associate State Director) has directed us to have a BLM/USFWS NEPA kickoff meeting this Friday from 10:30 to 12:30 at the Fairbanks Office.

It will be a project specific meeting and we would appreciate it if your staff that may be called upon to write the Effected Environment and Impact Sections of the NEPA would be able to participate.

We would like to put someone on the agenda to talk about the Polar Bear Consultation, would that be you or is there someone else we should invite?

Thank-you, please let me know if there is any other information I can provide. As soon as we get the application I will send it to you.

Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
[222 University Ave](#)  
[Fairbanks, Alaska 99709](#)  
907-474-2301 Office  
907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)

On Tue, May 1, 2018 at 3:58 PM, Berendzen, Steve <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)> wrote:

Thanks, Donna - I may have missed some earlier correspondence on this, but will this meeting be a meet and greet with general discussion, or will it get more specific with proposed areas of seismic coverage and equipment/methodology to be used? I haven't notified any staff and need a better understanding of what is expected before I encourage

staff participation. Also what time were you planning to meet, and for what duration?

If you can give us a better sense of what will be discussed and what role our folks will have in this meeting, I can give you better feedback on this.

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

On Tue, May 1, 2018 at 3:43 PM, Wixon, Donna <[dwixon@blm.gov](mailto:dwixon@blm.gov)> wrote:

Good Afternoon,

I don't have anything new to report, but I wanted to keep you in the loop. We are still waiting for a nonconfidential application. The last we heard a representative of ASRC and SAE were going to meet with someone from USFWS yesterday. They said state director but perhaps they meant regional director to discuss the permit. After the meeting they would make any changes to the permit request.

We have been given direction to have the meeting Friday and that is still our plan. Do you know how many people from your staff will be able to make the meeting? Are there any specific items you would like to see on the agenda?

Thank-you for your patience,  
Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
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[Fairbanks, Alaska 99709](#)  
[907-474-2301](#) Office  
[907-474-2386](#) Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)



**From:** [dwixon@blm.gov](mailto:dwixon@blm.gov)  
**To:** [ted\\_swem@fws.gov](mailto:ted_swem@fws.gov); [wendy\\_loya@fws.gov](mailto:wendy_loya@fws.gov); [tvosburgh@blm.gov](mailto:tvosburgh@blm.gov); [njones@blm.gov](mailto:njones@blm.gov); [stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov); [l75murph@blm.gov](mailto:l75murph@blm.gov); [tmeares@blm.gov](mailto:tmeares@blm.gov); [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov); [kdebenham@blm.gov](mailto:kdebenham@blm.gov); [lbyrant@blm.gov](mailto:lbyrant@blm.gov); [slamarr@blm.gov](mailto:slamarr@blm.gov); [dniagro@blm.gov](mailto:dniagro@blm.gov); BLM-AK SO Bridge 2 1 866 675 1735 Passcode 1222202; [john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov); [joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov); BLM-AK FDO Kobuk Room; [joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov); [roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov); [sarah\\_conn@fws.gov](mailto:sarah_conn@fws.gov); [grta\\_burkart@fws.gov](mailto:grta_burkart@fws.gov); [christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov); [sfritz@blm.gov](mailto:sfritz@blm.gov); [kennitiz@blm.gov](mailto:kennitiz@blm.gov); [mwhitman@blm.gov](mailto:mwhitman@blm.gov); [jkeeney@blm.gov](mailto:jkeeney@blm.gov); [rbrumbau@blm.gov](mailto:rbrumbau@blm.gov); [hollis\\_twitchel@fws.gov](mailto:hollis_twitchel@fws.gov); [stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov); [ssweet@blm.gov](mailto:ssweet@blm.gov)  
**Subject:** Invitat on: BLM USFWS Seismic Pre NEPA Kickoff Meeting @ Fri May 4, 2018 10:30am - 12:30pm (AKDT) (wendy\_loya@fws.gov)  
**Attachments:** [invite.ics](#)

more details > <<https://www.google.com/calendar/event?action=VIEW&eid=NWZoYWRR1hjBzNm1oZXNzZ2JkZjV1cmtwOHMgd2VuZHIhG95YUBmd3MuZ292&tok=MTQqZHDpeG9uQGJs55nb3Y4MDM1ODYzOWEyODU3NjhiOTZhNzlxNDASZGEzNjEwYTJlNThmNzBj&ctz=America%2FAnchorage&hl=en&es=1>>

BLM USFWS Seismic Pre NEPA Kickoff Meeting  
Meeting to discuss the proposed seismic application for the 1002 Area. It is possible that we won't have a nonconfidential application before the meeting. The applicant is working to provide us information that we will be able to use for the EA. Please see attached draft agenda and let me know if there are suggested additions or changes to the agenda. Thank-you very much for your participation in the meeting.  
When Fri May 4, 2018 10:30am – 12:30pm Alaska Time  
Where BLM-AK FDO Kobuk Room, BLM-AK SO Bridge 2 1 866 675 1735 Passcode 1222202 (b) (5) CIP (b) (7)(F) (map <[https://maps.google.com/maps?q=BLM-AK\\_FDO\\_Kobuk\\_Room,\\_BLM-AK\\_SO\\_Bridge\\_2\\_1\\_866\\_675\\_1735\\_Passcode\\_1222202&hl=en](https://maps.google.com/maps?q=BLM-AK_FDO_Kobuk_Room,_BLM-AK_SO_Bridge_2_1_866_675_1735_Passcode_1222202&hl=en)> )  
Video call [https://hangouts.google.com/hangouts/\\_/doi.gov/dwixon?iceid=ZHDpeG9uQGJs55nb3Y5fhadun0s6mhessgqf5urkpbds](https://hangouts.google.com/hangouts/_/doi.gov/dwixon?iceid=ZHDpeG9uQGJs55nb3Y5fhadun0s6mhessgqf5urkpbds)  
Calendar wendy\_loya@fws.gov  
Who • dwixon@blm.gov - organizer

- ted\_swem@fws.gov
- wendy\_loya@fws.gov
- tvosburgh@blm.gov
- njones@blm.gov
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- stephen\_arthur@fws.gov
- ssweet@blm.gov

Attachments Draft Agenda May 2 2018 (1).docx <[https://drive.google.com/a/blm.gov/file/d/1un-nXXoEAFa3W37uRNSnu03QXkkqjb/view?usp=drive\\_web](https://drive.google.com/a/blm.gov/file/d/1un-nXXoEAFa3W37uRNSnu03QXkkqjb/view?usp=drive_web)>

Going? Yes <<https://www.google.com/calendar/event?action=RESPOND&eid=NWZoYWRR1hjBzNm1oZXNzZ2JkZjV1cmtwOHMgd2VuZHIhG95YUBmd3MuZ292&rst=1&tok=MTQqZHDpeG9uQGJs55nb3Y4MDM1ODYzOWEyODU3NjhiOTZhNzlxNDASZGEzNjEwYTJlNThmNzBj&ctz=America%2FAnchorage&hl=en&es=1>>  
- Maybe <<https://www.google.com/calendar/event?action=RESPOND&eid=NWZoYWRR1hjBzNm1oZXNzZ2JkZjV1cmtwOHMgd2VuZHIhG95YUBmd3MuZ292&rst=3&tok=MTQqZHDpeG9uQGJs55nb3Y4MDM1ODYzOWEyODU3NjhiOTZhNzlxNDASZGEzNjEwYTJlNThmNzBj&ctz=America%2FAnchorage&hl=en&es=1>>  
- No <<https://www.google.com/calendar/event?action=RESPOND&eid=NWZoYWRR1hjBzNm1oZXNzZ2JkZjV1cmtwOHMgd2VuZHIhG95YUBmd3MuZ292&rst=2&tok=MTQqZHDpeG9uQGJs55nb3Y4MDM1ODYzOWEyODU3NjhiOTZhNzlxNDASZGEzNjEwYTJlNThmNzBj&ctz=America%2FAnchorage&hl=en&es=1>>  
more options > <<https://www.google.com/calendar/event?action=VIEW&eid=NWZoYWRR1hjBzNm1oZXNzZ2JkZjV1cmtwOHMgd2VuZHIhG95YUBmd3MuZ292&tok=MTQqZHDpeG9uQGJs55nb3Y4MDM1ODYzOWEyODU3NjhiOTZhNzlxNDASZGEzNjEwYTJlNThmNzBj&ctz=America%2FAnchorage&hl=en&es=1>>  
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Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More <<https://support.google.com/calendar/answer/37135#forwarding>> .

**From:** [LaMarr, Sarah](#)  
**To:** [Donna Wixon](#)  
**Cc:** [Robert Brumbaugh](#); [Matt Whitman](#); [Joseph Keeney](#); [greta\\_burkart@fws.gov](#); [stephen\\_arthur@fws.gov](#); [Vosburgh, Timothy](#); [christopher\\_latty@fws.gov](#); [Richard Kemnitz](#); [roger\\_kaye@fws.gov](#); [steve\\_berendzen@fws.gov](#); [Lonnie Bryant](#); [Ted Murphy](#); [Stacey Fritz](#); [ted\\_swem@fws.gov](#); [Sweet, Serena](#); [Conn. Sarah](#); [joshua\\_rose@fws.gov](#); [Wendy Loya](#); [john\\_trawicki@fws.gov](#); [joanna\\_fox@fws.gov](#); [Nigro, Debora](#); [stephanie\\_brady@fws.gov](#); [Debenham, Krystal](#); [Terra Meares](#); [Nichelle Jones](#); [hollis\\_twitchell@fws.gov](#)  
**Subject:** Re: Invitation: BLM USFWS Seismic Pre NEPA Kickoff Meeting @ Fri May 4, 2018 10:30am - 12:30pm (AKDT) (slamarr@blm.gov)  
**Date:** Thursday, May 3, 2018 2:33:32 PM  
**Attachments:** [Seismic Webex Invite.docx](#)  
[Webex Instructions.docx](#)

---

For those folks who will be joining us via phone who would like to see the presentation materials, please follow the attached instructions to participate in a WebEx.

If you have any problems, let us know!

Sarah La Marr  
Bureau of Land Management  
Arctic District Office  
Fairbanks, Alaska  
907-474-2334 (desk)  
907-888-3407 (cell)  
[slamarr@blm.gov](mailto:slamarr@blm.gov)

On Wed, May 2, 2018 at 11:39 AM, Donna Wixon <[dwixon@blm.gov](mailto:dwixon@blm.gov)> wrote:

### **BLM USFWS Seismic Pre NEPA Kickoff Meeting**

[more details »](#)

Meeting to discuss the proposed seismic application for the 1002 Area. It is possible that we won't have a nonconfidential application before the meeting. The applicant is working to provide us information that we will be able to use for the EA. Please see attached draft agenda and let me know if there are suggested additions or changes to the agenda. Thank-you very much for your participation in the meeting.

**When** Fri May 4, 2018 10:30am – 12:30pm Alaska Time

**Where** BLM-AK FDO Kobuk Room, BLM-AK SO Bridge (b) (5) CIP (b) (5) CIP (map) Passcode

**Video call** [https://hangouts.google.com/hangouts/\\_/doi.gov/dwixon](https://hangouts.google.com/hangouts/_/doi.gov/dwixon)

**Calendar** [slamarr@blm.gov](mailto:slamarr@blm.gov)

**Who**

- [dwixon@blm.gov](mailto:dwixon@blm.gov) - organizer
- [rbrumbau@blm.gov](mailto:rbrumbau@blm.gov)
- [mwhitman@blm.gov](mailto:mwhitman@blm.gov)
- [jkeeney@blm.gov](mailto:jkeeney@blm.gov)
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- [john\\_trawicki@fws.gov](mailto:john_trawicki@fws.gov)
- [slamarr@blm.gov](mailto:slamarr@blm.gov)
- [joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)
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- [kdebenham@blm.gov](mailto:kdebenham@blm.gov)
- [tmeares@blm.gov](mailto:tmeares@blm.gov)
- [njones@blm.gov](mailto:njones@blm.gov)
- [hollis\\_twitchell@fws.gov](mailto:hollis_twitchell@fws.gov)

Attachments [Draft Agenda May 2 2018 \(1\).docx](#)

Going? [Yes](#) - [Maybe](#) - [No](#) [more options »](#)

Invitation from [Google Calendar](#)

You are receiving this email at the account [slamarr@blm.gov](mailto:slamarr@blm.gov) because you are subscribed for invitations on calendar [slamarr@blm.gov](mailto:slamarr@blm.gov).

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Forwarding this invitation could allow any recipient to modify your RSVP response. [Learn More](#).

| Time        | Agenda Item                                                                                                                                               | Facilitator(s) |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 10:30-10:40 | Welcome/Introductions<br>Meeting Goals                                                                                                                    | Ted/Shelly/Rob |
| 10:40-11:00 | Proposed Action (IF<br>AVAILABLE)                                                                                                                         | Donna          |
| 11:00-11:15 | Seismic Overview <ul style="list-style-type: none"> <li>• BLM Regulations</li> <li>• Seismic Equipment/Operations</li> </ul>                              | Rob/Donna      |
| 11:15-11:45 | EA <ul style="list-style-type: none"> <li>• Process Overview</li> <li>• Roles and Responsibilities</li> <li>• BMPs from NPR-A Seismic Projects</li> </ul> | Serena/Donna   |
| 11:45-12:15 | Polar Bear Consultation                                                                                                                                   | USFWS          |
| 12:15-12:30 | Next Steps                                                                                                                                                | All            |
| 12:30       | Adjourn                                                                                                                                                   |                |

You are receiving this email because you are invited to participate in a WebEx meeting.

We will be hosting the **video via WebEx** and will use a **dial-in teleconference line for audio**. Both the video and the audio steps below must be completed.

### **Video**

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<http://www.mymeetings.com/nc/join.php?sigKey=blm&i=740461118&p=1234&t=c>

If you do not have WebEx software installed, you will be prompted to install the software or run a temporary application. **(See the attachment “WebEx Instructions” for more details).**

2. Enter your name, email, and company. **(There is no passcode** for the meeting - leave this field blank)

3. Indicate that you have read the Privacy Policy and click on Proceed.

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### **Audio**

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(b) (5) CIP

2. When prompted, enter the **passcode**

(b) (5) CIP

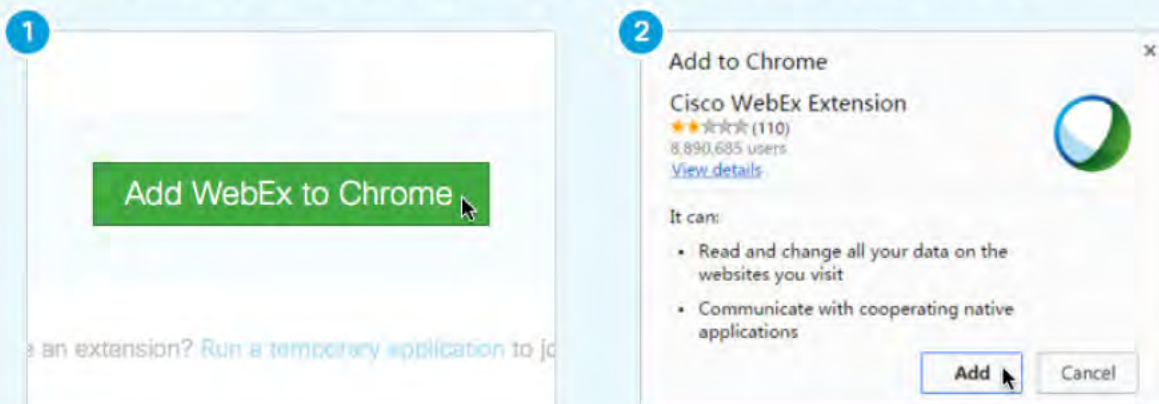
3. Please mute your teleconference line when you are not talking to reduce background noise during the meeting.

If you don't have WebEx installed on your computer when you click on the link to join the meeting you will be prompted to install the WebEx software.



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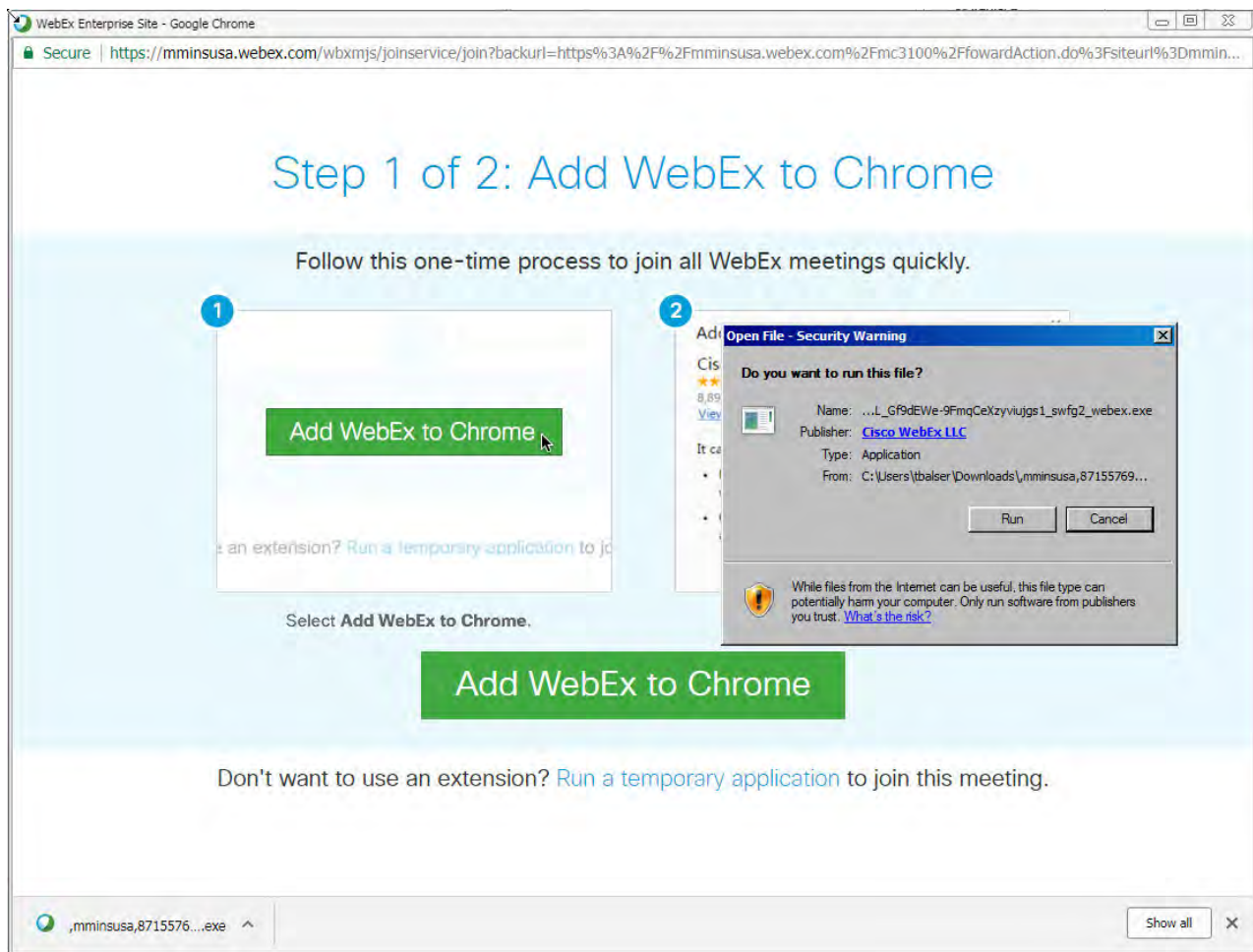
Add WebEx to Chrome

Don't want to use an extension? [Run a temporary application](#) to join this meeting.



There is also a temporary application that will run an extension for the meeting.

**Click on the link and an .exe file will download.**  
(You may need to check your downloads or popup blocker settings)



**Run/open the .exe file** and that should pop open a browser window that will allow you to join the meeting.

**From:** [Wixon, Donna](#)  
**To:** [Lonnie Bryant](#); [Sarah LaMarr](#); [Sarah Conn](#); [Joanna Fox](#); [Robert Brumbaugh](#); [John Trawicki](#); [Christopher Latty](#); [Hollis Twitchell](#); [Stephanie Brady](#); [Joshua Rose](#); [Roger Kaye](#); [Serena Sweet](#); [Ted Swem](#); [Greta Burkart](#); [Joseph Keeney](#); [Murphy, Ted](#); [Steve Berendzen](#); [kdebenham](#); [Terra Meares](#); [Stacey](#); [Stephen Arthur](#); [Shelly Jacobson](#); [Wendy Loya](#); [Richard Kemnitz](#); [Debbie](#); [Matthew Whitman](#); [Timothy Vosburgh](#); [Lynnda Kahn](#); [Mary Colligan](#)  
**Subject:** Seismic Application and updated Agenda - Friday May 4  
**Date:** Thursday, May 3, 2018 7:26:45 PM  
**Attachments:** [Final Agenda Coastal Plain Seismic Meeting.docx](#)  
[Marsh Creek Plan of Operations V8.1 F.pdf](#)

---

Hello All,

I am attaching the seismic application that we just received and an updated agenda.

See you tomorrow.

Thank-you,

Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office  
907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)



| Time        | Agenda Item                                                                                                                                               | Facilitator(s)                   |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| 10:30-10:40 | Welcome and Introductions<br>Goal of Meeting                                                                                                              | Shelly Jones<br>Ted Murphy       |
| 10:40-10:45 | Application/<br>Proposed Action                                                                                                                           | Donna Wixon                      |
| 10:45-11:30 | EA <ul style="list-style-type: none"> <li>• Process Overview</li> <li>• Roles and Responsibilities</li> <li>• BMPs from NPR-A Seismic Projects</li> </ul> | Serena Sweet<br><br>Donna Wixon  |
| 11:30-12:00 | Seismic Overview <ul style="list-style-type: none"> <li>• BLM Regulations</li> <li>• Seismic Equipment/Operations</li> </ul>                              | Rob Brumbaugh<br><br>Donna Wixon |
| 12:00-12:20 | Polar Bear Consultation                                                                                                                                   | USFWS                            |
| 12:20-12:30 | Next Steps                                                                                                                                                | All                              |
| 12:30       | Adjourn                                                                                                                                                   |                                  |

**From:** [Berendzen, Steve](#)  
**To:** [Loya, Wendy](#)  
**Cc:** [Hollis Twitchell](#)  
**Subject:** Fwd: info  
**Date:** Thursday, May 17, 2018 6:37:55 PM  
**Attachments:** [Week 2 May 29-June1 ANC FAI BAR.pdf](#)

---

Wendy, FYI - don't know if you've seen this. I just asked about it so she sent to me. I'm not included as an attendee - cool for me (just kidding :)

Do you know if Greg is planning to attend Fairbanks or Barrow? I don't think Fairbanks should be a problem for those who plan to come up here from a lodging or transportation standpoint, but it would be good for Hollis and I to coordinate our Barrow travel with whoever is going from the RO. We could theoretically stay in the Barrow bunkhouse, but Greg or other RO participant might prefer to stay with others at the Top of the World hotel. Hollis and I are flexible....

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

----- Forwarded message -----

**From:** **Hayes, Miriam (Nicole)** <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>  
**Date:** Thu, May 17, 2018 at 3:46 PM  
**Subject:** info  
**To:** Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>

Week 2 itinerary.

**Nicole Hayes**  
Project Coordinator  
Bureau of Land Management  
222 W. 7th Avenue #13  
Anchorage, Alaska 99513  
Desk: (907) 271-4354

# Coastal Plain Oil and Gas Leasing Program EIS – Scoping Meetings

WEEK 2 - May 29 through June 1, 2018

**Fairbanks, Anchorage, Utqiagvik**

## Tuesday, May 29, 2018 - Fairbanks

| Time    | Activity                                                                                                                                                    |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6:30 pm | <b>Public Scoping Meeting at the Carlson Center</b><br>2010 2 <sup>nd</sup> Ave.<br>Contact: Steve Sandquist XXX<br>Security: XXX<br><br>Livestreaming: XXX |

## Wednesday, May 30, 2018 – Anchorage

| Time     | Activity                                                                                                                                             |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am | <b>Public Scoping Meeting at the Dena'ina Center</b><br>600 West 7 <sup>th</sup> Ave<br>Contact: Dana Schnieber XXX<br>Livestreaming: Katie at IMIG: |

## Thursday, May 31, 2018 – Utqiagvik

| Time     | Activity                                                                |
|----------|-------------------------------------------------------------------------|
| 10:00 am | <b>Public Scoping Meeting at the Iñupiat Heritage Center</b><br>CONTACT |

## ATTENDEES

| Fairbanks                                  | Anchorage                                  | Utqiagvik                                  |
|--------------------------------------------|--------------------------------------------|--------------------------------------------|
| Nicole Hayes (BLM)                         | Nicole Hayes (BLM)                         | Nicole Hayes (BLM)                         |
| Ted Murphy (BLM)                           | Ted Murphy (BLM)                           | Ted Murphy (BLM)                           |
| Joe Balash (DOI)                           | Joe Balash (DOI)                           | Joe Balash (DOI)                           |
| Steve Wackowski (DOI)                      | Steve Wackowski (DOI)                      | Steve Wackowski (DOI)                      |
| Kate MacGregor (DOI)                       | Kate MacGregor (DOI)                       | Kate MacGregor (DOI)                       |
| Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)                      |
| David Batts (EMPSi)                        | David Batts (EMPSi)                        | Molly McCarter (EMPSi)                     |
| John King (EMPSi)                          | John King (EMPSi)                          | Mary Vavrik (Midnight Sun Court Reporting) |
| Molly McCarter (EMPSi)                     | Molly McCarter (EMPSi)                     |                                            |
| Lindsay Chipman (EMPSi)                    | Lindsay Chipman (EMPSi)                    |                                            |
| Andy Spellmeyer (EMPSi)                    | Andy Spellmeyer (EMPSi)                    |                                            |
| Mary Vavrik (Midnight Sun Court Reporting) | Mary Vavrik (Midnight Sun Court Reporting) |                                            |

## PRIMARY CONTACT INFORMATION

|                                                                                                |                                                                                                               |                                                                                                                                   |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Nicole Hayes, BLM<br>(Project Manager)<br>mnhayes@blm.gov<br>Office: 907-271-4354<br>Cell: XXX | Chad Ricklefs, EMPSi<br>(Project Manager)<br>chad.ricklefs@empsi.com<br>Office: 303-495-5129<br>Cell: (b) (6) | <u>LOGISTICS SUPPORT:</u><br>Amy Lewis, EMPSi<br>(Public Involvement Lead)<br>amy.lewis@empsi.com<br>Office: 503<br>Cell: (b) (6) |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|

### Air Transportation

Fairbanks – BLM and EMPSi to book own commercial travel  
Anchorage – BLM and EMPSi to book own commercial travel  
Utqiagvik – BLM and EMPSi to book own commercial travel

Court Reporter (Mary Vavrik) – XXX; Commercial flight TBD

### Ground Transportation

Fairbanks – by individual  
Anchorage – by individual  
Utqiagvik – XXX

### Meals/Personal Gear and Equipment (BLM Team/EMPSi staff)

Fairbanks, Anchorage, Utqiagvik – meals are on your own

BLM and EMPSi bring own snacks, water bottles/thermos, and snacks. Also bring emergency and arctic gear, sleeping bags, and medicine.

### Contractor Lodging

Fairbanks – Chena River Lodge-Best Western  
Anchorage – XXX  
Utqiagvik – Top of the World Hotel (contact info, payment)

## Tuesday, May 29, 2018 – Fairbanks

| Time     | Activity                                                                      |
|----------|-------------------------------------------------------------------------------|
| 7:00 am  | BLM staff to set up room for live streaming                                   |
| 12:00 pm | EMPSi staff meet at Carlson Center to begin set up for public scoping meeting |
| 2:00 pm  | BLM to arrive at Carlson Center                                               |
| XXX pm   | Security guards begin duty                                                    |
| XXXX pm  | BLM safety briefing                                                           |
| XXX pm   | Open doors; allow people to begin lining up outside of the meeting room       |
| 3:00 pm  | <b>Public Scoping Meeting</b> - open house period begins                      |

|         |                                                                                        |
|---------|----------------------------------------------------------------------------------------|
| 4:30 pm | BLM presentation, followed by public comment period                                    |
| 9:00 pm | Anticipated end of meeting and clean up                                                |
| 9:30 pm | Overnight at Best Western Chena River Lodge (Nicole, Ted, Court Reporter); XXX (EMPSi) |

### Wednesday, May 30, 2018 – Anchorage

| Time     | Activity                                                                                       |
|----------|------------------------------------------------------------------------------------------------|
| 7:00 am  | BLM staff to set up room for live streaming                                                    |
| 12:00 pm | EMPSi staff meet at Dena'ina Center – Idlughet Hall to begin set up for public scoping meeting |
| 2:00 pm  | BLM to arrive at Dena'ina Center                                                               |
| XXX pm   | Security guards begin duty                                                                     |
| XXX pm   | BLM safety briefing                                                                            |
| XXX pm   | Open doors; allow people to begin lining up outside of the meeting room                        |
| 3:00 pm  | <b>Public Scoping Meeting</b> - open house period begins                                       |
| 4:30 pm  | BLM presentation, followed by public comment period                                            |
| 9:00 pm  | Anticipated end of meeting and clean up                                                        |
| 9:30 pm  | Overnight at XXX (EMPSi)                                                                       |

### Thursday, May 31, 2018 – Utqiagvik

| Time    | Activity                                                        |
|---------|-----------------------------------------------------------------|
| XXX am  | Commercial flight departure for Utqiagvik                       |
| XXX am  | Arrive in Utqiagvik                                             |
| XX am   | Transfer from airport to Top of the World Hotel by taxi         |
|         | Shop for refreshments?                                          |
| XXX pm  | EMPSi arrive at Inupiat Heritage Center to begin meeting set-up |
| XXX pm  | BLM to arrive at Inupiat Heritage Center                        |
| 4:00 pm | <b>Public Scoping Meeting</b> - open house period begins        |
| 5:00 pm | BLM presentation, followed by public comment period             |
| 9:00 pm | Anticipated end of meeting and clean-up                         |
| 9:30 pm | Overnight at Top of the World Hotel (XXX)                       |

### Friday, June 1, 2018 – Utqiagvik/Anchorage

| Time   | Activity                                  |
|--------|-------------------------------------------|
| XXX am | Commercial flight departure for Anchorage |
| XXX am | Arrive in Anchorage                       |

----- Forwarded message -----

From: **LaMarr, Sarah** <[slamarr@blm.gov](mailto:slamarr@blm.gov)>

Date: Fri, May 18, 2018 at 3:48 PM

Subject: Updated Seismic Project Initiation Letter and Schedule for Review

To: Nichelle Jones <[njones@blm.gov](mailto:njones@blm.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>,

Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>

Cc: "Wixon, Donna" <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Please review the updated schedule in the attached PIL. Thanks, s.

Sarah La Marr  
Bureau of Land Management  
Arctic District Office  
Fairbanks, Alaska  
907-474-2334 (desk)  
907-888-3407 (cell)  
[slamarr@blm.gov](mailto:slamarr@blm.gov)



# United States Department of the Interior

Bureau of Land Management – Arctic District Office  
Fish and Wildlife Service – Arctic National Wildlife Refuge

Refer To: FF097424  
1310 (LLAKR00000)

Date: May XX, 2018

## Project Initiation Letter

To: Bureau of Land Management (BLM) and Fish and Wildlife Service (FWS)  
Interdisciplinary Team Members

From: Nichelle Jones (BLM Arctic District Manager) and Steven Berendzen (FWS Arctic  
National Wildlife Refuge Manager)

Subject: Project Initiation Letter for the Marsh Creek 3D Seismic Plan of Operations

## Purpose and Need

Title II of the Tax Cuts and Jobs Act of 2017 directed the Secretary of Interior (Secretary) to establish and administer a competitive oil and gas program for the leasing, development, production and transportation of oil and gas in and from the Coastal Plain with two lease sales required over the next ten years. The Tax Cuts and Jobs Act also directed the Secretary to issue any right of ways across the Coastal Plain for exploration, development and/or production and directed the Coastal Plain to be managed in a manner similar to the administration of lease sales under the Naval Petroleum Reserves Production Act (1976). Because the BLM manages the National Petroleum Reserve-Alaska (NPR-A) pursuant to the Naval Petroleum Reserves Production Act (1976), the BLM has been identified as the lead agency for permitting oil and gas related activities in the Arctic National Wildlife Refuge Coastal Plain area, including seismic exploration activities.

## Proposed Action

The BLM State Office received the Marsh Creek 3D Plan of Operations from SAExploration (SAE), Inc. for winter seismic surveys in the Coastal Plain on April 19, 2018. SAE is proposing to acquire seismic data across the Arctic National Wildlife Refuge Coastal Plain (2602 sq. miles) using rubber tracked/buggy vibrators and wireless, autonomous recording channels (nodes) during the winter of 2018/2019 and 2019/2020. There could be two crews each winter season with work starting approximately December 1 and ending on May 31, depending on tundra closures.

## **Roles and Responsibilities**

Although the BLM is the lead agency for permitting oil and gas activities on the Coastal Plain, including seismic exploration, FWS staff will be integral in the planning and analysis of the proposed seismic exploration project. The purpose of this Project Initiation Letter is to identify interdisciplinary team (IDT) members and provide direction on how to proceed with the NEPA process for the Marsh Creek 3D Seismic Plan of Operations.

We have chosen to use an Environmental Assessment as the NEPA tool to analyze the impacts of this project. See Table 1 for a list of core interdisciplinary team (IDT) members and their responsibilities.



**Table 1. Seismic Exploration Interdisciplinary Team**

| Role                           | BLM                          | FWS                                                             | Issues & Alternatives | Chapter 1 and 2 | Chapter 3 (Affected Environment) | Chapter 4 (Environmental Impacts & Cumulative Effects) | BMPs      | Public Meetings | Gov Consult | Response to Comments |
|--------------------------------|------------------------------|-----------------------------------------------------------------|-----------------------|-----------------|----------------------------------|--------------------------------------------------------|-----------|-----------------|-------------|----------------------|
| Oversight and Decisions        | Shelly Jones                 | Steve Berendzen                                                 | Briefings             |                 |                                  | Briefings                                              | Briefings | X               | X           | Briefings            |
| IDT Leader                     | Donna Wixon                  |                                                                 | Facilitate            | X               | Compile/Edit                     | Compile/Edit                                           | Briefings | X               | X           | X                    |
|                                |                              | Joanna Fox                                                      | Facilitate            | Review          | Review/Edit                      | Review/Edit                                            | Briefings | X               | X           | X                    |
| International Liaison          |                              | Charlie Hamilton (Polar Bears)<br>Gilbert Castellanos (Caribou) | X                     |                 | X                                | X                                                      | X         |                 |             | X                    |
| Geology/<br>Petroleum Engineer | Rob Brumbaugh                |                                                                 | X                     |                 | X                                | X                                                      | X         |                 |             | X                    |
|                                |                              | Patrick O'Dell                                                  | X                     |                 | Review                           | Review                                                 | X         |                 |             | X                    |
| Soils and Permafrost           | Eric Geisler                 |                                                                 | X                     |                 |                                  | X                                                      | X         |                 |             | X                    |
|                                |                              | Josh Rose                                                       | X                     |                 | X                                | Review                                                 | X         |                 |             | X                    |
| Vegetation                     | Tim Vosburgh/<br>Scott Guyer |                                                                 | X                     |                 |                                  | X                                                      | X         |                 |             | X                    |
|                                |                              | Greta Burkhart                                                  | X                     |                 | X                                | Review                                                 | X         |                 |             | X                    |
| Hydrology and Wetlands         | Richard Kemnitz              |                                                                 | X                     |                 |                                  | X                                                      | X         |                 |             | X                    |
|                                |                              | Greta Burkhart/Josh Rose                                        | X                     |                 | X                                | Review                                                 | X         |                 |             | X                    |
| Archaeology                    | Joe Keeney                   |                                                                 | X                     |                 |                                  | X                                                      | X         |                 |             | X                    |
|                                |                              | Ed Declava                                                      | X                     |                 | X                                | Review                                                 | X         |                 |             | X                    |
| Acoustical Environment         | Alan Peck                    |                                                                 | X                     |                 | X                                | X                                                      | X         |                 |             | X                    |
|                                |                              | Roger Kaye                                                      | X                     |                 | Review                           | Review                                                 | X         |                 |             | X                    |
| Fisheries                      | Matt Whitman                 |                                                                 | X                     |                 |                                  | X                                                      | X         |                 |             | X                    |
|                                |                              | Randy Brown                                                     | X                     |                 | X                                | Review                                                 | X         |                 |             | X                    |

| Role                                     | BLM                                         | FWS                                     | Issues & Alternatives | Chapter 1 and 2 | Chapter 3 (Affected Environment) | Chapter 4 (Environmental Impacts & Cumulative Effects) | BMPs | Public Meetings | Gov Consult | Response to Comments |
|------------------------------------------|---------------------------------------------|-----------------------------------------|-----------------------|-----------------|----------------------------------|--------------------------------------------------------|------|-----------------|-------------|----------------------|
| Wildlife (Birds)                         | Debbie Nigro                                |                                         | X                     |                 |                                  | X                                                      | X    |                 |             | X                    |
|                                          |                                             | Chris Latty                             | X                     |                 | X                                | Review                                                 | X    |                 |             | X                    |
| Wildlife (Mammals)                       | Tim Vosburgh                                |                                         | X                     |                 |                                  | X                                                      | X    |                 |             | X                    |
|                                          |                                             | Steve Arthur                            | X                     |                 | X                                | Review                                                 | X    |                 |             | X                    |
| T&E Species and Consultation             | Debbie Nigro (BA – Birds)                   |                                         | X                     |                 |                                  | X                                                      | X    |                 |             | X                    |
|                                          |                                             | MMPA – Bear Ted Swem (ESA consultation) | X                     |                 | X                                | Review                                                 | X    |                 |             | X                    |
| Socioeconomics and Environmental Justice | Stacey Fritz                                |                                         | X                     |                 |                                  | X                                                      | X    | X               | X           | X                    |
|                                          |                                             | Hollis Twitchell                        | X                     |                 | X                                | Review                                                 | X    | X               | X           | X                    |
| Subsistence & 810 Analysis               | Stacey Fritz (responsible for 810 analysis) |                                         | X                     |                 |                                  | X                                                      | X    | X               | X           | X                    |
|                                          |                                             | Hollis Twitchell                        | X                     |                 | X                                | Review                                                 | X    | X               | X           | X                    |
| Lands/Realty                             | Donna Wixon                                 |                                         | X                     |                 |                                  | X                                                      | X    |                 |             | X                    |
|                                          |                                             | Susan LaKonski                          | X                     |                 | X                                | Review                                                 | X    |                 |             | X                    |
| VRM/Transportation                       | Randy Goodwin                               |                                         | X                     |                 | X                                | X                                                      | X    |                 |             | X                    |
| Wilderness                               |                                             | Roger Kaye                              | X                     |                 | X                                | X                                                      | X    |                 |             | X                    |
| Wild & Scenic Rivers                     | Randy Goodwin                               |                                         | X                     |                 |                                  | X                                                      | X    |                 |             | X                    |
|                                          |                                             | Jennifer Reed                           | X                     |                 | X                                | Review                                                 | X    |                 |             | X                    |
| Hazardous Materials                      | Melody Debenham                             |                                         |                       |                 |                                  | X                                                      | X    |                 |             | X                    |
|                                          |                                             | Angela Matz                             | X                     |                 | X                                | Review                                                 | X    |                 |             | X                    |
| GIS/Mapping                              | Cindy Hamfler                               |                                         |                       | X               | X                                |                                                        |      | X               |             |                      |
|                                          |                                             | Sheila Dufford                          |                       | X               | X                                |                                                        |      | X               |             |                      |

## **IDT Team**

All participants identified in this Project Initiation Letter will work together throughout the analysis and documentation process.

The IDT Lead is responsible for communicating with the managers on a regular basis, ensuring the process is meeting timeframes and providing assignments and instructions to IDT members. In addition, the IDT Lead is responsible for finalizing the proposed action, leading and facilitating IDT meetings, writing Chapters 1 and 2, compiling and editing Chapters 3 and 4, finalizing the NEPA document and assuring a complete project record.

All IDT members will be responsible for identifying environmental and/or social issues related to the proposed action, develop best management practices and propose alternatives based on issues.

Fish and Wildlife specialists will be primarily responsible for writing Chapter 3 (Existing Condition) while BLM staff will be primarily responsible for writing Chapter 4 (Environmental Impacts) with review by FWS specialists (refer to Table 1). Communication is critical and the IDT Lead and managers should be notified as soon as possible of any potential issues or deadlines that can't be met. Any questions should be directed to the IDT Lead, Donna Wixon at [dwixon@blm.gov](mailto:dwixon@blm.gov) or 474-2301.

After the Proposed Action is finalized (approximately early June), there will be weekly IDT update conference calls each Tuesday at 3pm (call in number will be provided). There will also be an in person IDT meeting to finalize alternatives and best management practices.

The BLM District Manager and the FWS Arctic National Wildlife Refuge Manager will be given briefings at key milestones during the process such as after Issue Statement Development, Alternative Development, and determination of Environmental Impacts (including the 810 analysis and ESA impacts). Key IDT members may need to be available to attend briefings.

In addition, the IDT Lead will update managers weekly on the timeline, process, and any issues that need to be resolved.

## **NEPA**

Under the new Department NEPA direction, complex Environmental Assessments will be required to be less than 50 pages in length (appendices are not included in the total page numbers). All IDT members will need to be cognizant of the page limitations and write their sections accordingly. Specialists should complete Specialist Reports for their resource that will be included as an appendix and provide a summary of their findings for the body of the EA. Even if a resource is found to have no issues associated with the proposed action, a Specialist Report should still be completed to explain why there are no issues associated with that resource.

## **Timeframes**

Under the 43 CFR 3152 (Mineral Exploration in Alaska), the authorized officer is required to review and approve a seismic permit within 90 calendar days of receiving an application unless

compliance with statutory requirements, such as NEPA, would delay the action. Due to the high likelihood of public interest in this project, the need for public outreach and the amount of time necessary for Endangered Species Act consultation, it is not feasible to meet the 90 day timeframe. See the proposed project timeline below.

### **Projected Timeline**

**May 11-** Due date for application questions from FWS and BLM to IDT Lead  
**May 22 –** IDT Lead compiles application questions and sends letter to applicant  
**May 22 –** Project Initiation Letter sent to IDT  
**May 22-June 1 –** Draft Affected Environment (FWS and Key BLM IDT members) (Refer to Table 1)  
**May 30 –** Deadline for applicant response to questions  
**May 30-June 6 -** Finalize Proposed Action and post to BLM ePlanning website (IDT Lead)  
**June - November –**MMPA Incidental Take Regulations development (published in Federal Register in November and final rule in January)  
**June 6 –** IDT Lead sends Proposed Action to team to drafting Issue Statements  
**June 12 –** Deadline for Issue Statements from IDT to IDT Lead  
**June 12 –** IDT Lead sends letter to applicant regarding schedule  
**June 13-27 –** All IDT members draft proposed Best Management Practices and draft Alternatives based on Issues  
**June 28 –** In person IDT meeting to finalize Alternatives and Best Management Practices (IDT)  
**June 29 –** IDT Lead sends Alternatives including Best Management Practices to Managers for review  
**July 3 –** IDT Lead sends list of projects to include in cumulative effects analysis to IDT for review  
**July 5 –** Manager Alternative Briefing and **Identify Preferred Alternative** (IDT Lead, Managers and key IDT members)  
**July 6 - July 20 –** Joint Biological Assessment for ESA and MMPA consultations on preferred alternative (FWS – polar bears, BLM - eiders) (BA for both seismic and the Incidental Take Regulations)  
**July 6 - July 20 –** IDT writes Environmental Impacts including cumulative effects (BLM and Key FWS IDT members) (Refer to Table 1)  
**July 20 – November 9 –** Joint MMPA and ESA Formal Consultation for both seismic and Incidental Take Regulations  
**July 25 –** Manager Briefing on Environmental Impacts  
**July 27 –** Post draft EA for 30 day comment period.  
**August 6-15–** Public Meetings and Government to Government  
**August 27–** All Public Comments Received  
**August 27-September 14 –** IDT Responds to Comments  
**November 9 –** Joint MMPA and ESA Formal Consultation Completed  
**November 12 –** Sign FONSI and Decision (BLM District Manager)  
**November 16 –** Incidental Take Regulations published in Federal Register  
**January 2019 –** Final Incidental Take Regulations Rule

Nichelle Jones

Steve Berendzen

(BLM Arctic District Manager)

(FWS Arctic National Wildlife Refuge Manager)





BUREAU OF LAND MANAGEMENT  
Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709-3816  
<http://www.blm.gov/ak>



May 22, 2018

In reply refer to:  
FF097424  
3152.00 (AKR000)

Ms. Suzan Simonds  
Permit and Regulatory Manager  
SAExploration Inc.  
8240 Sandlewood Place, Suite 102  
Anchorage, Alaska 99507

Subject: Oil and Gas Geophysical Exploration Application

Dear Ms. Simonds,

Title II of the Tax Cuts and Jobs Act of 2017 directed the Secretary of Interior to establish and administer a competitive oil and gas program within the Coastal Plain of Alaska. Because the Bureau of Land Management (BLM) manages the National Petroleum Reserve in Alaska (NPR-A) pursuant to the Naval Petroleum Reserves Production Act (1976), the BLM has been identified as the lead agency for permitting oil and gas related activities in the Arctic National Wildlife Refuge Coastal Plain area, including seismic exploration activities. Within the BLM the Arctic District Office has been tasked to process seismic applications for the area.

On April 19, 2018 the Alaska BLM State Office received an application from SAExploration to conduct seismic activity in the 1002 area of the Alaska National Wildlife Refuge. On May 3, 2018 the BLM Arctic District received a nonconfidential version of the plan of operations. BLM and USFWS met on May 4<sup>th</sup> to discuss the proposed action.

The regulations that cover the proposed action are 43 CFR 3152, Exploration in Alaska. Part 3152.1 provides information on what is required to be submitted as part of the application. SAExploration has provided information for items a thru f. Part f requires a plan for conducting the exploration activities. While SAExploration has submitted a plan of operations, the plan does not provide enough information for the BLM to adequately evaluate impacts of the proposed action on the environment as required by the National Environmental Policy Act (NEPA).

Please see attached list of questions entitled: "Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO) BLM/USFWS Comments and Questions." We would ask that you respond to the questions and comments as soon as possible so that we may begin the NEPA process on the proposed action. Once BLM receives the answers to the attached questions we will start the 90 day review clock as required by 43 CFR 3152.2 a. and notify you if the 90 days cannot be met and refine our estimation of time needed to process your application

If you have any questions please contact Donna Wixon of my staff at 907-474-2301.

Sincerely,  
Nichelle Jones, Manager



Arctic District Office

Enclosures (1):

Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO) BLM/USFWS Comments and Questions

# **Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO): BLM/USFWS Comments and Questions**

## **General comments:**

1. What kind of lighting will be needed - tall light posts for equipment and storage areas; aircraft operations, localized lighting for worker camps, seismic line work, etc?
2. What is the normal and peak operating decibel levels of the camp generator and hours of operation each day or 24/7?
3. What are the total miles of seismic trails planned?
4. Will SAExploration Inc. be submitting a more detailed map of the actual proposed area of survey? This would greatly help in addressing impacts.
5. Does SAExploration, Inc. plan to avoid native allotments entirely?

## **Section 4.0 Environmental Management**

1. Please provide a write up of how you are doing things differently based on lessons learned from the past.
2. What are the steepest slopes that you would be conducting activity on and how do you propose to protect soil and vegetation?

## **Section 5.0 Cultural Interface**

1. This section mentions coordination with Kaktovik, what about Arctic Village and Venetie?
2. Applicant needs to submit a Subsistence Plan that meets the requirements of the 2013 Record of Decision (ROD) Best Management Practice (BMP) H-1 and also include:
  - Precise meeting dates and locations.
  - The names of and contact information for subsistence representatives and the biologist hired by SAE to work with the panel.
  - Reporting on mitigation measures and conflict avoidance agreements, if any, developed through such consultation.
  - Documentation of notification to allotment owners and camps and cabins users.
  - Procedures necessary to facilitate access by subsistence users to conduct their activities.
3. Applicant needs to follow the requirements of BMP H-2.

## **Section 6.0 Oversight Panel <sup>1</sup>**

1. When will the oversight Panel be formed?
2. How many people will be on the panel?
3. What types of people will be on the panel?
4. Will its members be residents of Kaktovik only?
5. Will the panel only report to Kaktovik?

---

<sup>1</sup> BLM would like to set up a meeting in June or July to discuss.



6. Does “cultural sites” refer to archaeological, historic, and/or traditional land use sites? If so, will this subsistence observer also be an archaeologist with access to the Alaska Heritage Resources Survey (AHRS) database (maintained by the Alaska State Historic Preservation Office) and the Traditional Land Use Inventory (TLUI) site within the study area (maintained by the North Slope Borough Department of Planning and Community Services)?

## **Section 7.2 Training Process**

1. Please provide an Orientation Program Plan following NPR-A BMP I-1 for BLM’s approval.

## **Section 8.0 Permit Requirements**

1. In table please include ESA Consultation under BLM
2. In table, under ADFG and Fish Habitat Permits, please add stream/river crossings.
3. In table under other approvals what lease holders are in the area?
4. What public outreach has taken place prior to application submittal, or as of today’s date?<sup>2</sup>

## **Section 9.0 Mobilization and Access**

1. “The crews will mobilize to existing gravel pads which will allow access to the tundra and provide a resupply area for the crews” (Page 7: SAExploration 2018). These gravel pads are not identified in the POO – whether inside the 1002 area boundary or adjacent to it. Where are the gravel pads and travel corridors? Locations of ingress and egress? Please submit a map showing ingress and egress with land status layer.
2. SAE states "SAE will attempt to coordinate with companies to use any existing or planned trails." There are no existing trails in the permit area, what other companies are you referring to?
3. How close does the campsite need to be to the area you are working in?
4. What criteria will be used to determine if snow depth and coverage is adequate to minimize damage to the tundra vegetation?
5. Does SAE have a contingency plan should snow depth and cover not be adequate to minimize soil compaction and vegetation damage?
6. Please provide routes and what type of activity, storage, etc. that will occur at locations within the permit area.
7. Please provide a description of the current camp move practices and how they would help to protect the tundra.
8. Are there ice or snow roads between Dalton Highway and Point Thompson that you could travel on to reduce tundra damage? If not, could you travel some of the distance on sea ice?

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<sup>2</sup> BLM would like to set up a meeting in June/July to discuss.

9. What are the operating plans and environmental protection protocols for tundra travel? How will these protocols differ for different snow and soil conditions and for travel on steep slopes, areas with sensitive soil/vegetation types, and near special areas (e.g. groundwater-fed springs, overflow ice, ice-hummocks, and waterbodies that may support fish?
10. For each type of activity/equipment (e.g. camp moves, resupplies, snow machine access, refueling, transport of fuel and hazardous chemicals), describe what the environmental regulations/limits will be for the following:
  - a. What is the maximum slope that operations for each type of activity/equipment would occur on? This information will allow us analyze the potential for impacts of different activities (e.g. fuel storage, transport of hazardous materials, camp moves, seismic) would be occurring on steep slopes.
  - b. What are the criteria for snow and soil characteristics that will be required for each type of activity/equipment? Will these criteria vary with slope and type of soil and vegetation?
11. Please provide the following information broken down in a table and linkable to GIS format along with a map:
  - a. Proposed route distance
  - b. Timing
  - c. Type of activity (e.g. resupply, camp move)
  - d. Type of equipment (e.g. vehicle type, sled, skis)
  - e. Weight of vehicle/equipment empty
  - f. Weight of equipment/vehicle fully loaded.
  - g. Pounds per square inch (PSI) pressure of vehicle, sled, or skis empty
  - h. Pounds per square inch (PSI) pressure of vehicle, sled, or skis fully loaded (note – this especially important for sleds or vehicles that haul large volumes of water or fuel, kitchen and bath units, etc.)
  - i. Total footprint of all vehicle or other equipment in contact with ground
  - j. Type of tire (tracked versus wheeled)
  - k. Track material (e.g. steel versus rubber)
  - l. Are tracks cleated or uncleated? Number of times a particular route would be exposed to a particular PSI from a particular vehicle, sled, or skis.
  - m. Maximum slope that this equipment would travel on and at what weights (minimum and maximum)
  - n. Snow depth requirements for this type of vehicle/equipment
  - o. Freezing depth requirements for this type of vehicle/equipment
  - p. Are hazardous material transported on this type of equipment?
  - q. Is more than 500 gallons of fuel be transported on this type of vehicle/equipment?
12. How and where will snow be gathered and moved for construction of snow trails and ramps?
13. How far can snow be transported for trail making?
14. What are the topographic and other criteria that elicit the need for creating snow ramps?
15. Verify that you would be prepacking snow trails.

16. What vehicles would be used for prepacking?
17. What equipment would be used for moving and placing snow?
18. How many resupply trips will be needed along routes?
19. How many vehicles and what type will be involved in resupply trips?
20. Will resupply vehicles use existing trails?
21. For the expected size and shape of the grid area, how many miles of camp move trails would there be within the work area (not including miles of access to reach the edge of the project area)?

## **Section 10.0 Survey and Ice Check**

1. What does low snow years mean exactly? If it means they will ensure that enough snow cover is present for equipment movements, then what are the minimum snow depths? Will tundra freeze-down be quantified prior to and/or during operations?
2. What provisions are there for the possibility that snow conditions deteriorate before the train returns?
3. Where would snow surveys be done in order to decide when exploration could begin?<sup>3</sup>
4. How will SAE gather data on frost and snow conditions?
5. There can be large expanses with no snow cover in the 1002 Area. What are the contingency plans in the event extensive areas with low snow cover and/or unfrozen ground are encountered?
6. What Lakes, rivers or sea ice would be traveled across?

## **Section 11.0 River Crossings (and lake)**

1. This element of the operations cannot just be permitted with ADF&G. In addition to ADF&G FHPs, the BLM & FWS must evaluate this activity as part of the NEPA process. The BLM already has some Best Management Practices (in the 2012 NPR-A IAP) related to stream/river crossings that can be used for guidance, but site specific evaluations will be necessary to determine if these BMPs or a modified version of the BMPs are most appropriate for this landscape. (Comment not question).
2. Describe how deep/steep banks would be crossed.
3. The POO provides no specific information on accessing water, water requirements, or ice bridge locations. Please provide.
4. Please provide a map that shows stream and lake crossings with a table that identifies the latitude and longitude of the corresponding crossings.
5. What are the proposed locations for ice bridges? Where will water for construction of ice bridges come from?
6. Does SAE propose any baseline monitoring of ice depth, winter water volume, invertebrates, fish, and water chemistry
7. If a crossing needs to be reinforced/built up for supporting equipment, where will liquid water come from? The BLM currently does not allow liquid water to be removed from rivers during the winter. If liquid water may need to be removed from lakes to build any

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<sup>3</sup> BLM would like to set up a meeting in June/July to discuss

“ice bridges”, then the volumes would need to be accounted for in the lake water use request to the BLM/FWS for evaluation in the EA and in ADF&G FHPs and ADNR Temporary Water Use Permits.

8. Would the removal of snow for this purpose only occur on areas of grounded ice (from lakes and/or rivers)?
9. Would the removal of ice aggregate from grounded ice areas on a river be requested?

## **Section 12.0 Willow Protocol**

1. What criteria will be used to identify location and size of sensitive willow areas?
2. Will other vegetation types sensitive to seismic activities be considered when designing and constructing snow roads and trails? (Sensitive vegetation types include moist tussock tundra and low shrub vegetation categories.)
3. Please provide a weed plan following requirements of the NPR-A BMP M-2 for BLM Approval.

## **Section 13.0 Recording Operations (and sound)**

1. What is the frequency, intensity, and duration of vibroseis?
2. What is the proximity to non-fish bearing and fish bearing waterbodies?
3. Provide the location of waterbodies and table of information of the proximity to non-fish bearing and fish bearing waterbodies.
4. With the 3D seismic, is there a distance that a line could be altered if needed for some reason without compromising the data?
5. Please verify that vibrators would not be operating on lakes or rivers.
6. If vibroseis shots will be made over liquid water under ice, the permittee needs to review the following document and indicate how they would implement or otherwise address recommendations made to reduce potential impacts to fish.  
Morris, W., and J. Winters. 2005. Fish Behavioral and Physical Responses to Vibroseis Noise, Prudhoe Bay, Alaska 2003. Technical Report No. 05-02. Alaska Department of Natural Resources, Office of Habitat and Permitting.
7. What is SOS Methodology?

## **Section 14.0 Camp Facilities**

1. How many camp areas will be used?
2. How many days on average will a camp be on a site?
3. How much water will be required for camp each day?
4. What are the water requirements each year for this project?
5. Provide a more detailed description of grey water discharge
6. What is the maximum gradient the tracked tractors can pull the camp sleds?
7. Section 14 states: “If existing airstrips are within the project area those area may be utilized to allow personnel, food and fuel to be delivered to the work area”. Are there existing airstrips in the project area?
8. What is the predetermined route?

9. What is the Vsat communication system?

## **Section 15.0 Water Withdrawal (from lakes)**

1. Would snow for drinking water only be removed from grounded ice areas?
2. Water volume (liquid water and ice aggregate) requests must be made for each specific lake that might be used, for evaluation in the EA.
3. What information does SAE plan to collect or compile for planned use lakes.<sup>4</sup>

## **Section 16.0 Temporary Snow Air Strips**

1. Are you proposing to use water and or ice chips to prepare landing strips on lakes?
2. When lakes cannot be used as airstrips, what is the site prep for tundra air strips?
3. What equipment is involved in creating and maintaining airstrips?
4. We need to know which specific lakes might be used for an airstrip, the size of the airstrip, the procedure for building and maintaining an airstrip, and the intended placement and orientation.
5. If airstrips are built on lakes, additional data collection may be required to provide data regarding the extent of additional freeze-down under the airstrip, as compared to the remainder of the lake.
6. What is the operating plan for working in areas that fixed-wing aircraft cannot access? Is there a need for helicopter access?
7. How many crew swaps will be carried out? i.e. how many times will an airstrip be used per week?
8. What type of aircraft will be used? Wheeled or skis?
9. Section 16 states: "SAE will create a flat area on predetermined grounded, frozen lakes, or tundra to serve as landing strip to receive the aircraft for crew changes." This is in the Temporary Snow Airstrips section. Will tundra airstrips be built of snow or will ice be needed to make the airstrip?

## **Section 17.0 Fuel Supply and Storage**

1. How much fuel will be used per day?
2. How much fuel will be used for each year of the project?
3. What are the proposed locations for refueling and fuel storage?
4. What is the maximum amount of fuel that will be stored at a particular location? How many of these locations will there be at a given time and during the entire course of the project?
5. The POO states that the refueling distance from waterbodies would be 100 feet. The BLM NPR-A BMP requires 500 ft distance and we will consider this requirement for this project. We allow a deviation from the 500 ft. in the NPR-A because of the high density/close proximity of so many lakes that makes it impractical in many areas.

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<sup>4</sup> BLM would like to set up a meeting in June/July to discuss.

6. Provide a copy of the SPCC plan(s) for this project with site-specific information included. Until it is complete provide:  
The size, type, and number of fuel storage tanks or other containers.  
What type of equipment/supplies will be available on site to respond to a spill?  
Describe any training requirements for employees handling fuel.
7. Since there will be no refueling within a certain distance of any waterbody, what is the protocol for aerial fuel delivery, should it be needed. Will fuel be delivered in drums or will a tanker be used?

## **Section 18.0 Waste Management**

1. What are the volumes and proposed locations of discharge of gray water? How many gray water discharge locations will there be?
2. Provide a copy of your APDES permit, and any requirements it may have for treatment before discharge.
3. Provide a hazardous waste plan following the requirements of the NPR-A BMP A-3.
4. Provide a Comprehensive Waste Management Plan following the requirements of the NPR-A BMP A-2.
5. What types of wastes are anticipated to be generated by seismic operations?

## **Section 19.0 Wildlife**

1. What is the intensity and wavelength of sound of equipment?

## **20.0 Historic and Cultural Resources**

1. Is SAE implying that buffers for historic and cultural resources be determined from a point on the map that indicates the general vicinity of these resources or will the buffer be drawn from the actual area that resources cover?
2. In response to the “if required,” in addition to background research of documented (“known”) cultural (historic, prehistoric, and TLUI) sites, SAE Exploration should conduct archaeological field surveys of all proposed travel routes and survey locations prior to the proposed seismic survey.<sup>5</sup>
3. The 500 foot minimum avoidance boundary around all cultural sites is adequate for seismic exploration. However, does SAExploration plan to consider the boundaries of all sites within the proposed seismic testing areas?
4. Most of the sites in both the AHRS and TLUI are referenced geospatially by a 1-dimensional point that is typically somewhere near the center of a 2-dimensional area. Sometimes cultural remains within a site can be distributed over hundreds of meters, thus extending beyond a roughly 150 meter (500 foot) buffer. SAExploration should not only survey for undocumented sites within the proposed seismic study areas, but also consider sites documented in the AHRS and TLUI databases and that are within the proposed seismic study areas. These sites should be included in the 2018 cultural field survey,

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<sup>5</sup> BLM would like to set up a meeting in June/July to discuss.

where archaeologists should at minimum map the boundaries (i.e. the extent of cultural remains within a site) of sites within the seismic study areas that are spatially referenced by a point. Site buffers should then extend 500 feet from the site boundary.

## **Appendix D:**

1. Request more photos, including camp sleighs, long haul fueler, Case/Steiger tractor, CAT dozer and CAT loader.

## **Appendix F: Wildlife Interaction Plan**

1. In the SAE plan of operations, “heavy equipment” and “seismic activity” with regard to wildlife interactions needs to be further defined. For example, if there is a one mile avoidance area for a polar bear den, does that apply to laying of recording devices by hand or smaller vehicle, or just to the large vibroseis activity? For example, does a one mile avoidance area mean that no personnel, equipment, gear or anything else will come within one mile of a polar bear den? Does this apply to seal birthing dens and grizzly bear dens as well?
2. “A polar bear den detection survey shall be conducted prior to activities occurring in polar bear denning habitat during the maternal denning period (November to mid-April).” How will this survey be conducted?
3. Will all suitable denning habitat within the entire 1002 area be surveyed?
4. What is the survey design, operating procedure and resulting accuracy in identifying denning sites? Are these surveys done prior to any other activity or occupation of an area including caching equipment or fuel or conducting reconnaissance surveys to assess ice conditions, locations for camp moves, etc?<sup>6</sup>
5. The data provided for polar bear numbers in the southern Beaufort Sea is out of date (Page 23 Polar Bears: SAExploration 2018).
  - a. Current estimate of polar bears in the Southern Beaufort Sea population is estimated to be 900 and declining (see Bromaghian 2010)
  - b. Global population is estimated to be 22,000 – 31,000 with an average of 26,000 (see FWS 5-year review 2017)
6. “Aircraft will avoid flying over ideal Polar Bear habitat including but not limited to sea ice and barrier islands.” Please define what is considered to be “ideal” polar bear habitat.
7. “Vessels and aircraft will avoid areas in which subsistence hunting is being conducted.” Are vessels being used for this project? Is so please describe.
8. “The Project Manager and wilderness guides have overall responsibility.” What are “wilderness guides” (also called wildlife guide in some places in the document)? Please describe training and responsibilities. This is not a position that was described in the polar bear section of this plan.
9. If the bear takes refuge near or in a vehicle and does not appear likely to move, crew HSE will be notified depending on the location of operation. No action will be taken unless

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<sup>6</sup> BLM would like to set up a meeting in June/July to discuss.

authorized by the AKFG or their designated agents.” Assuming that AKFG is the Alaska Department of Fish and Game (ADFG), please correct in all locations in document.

10. Field Operating Procedure Polar Bear Protocol

- a. In numbers 1 and 7 of this protocol include the distance that must be maintained from known densities.



**From:** [Berendzen, Steve](#)  
**To:** [Mitch Ellis](#)  
**Cc:** [Loya, Wendy](#); [Karen Clark](#); [Joanna Fox](#); [Hollis Twitchell](#); [Doug Damberg](#)  
**Subject:** Re: Updated Powerpoint and Logistics Schedule - Updates  
**Date:** Monday, May 21, 2018 10:29:49 AM

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Karen,

The weather forecast for Wednesday and Thursday looks marginal for Hollis to fly into Arctic Village. You should definitely plan on the Wrights flight up there Wednesday, but depending on how the meeting goes that day you might consider taking my seat on the BLM charter back with the group Thursday, and I could take a commercial flight back on Friday.

If Hollis can make it up there, then either one of us could come back with him (weather permitting...)

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

On Sat, May 19, 2018 at 1:23 PM, Mitch Ellis <[mitch\\_ellis@fws.gov](mailto:mitch_ellis@fws.gov)> wrote:  
Appreciate the update Steve. Sorry for their loss.

Sent from my iPhone

On May 19, 2018, at 9:16 AM, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)> wrote:

Kaktovik meeting delayed due to funeral for local elder

Sent from my iPhone

Begin forwarded message:

**From:** "Miriam (Nicole) Hayes" <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>  
**Date:** May 19, 2018 at 8:18:24 AM AKDT  
**To:** [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)  
**Subject:** Fwd: Updated Powerpoint and Logistics Schedule - Updates

Steve,  
See below.  
Nicole

Sent from my iPad

Begin forwarded message:

**From:** "Miriam (Nicole) Hayes"

<[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>

**Date:** May 19, 2018 at 8:15:58 AM AKDT

**To:** "Seidlitz, Joseph (Gene)" <[gseidlitz@blm.gov](mailto:gseidlitz@blm.gov)>

**Cc:** "Mouritsen, Karen" <[kmourits@blm.gov](mailto:kmourits@blm.gov)>, Ted

Murphy <[t75murph@blm.gov](mailto:t75murph@blm.gov)>, Hilary Zarin

<[hzarin@blm.gov](mailto:hzarin@blm.gov)>, Cara Macdonald

<[cara\\_macdonald@ios.doi.gov](mailto:cara_macdonald@ios.doi.gov)>, Jeff Brune

<[jbrune@blm.gov](mailto:jbrune@blm.gov)>, Lesli Ellis-Wouters

<[lellis@blm.gov](mailto:lellis@blm.gov)>, Lesia Monson

<[lesia\\_monson@ios.doi.gov](mailto:lesia_monson@ios.doi.gov)>

**Subject: Re: Updated Powerpoint and Logistics  
Schedule - Updates**

The itinerary is changing due to a death of an elder in Kaktovik. The meeting in Kaktovik is being rescheduled to 6/12, therefore, our first meeting will be in Arctic Village at 1000 on 5/23. We will fly from Fairbanks that morning. More details to come after I coordinate with the flight schedulers.

Nicole

Sent from my iPad

On May 18, 2018, at 10:10 AM, Hayes, Miriam (Nicole) <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)> wrote:

Hi,

Attached is the final itinerary for Week 1. Please note the potential for the change to Kaktovik.

The Week 2 itinerary will be finalized next week but the meeting times are correct.

**Nicole Hayes**

Project Coordinator

Bureau of Land Management

[222 W. 7th Avenue #13](#)

[Anchorage, Alaska 99513](#)

Desk: (907) 271-4354

On Thu, May 17, 2018 at 10:12 AM,

Seidlitz, Joseph (Gene)

<[gseidlitz@blm.gov](mailto:gseidlitz@blm.gov)> wrote:

Team AK

Hi! Good Morning. First of all, the

Team up in AK is doing great and there continue to be requests from BLM WO and/or ASLM and we appreciate your attention to these. Thank You.

In addition, we are aware some of the tasks involve EMSPI. After the Coastal Plain Call from yesterday, some edits were going to occur to the Logistics/Itinerary and the Powerpoint? When those edits are complete, can you please share? For convenience purposes only, please send the "logistical/itinerary documents in "word" so the ASLM Exec. Assistants can cut and paste into the ASLM Final Itinerary's.

Thanks Again. Keep up the good work  
Gene

Gene Seidlitz  
ASLM Analyst-Liaison  
202-208-4555 (O)  
775-304-1008 (C)

<Week 1 May 21-25 Kaktovik\_Arctic  
Village\_v3. docx (1).docx>

<Week 2 May 29-June1 ANC\_FAI\_BAR.  
docx.docx>

----- Forwarded message -----

From: Wixon, Donna <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Date: Tue, May 22, 2018 at 1:00 PM

Subject: Fwd: SAE Plan of Operations Questions

To: Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>

Cc: Sarah LaMarr <[slamarr@blm.gov](mailto:slamarr@blm.gov)>, Shelly Jacobson <[njones@blm.gov](mailto:njones@blm.gov)>

Hi Steve and Joanna,

Attached is a copy of the questions we sent to SAExploration.

Thanks,

Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office  
907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)

----- Forwarded message -----

From: **Wixon, Donna** <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Date: Tue, May 22, 2018 at 11:35 AM

Subject: SAE Plan of Operations Questions

To: Suzan Simonds <[ssimonds@saexploration.com](mailto:ssimonds@saexploration.com)>

Cc: Shelly Jacobson <[njones@blm.gov](mailto:njones@blm.gov)>

Good Morning Sue,

Attached please find a letter and questions about the seismic permit that SAExploration has requested from the BLM for the 1002 area.

Please let me know if you have any questions about our questions as you work through them.

Thanks,

Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office

907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)



BUREAU OF LAND MANAGEMENT  
Arctic District Office  
222 University Avenue  
Fairbanks, Alaska 99709-3816  
<http://www.blm.gov/ak>



May 22, 2018

In reply refer to:  
FF097424  
3152.00 (AKR000)

Ms. Suzan Simonds  
Permit and Regulatory Manager  
SAExploration Inc.  
8240 Sandlewood Place, Suite 102  
Anchorage, Alaska 99507

Subject: Oil and Gas Geophysical Exploration Application

Dear Ms. Simonds,

Title II of the Tax Cuts and Jobs Act of 2017 directed the Secretary of Interior to establish and administer a competitive oil and gas program within the Coastal Plain of Alaska. Because the Bureau of Land Management (BLM) manages the National Petroleum Reserve in Alaska (NPR-A) pursuant to the Naval Petroleum Reserves Production Act (1976), the BLM has been identified as the lead agency for permitting oil and gas related activities in the Arctic National Wildlife Refuge Coastal Plain area, including seismic exploration activities. Within the BLM the Arctic District Office has been tasked to process seismic applications for the area.

On April 19, 2018 the Alaska BLM State Office received an application from SAExploration to conduct seismic activity in the 1002 area of the Alaska National Wildlife Refuge. On May 3, 2018 the BLM Arctic District received a nonconfidential version of the plan of operations. BLM and USFWS met on May 4<sup>th</sup> to discuss the proposed action.

The regulations that cover the proposed action are 43 CFR 3152, Exploration in Alaska. Part 3152.1 provides information on what is required to be submitted as part of the application. SAExploration has provided information for items a thru f. Part f requires a plan for conducting the exploration activities. While SAExploration has submitted a plan of operations, the plan does not provide enough information for the BLM to adequately evaluate impacts of the proposed action on the environment as required by the National Environmental Policy Act (NEPA).

Please see attached list of questions entitled: "Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO) BLM/USFWS Comments and Questions." We would ask that you respond to the questions and comments as soon as possible so that we may begin the NEPA process on the proposed action. Once BLM receives the answers to the attached questions we will start the 90 day review clock as required by 43 CFR 3152.2 a. and notify you if the 90 days cannot be met and refine our estimation of time needed to process your application

If you have any questions please contact Donna Wixon of my staff at 907-474-2301.

Sincerely,  
Nichelle Jones, Manager



Arctic District Office

Enclosures (1):

Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO) BLM/USFWS Comments and Questions

# **Marsh Creek 3D 2018 Winter Seismic Survey Plan of Operations (POO): BLM/USFWS Comments and Questions**

## **General comments:**

1. What kind of lighting will be needed - tall light posts for equipment and storage areas; aircraft operations, localized lighting for worker camps, seismic line work, etc?
2. What is the normal and peak operating decibel levels of the camp generator and hours of operation each day or 24/7?
3. What are the total miles of seismic trails planned?
4. Will SAExploration Inc. be submitting a more detailed map of the actual proposed area of survey? This would greatly help in addressing impacts.
5. Does SAExploration, Inc. plan to avoid native allotments entirely?

## **Section 4.0 Environmental Management**

1. Please provide a write up of how you are doing things differently based on lessons learned from the past.
2. What are the steepest slopes that you would be conducting activity on and how do you propose to protect soil and vegetation?

## **Section 5.0 Cultural Interface**

1. This section mentions coordination with Kaktovik, what about Arctic Village and Venetie?
2. Applicant needs to submit a Subsistence Plan that meets the requirements of the 2013 Record of Decision (ROD) Best Management Practice (BMP) H-1 and also include:
  - Precise meeting dates and locations.
  - The names of and contact information for subsistence representatives and the biologist hired by SAE to work with the panel.
  - Reporting on mitigation measures and conflict avoidance agreements, if any, developed through such consultation.
  - Documentation of notification to allotment owners and camps and cabins users.
  - Procedures necessary to facilitate access by subsistence users to conduct their activities.
3. Applicant needs to follow the requirements of BMP H-2.

## **Section 6.0 Oversight Panel <sup>1</sup>**

1. When will the oversight Panel be formed?
2. How many people will be on the panel?
3. What types of people will be on the panel?
4. Will its members be residents of Kaktovik only?
5. Will the panel only report to Kaktovik?

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<sup>1</sup> BLM would like to set up a meeting in June or July to discuss.



6. Does “cultural sites” refer to archaeological, historic, and/or traditional land use sites? If so, will this subsistence observer also be an archaeologist with access to the Alaska Heritage Resources Survey (AHRS) database (maintained by the Alaska State Historic Preservation Office) and the Traditional Land Use Inventory (TLUI) site within the study area (maintained by the North Slope Borough Department of Planning and Community Services)?

## **Section 7.2 Training Process**

1. Please provide an Orientation Program Plan following NPR-A BMP I-1 for BLM’s approval.

## **Section 8.0 Permit Requirements**

1. In table please include ESA Consultation under BLM
2. In table, under ADFG and Fish Habitat Permits, please add stream/river crossings.
3. In table under other approvals what lease holders are in the area?
4. What public outreach has taken place prior to application submittal, or as of today’s date?<sup>2</sup>

## **Section 9.0 Mobilization and Access**

1. “The crews will mobilize to existing gravel pads which will allow access to the tundra and provide a resupply area for the crews” (Page 7: SAExploration 2018). These gravel pads are not identified in the POO – whether inside the 1002 area boundary or adjacent to it. Where are the gravel pads and travel corridors? Locations of ingress and egress? Please submit a map showing ingress and egress with land status layer.
2. SAE states "SAE will attempt to coordinate with companies to use any existing or planned trails." There are no existing trails in the permit area, what other companies are you referring to?
3. How close does the campsite need to be to the area you are working in?
4. What criteria will be used to determine if snow depth and coverage is adequate to minimize damage to the tundra vegetation?
5. Does SAE have a contingency plan should snow depth and cover not be adequate to minimize soil compaction and vegetation damage?
6. Please provide routes and what type of activity, storage, etc. that will occur at locations within the permit area.
7. Please provide a description of the current camp move practices and how they would help to protect the tundra.
8. Are there ice or snow roads between Dalton Highway and Point Thompson that you could travel on to reduce tundra damage? If not, could you travel some of the distance on sea ice?

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<sup>2</sup> BLM would like to set up a meeting in June/July to discuss.

9. What are the operating plans and environmental protection protocols for tundra travel? How will these protocols differ for different snow and soil conditions and for travel on steep slopes, areas with sensitive soil/vegetation types, and near special areas (e.g. groundwater-fed springs, overflow ice, ice-hummocks, and waterbodies that may support fish?
10. For each type of activity/equipment (e.g. camp moves, resupplies, snow machine access, refueling, transport of fuel and hazardous chemicals), describe what the environmental regulations/limits will be for the following:
  - a. What is the maximum slope that operations for each type of activity/equipment would occur on? This information will allow us analyze the potential for impacts of different activities (e.g. fuel storage, transport of hazardous materials, camp moves, seismic) would be occurring on steep slopes.
  - b. What are the criteria for snow and soil characteristics that will be required for each type of activity/equipment? Will these criteria vary with slope and type of soil and vegetation?
11. Please provide the following information broken down in a table and linkable to GIS format along with a map:
  - a. Proposed route distance
  - b. Timing
  - c. Type of activity (e.g. resupply, camp move)
  - d. Type of equipment (e.g. vehicle type, sled, skis)
  - e. Weight of vehicle/equipment empty
  - f. Weight of equipment/vehicle fully loaded.
  - g. Pounds per square inch (PSI) pressure of vehicle, sled, or skis empty
  - h. Pounds per square inch (PSI) pressure of vehicle, sled, or skis fully loaded (note – this especially important for sleds or vehicles that haul large volumes of water or fuel, kitchen and bath units, etc.)
  - i. Total footprint of all vehicle or other equipment in contact with ground
  - j. Type of tire (tracked versus wheeled)
  - k. Track material (e.g. steel versus rubber)
  - l. Are tracks cleated or uncleated? Number of times a particular route would be exposed to a particular PSI from a particular vehicle, sled, or skis.
  - m. Maximum slope that this equipment would travel on and at what weights (minimum and maximum)
  - n. Snow depth requirements for this type of vehicle/equipment
  - o. Freezing depth requirements for this type of vehicle/equipment
  - p. Are hazardous material transported on this type of equipment?
  - q. Is more than 500 gallons of fuel be transported on this type of vehicle/equipment?
12. How and where will snow be gathered and moved for construction of snow trails and ramps?
13. How far can snow be transported for trail making?
14. What are the topographic and other criteria that elicit the need for creating snow ramps?
15. Verify that you would be prepacking snow trails.

16. What vehicles would be used for prepacking?
17. What equipment would be used for moving and placing snow?
18. How many resupply trips will be needed along routes?
19. How many vehicles and what type will be involved in resupply trips?
20. Will resupply vehicles use existing trails?
21. For the expected size and shape of the grid area, how many miles of camp move trails would there be within the work area (not including miles of access to reach the edge of the project area)?

## **Section 10.0 Survey and Ice Check**

1. What does low snow years mean exactly? If it means they will ensure that enough snow cover is present for equipment movements, then what are the minimum snow depths? Will tundra freeze-down be quantified prior to and/or during operations?
2. What provisions are there for the possibility that snow conditions deteriorate before the train returns?
3. Where would snow surveys be done in order to decide when exploration could begin?<sup>3</sup>
4. How will SAE gather data on frost and snow conditions?
5. There can be large expanses with no snow cover in the 1002 Area. What are the contingency plans in the event extensive areas with low snow cover and/or unfrozen ground are encountered?
6. What Lakes, rivers or sea ice would be traveled across?

## **Section 11.0 River Crossings (and lake)**

1. This element of the operations cannot just be permitted with ADF&G. In addition to ADF&G FHPs, the BLM & FWS must evaluate this activity as part of the NEPA process. The BLM already has some Best Management Practices (in the 2012 NPR-A IAP) related to stream/river crossings that can be used for guidance, but site specific evaluations will be necessary to determine if these BMPs or a modified version of the BMPs are most appropriate for this landscape. (Comment not question).
2. Describe how deep/steep banks would be crossed.
3. The POO provides no specific information on accessing water, water requirements, or ice bridge locations. Please provide.
4. Please provide a map that shows stream and lake crossings with a table that identifies the latitude and longitude of the corresponding crossings.
5. What are the proposed locations for ice bridges? Where will water for construction of ice bridges come from?
6. Does SAE propose any baseline monitoring of ice depth, winter water volume, invertebrates, fish, and water chemistry
7. If a crossing needs to be reinforced/built up for supporting equipment, where will liquid water come from? The BLM currently does not allow liquid water to be removed from rivers during the winter. If liquid water may need to be removed from lakes to build any

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<sup>3</sup> BLM would like to set up a meeting in June/July to discuss

“ice bridges”, then the volumes would need to be accounted for in the lake water use request to the BLM/FWS for evaluation in the EA and in ADF&G FHPs and ADNR Temporary Water Use Permits.

8. Would the removal of snow for this purpose only occur on areas of grounded ice (from lakes and/or rivers)?
9. Would the removal of ice aggregate from grounded ice areas on a river be requested?

## **Section 12.0 Willow Protocol**

1. What criteria will be used to identify location and size of sensitive willow areas?
2. Will other vegetation types sensitive to seismic activities be considered when designing and constructing snow roads and trails? (Sensitive vegetation types include moist tussock tundra and low shrub vegetation categories.)
3. Please provide a weed plan following requirements of the NPR-A BMP M-2 for BLM Approval.

## **Section 13.0 Recording Operations (and sound)**

1. What is the frequency, intensity, and duration of vibroseis?
2. What is the proximity to non-fish bearing and fish bearing waterbodies?
3. Provide the location of waterbodies and table of information of the proximity to non-fish bearing and fish bearing waterbodies.
4. With the 3D seismic, is there a distance that a line could be altered if needed for some reason without compromising the data?
5. Please verify that vibrators would not be operating on lakes or rivers.
6. If vibroseis shots will be made over liquid water under ice, the permittee needs to review the following document and indicate how they would implement or otherwise address recommendations made to reduce potential impacts to fish.  
Morris, W., and J. Winters. 2005. Fish Behavioral and Physical Responses to Vibroseis Noise, Prudhoe Bay, Alaska 2003. Technical Report No. 05-02. Alaska Department of Natural Resources, Office of Habitat and Permitting.
7. What is SOS Methodology?

## **Section 14.0 Camp Facilities**

1. How many camp areas will be used?
2. How many days on average will a camp be on a site?
3. How much water will be required for camp each day?
4. What are the water requirements each year for this project?
5. Provide a more detailed description of grey water discharge
6. What is the maximum gradient the tracked tractors can pull the camp sleds?
7. Section 14 states: “If existing airstrips are within the project area those area may be utilized to allow personnel, food and fuel to be delivered to the work area”. Are there existing airstrips in the project area?
8. What is the predetermined route?

9. What is the Vsat communication system?

## **Section 15.0 Water Withdrawal (from lakes)**

1. Would snow for drinking water only be removed from grounded ice areas?
2. Water volume (liquid water and ice aggregate) requests must be made for each specific lake that might be used, for evaluation in the EA.
3. What information does SAE plan to collect or compile for planned use lakes.<sup>4</sup>

## **Section 16.0 Temporary Snow Air Strips**

1. Are you proposing to use water and or ice chips to prepare landing strips on lakes?
2. When lakes cannot be used as airstrips, what is the site prep for tundra air strips?
3. What equipment is involved in creating and maintaining airstrips?
4. We need to know which specific lakes might be used for an airstrip, the size of the airstrip, the procedure for building and maintaining an airstrip, and the intended placement and orientation.
5. If airstrips are built on lakes, additional data collection may be required to provide data regarding the extent of additional freeze-down under the airstrip, as compared to the remainder of the lake.
6. What is the operating plan for working in areas that fixed-wing aircraft cannot access? Is there a need for helicopter access?
7. How many crew swaps will be carried out? i.e. how many times will an airstrip be used per week?
8. What type of aircraft will be used? Wheeled or skis?
9. Section 16 states: "SAE will create a flat area on predetermined grounded, frozen lakes, or tundra to serve as landing strip to receive the aircraft for crew changes." This is in the Temporary Snow Airstrips section. Will tundra airstrips be built of snow or will ice be needed to make the airstrip?

## **Section 17.0 Fuel Supply and Storage**

1. How much fuel will be used per day?
2. How much fuel will be used for each year of the project?
3. What are the proposed locations for refueling and fuel storage?
4. What is the maximum amount of fuel that will be stored at a particular location? How many of these locations will there be at a given time and during the entire course of the project?
5. The POO states that the refueling distance from waterbodies would be 100 feet. The BLM NPR-A BMP requires 500 ft distance and we will consider this requirement for this project. We allow a deviation from the 500 ft. in the NPR-A because of the high density/close proximity of so many lakes that makes it impractical in many areas.

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<sup>4</sup> BLM would like to set up a meeting in June/July to discuss.

6. Provide a copy of the SPCC plan(s) for this project with site-specific information included. Until it is complete provide:  
The size, type, and number of fuel storage tanks or other containers.  
What type of equipment/supplies will be available on site to respond to a spill?  
Describe any training requirements for employees handling fuel.
7. Since there will be no refueling within a certain distance of any waterbody, what is the protocol for aerial fuel delivery, should it be needed. Will fuel be delivered in drums or will a tanker be used?

## **Section 18.0 Waste Management**

1. What are the volumes and proposed locations of discharge of gray water? How many gray water discharge locations will there be?
2. Provide a copy of your APDES permit, and any requirements it may have for treatment before discharge.
3. Provide a hazardous waste plan following the requirements of the NPR-A BMP A-3.
4. Provide a Comprehensive Waste Management Plan following the requirements of the NPR-A BMP A-2.
5. What types of wastes are anticipated to be generated by seismic operations?

## **Section 19.0 Wildlife**

1. What is the intensity and wavelength of sound of equipment?

## **20.0 Historic and Cultural Resources**

1. Is SAE implying that buffers for historic and cultural resources be determined from a point on the map that indicates the general vicinity of these resources or will the buffer be drawn from the actual area that resources cover?
2. In response to the “if required,” in addition to background research of documented (“known”) cultural (historic, prehistoric, and TLUI) sites, SAE Exploration should conduct archaeological field surveys of all proposed travel routes and survey locations prior to the proposed seismic survey.<sup>5</sup>
3. The 500 foot minimum avoidance boundary around all cultural sites is adequate for seismic exploration. However, does SAExploration plan to consider the boundaries of all sites within the proposed seismic testing areas?
4. Most of the sites in both the AHRS and TLUI are referenced geospatially by a 1-dimensional point that is typically somewhere near the center of a 2-dimensional area. Sometimes cultural remains within a site can be distributed over hundreds of meters, thus extending beyond a roughly 150 meter (500 foot) buffer. SAExploration should not only survey for undocumented sites within the proposed seismic study areas, but also consider sites documented in the AHRS and TLUI databases and that are within the proposed seismic study areas. These sites should be included in the 2018 cultural field survey,

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<sup>5</sup> BLM would like to set up a meeting in June/July to discuss.

where archaeologists should at minimum map the boundaries (i.e. the extent of cultural remains within a site) of sites within the seismic study areas that are spatially referenced by a point. Site buffers should then extend 500 feet from the site boundary.

## **Appendix D:**

1. Request more photos, including camp sleighs, long haul fueler, Case/Steiger tractor, CAT dozer and CAT loader.

## **Appendix F: Wildlife Interaction Plan**

1. In the SAE plan of operations, “heavy equipment” and “seismic activity” with regard to wildlife interactions needs to be further defined. For example, if there is a one mile avoidance area for a polar bear den, does that apply to laying of recording devices by hand or smaller vehicle, or just to the large vibroseis activity? For example, does a one mile avoidance area mean that no personnel, equipment, gear or anything else will come within one mile of a polar bear den? Does this apply to seal birthing dens and grizzly bear dens as well?
2. “A polar bear den detection survey shall be conducted prior to activities occurring in polar bear denning habitat during the maternal denning period (November to mid-April).” How will this survey be conducted?
3. Will all suitable denning habitat within the entire 1002 area be surveyed?
4. What is the survey design, operating procedure and resulting accuracy in identifying denning sites? Are these surveys done prior to any other activity or occupation of an area including caching equipment or fuel or conducting reconnaissance surveys to assess ice conditions, locations for camp moves, etc?<sup>6</sup>
5. The data provided for polar bear numbers in the southern Beaufort Sea is out of date (Page 23 Polar Bears: SAExploration 2018).
  - a. Current estimate of polar bears in the Southern Beaufort Sea population is estimated to be 900 and declining (see Bromaghian 2010)
  - b. Global population is estimated to be 22,000 – 31,000 with an average of 26,000 (see FWS 5-year review 2017)
6. “Aircraft will avoid flying over ideal Polar Bear habitat including but not limited to sea ice and barrier islands.” Please define what is considered to be “ideal” polar bear habitat.
7. “Vessels and aircraft will avoid areas in which subsistence hunting is being conducted.” Are vessels being used for this project? Is so please describe.
8. “The Project Manager and wilderness guides have overall responsibility.” What are “wilderness guides” (also called wildlife guide in some places in the document)? Please describe training and responsibilities. This is not a position that was described in the polar bear section of this plan.
9. If the bear takes refuge near or in a vehicle and does not appear likely to move, crew HSE will be notified depending on the location of operation. No action will be taken unless

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<sup>6</sup> BLM would like to set up a meeting in June/July to discuss.

authorized by the AKFG or their designated agents.” Assuming that AKFG is the Alaska Department of Fish and Game (ADFG), please correct in all locations in document.

10. Field Operating Procedure Polar Bear Protocol

- a. In numbers 1 and 7 of this protocol include the distance that must be maintained from known densities.



**From:** [Berendzen, Steve](#)  
**To:** [Loya, Wendy](#); [Hollis Twitchell](#)  
**Cc:** [Joanna Fox](#); [Doug Damberg](#); [Steven Strader](#)  
**Subject:** Fwd: For Fairbanks, Anchorage and Utqiagvik meetings  
**Date:** Tuesday, May 29, 2018 11:08:53 AM  
**Attachments:** [Week 2 May 29-June1 ANC FAI BAR FINAL.docx v.2.docx](#)  
[Meeting Flow.docx](#)

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FYI - updated agenda and logistics for EIS Scoping meetings this week.

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

----- Forwarded message -----

From: **Mouritsen, Karen** <[kmourits@blm.gov](mailto:kmourits@blm.gov)>  
Date: Fri, May 25, 2018 at 6:03 PM  
Subject: For Fairbanks, Anchorage and Utqiagvik meetings  
To: Joseph Balash <[joseph\\_balash@ios.doi.gov](mailto:joseph_balash@ios.doi.gov)>, "MacGregor, Katharine" <[katharine\\_macgregor@ios.doi.gov](mailto:katharine_macgregor@ios.doi.gov)>, Stephen Wackowski <[stephen\\_wackowski@ios.doi.gov](mailto:stephen_wackowski@ios.doi.gov)>, Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Miriam Hayes <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>, Ted Murphy <[t75murph@blm.gov](mailto:t75murph@blm.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>  
Cc: Joseph Seidlitz <[gseidlitz@blm.gov](mailto:gseidlitz@blm.gov)>, "Moran, Jill" <[jcmoran@blm.gov](mailto:jcmoran@blm.gov)>, Lesia Monson <[lesia\\_monson@ios.doi.gov](mailto:lesia_monson@ios.doi.gov)>, "Rosenberger, Leslie" <[rosenberger@blm.gov](mailto:rosenberger@blm.gov)>, "Frost, Eileen" <[efrost@blm.gov](mailto:efrost@blm.gov)>, Lesli Ellis-Wouters <[lellis@blm.gov](mailto:lellis@blm.gov)>, Serena Sweet <[ssweet@blm.gov](mailto:ssweet@blm.gov)>, Michael Nedd <[mnedd@blm.gov](mailto:mnedd@blm.gov)>, Nichelle Jones <[njones@blm.gov](mailto:njones@blm.gov)>, [chad.ricklefs@empsi.com](mailto:chad.ricklefs@empsi.com), Hilary Zarin <[hzarin@blm.gov](mailto:hzarin@blm.gov)>, Jeff Krauss <[jkrauss@blm.gov](mailto:jkrauss@blm.gov)>, Tracie Lassiter <[tracie\\_lassiter@ios.doi.gov](mailto:tracie_lassiter@ios.doi.gov)>, Brian Steed <[bsteed@blm.gov](mailto:bsteed@blm.gov)>

Hello Joe, Kate, Steve

Attached here is a document with the times and logistics for the meetings in Fairbanks, Anchorage and Utqiagvik. The second document is the detailed description of how we will manage the speakers. Please note that in Fairbanks, we will have a safety briefing for BLM and DOI attendees, at 1:30 pm -- so please arrive at 1:15. The outer doors will open at 2 and the open house will begin at 3 pm. (in Anchorage, the safety briefing will be at 2:30).

BLM employees will be glad to pick you up at the airport or a hotel before these meetings, just let one of us know.

For Fairbanks and Anchorage, we have arranged for you all to enter through a side door, so do call the person noted on the agenda for that day.

Lesli Ellis Wouters (BLM-AK Communications Chief), Nicole Hayes and Ted Murphy will arrive in Fairbanks on Tuesday at mid-morning. They will have these documents in folders for you. Ted Murphy will be taking my place at next week's meetings.

Joe, on Tuesday, Lesli will need to talk to you about the designated speakers.

Kate, I'll send a separate email to you, as we have a communications site trip for you on Monday at

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10:30, then we will make sure you get lunch and get you to the Fairbanks venue for the safety briefing.

Steve, I will be calling you tomorrow about the Chicken trip (I have some options put together by Geoff Beyersdork and Matt Varner) and we need to talk to you before finalizing some of those plans.

Please call if any questions or concerns. Have a good weekend.

Ted - cell --

(b) (6)

Nicole cell --

(b) (6)

or

(b) (6)

Chad Ricklefs - EMPSi contractor lead -- cell: 303-819-4392

Lesli Ellis-Wouters - cell -- 907-331-8763

Karen cell 202-329-2030

## Coastal Plain Oil and Gas Leasing Program EIS – Scoping Meetings

WEEK 2 - May 29 through June 1, 2018

**Fairbanks, Anchorage, Utqiagvik**

### Tuesday, May 29, 2018 – Fairbanks

Contact: Steve Sandquist 907-451-7800 (main); (b) (6) (cell)

Livestreaming: Art Ferraro (BLM) (b) (6) (cell)

BLM Security: Seth McMillan (b) (6) (cell)

EMPSi POC: Molly McCarter (venue and livestreaming) (b) (6) (cell)

| Time     | Activity                                                                                                                         |
|----------|----------------------------------------------------------------------------------------------------------------------------------|
|          | <b>Public Scoping Meeting at the Carlson Center</b><br>2010 2 <sup>nd</sup> Ave.                                                 |
| 7:00 am  | BLM staff to finalize live streaming set-up                                                                                      |
| 11:00 am | EMPSi/HDR staff meet at Carlson Center to begin set up for public scoping meeting                                                |
| 1:00 pm  | Venue security guards begin duty                                                                                                 |
| 1:15 pm  | BLM to arrive at Carlson Center. <b>Joe, Steve, Kate</b> : please call Seth when you arrive to coordinate entry – (b) (6) (cell) |
| 1:30 pm  | <b>BLM safety briefing</b>                                                                                                       |
| 2:00 pm  | Open <u>outer</u> venue doors; allow people to begin lining up outside of the meeting room                                       |
| 3:00 pm  | <b>Public Scoping Meeting</b> - open house period begins (open doors to meeting room at 3pm)                                     |
| 4:30 pm  | BLM presentation, followed by public comment period                                                                              |
| 9:00 pm  | Anticipated end of meeting and clean up                                                                                          |
| 9:30 pm  | Transfer to lodging                                                                                                              |

### Wednesday, May 30, 2018 – Anchorage

Venue Contact: Dana Schnieber 907-263-2816 (direct); 907-263-2850 (main)

Livestreaming/AV needs: Katie Cole at IMIG AV: 907-274-2161, x406

Art Ferraro (BLM) (b) (6) (cell)

BLM Security: Jeff Duhrsen (b) (6) (cell)

EMPSi POC: Molly McCarter (venue and livestreaming) (b) (6) (cell)

| Time     | Activity                                                                                             |
|----------|------------------------------------------------------------------------------------------------------|
|          | <b>Public Scoping Meeting at the Dena'ina Center (Idlughet Hall)</b><br>600 West 7 <sup>th</sup> Ave |
| 7:00 am  | BLM staff to set up room for live streaming                                                          |
| 10:00 am | EMPSi/HDR staff meet at Dena'ina Center – Idlughet Hall to begin set up for public scoping meeting   |

|         |                                                                                                                                                                                    |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | Park rental cars at the <b>back service entrance</b> when you arrive, which is on 8 <sup>th</sup> Avenue near G Street. Call Dana on her cell when you arrive for entry: (b) (6) . |
| 2:00 pm | BLM to arrive at Dena'ina Center. <b>Joe, Steve, Kate:</b> please call Jeff when you arrive to coordinate entry – (b) (6) (cell)                                                   |
| 2:00 pm | Open <u>outer</u> venue doors; allow people to begin lining up outside of the meeting room                                                                                         |
| 2:00 pm | Venue security guards begin duty                                                                                                                                                   |
| 2:30 pm | <b>BLM safety briefing</b>                                                                                                                                                         |
| 3:00 pm | <b>Public Scoping Meeting</b> – open house period begins (open doors to meeting room at 3pm)                                                                                       |
| 4:30 pm | BLM presentation, followed by public comment period                                                                                                                                |
| 9:00 pm | Anticipated end of meeting and clean up                                                                                                                                            |
| 9:30 pm | Venue security ends duty                                                                                                                                                           |

#### Thursday, May 31, 2018 – Utqiagvik

Court Reporter (Mary Vavrik – (b) (6) cell)

Alaska Air #55: departs ANC 5/31 at 7:30am, arrives BRW 10:53am

Alaska Air #55: departs BRW 6/1 at 11:4am, arrives ANC 2:56pm

| Time         | Activity                                                                                                                                                |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4:00-9:00 pm | <b>Public Scoping Meeting at the Inupiat Heritage Center</b><br>1274 Agvik Street<br>907-852-0422 (main)                                                |
| 7:30 am      | Commercial flight (AK Air #55) departure for Utqiagvik                                                                                                  |
| 10:53 am     | Arrive in Utqiagvik                                                                                                                                     |
| 11:30 am     | Transfer from airport to Top of the World Hotel by <u>hotel shuttle</u> (should be waiting to pick you up at the airport; hotel has flight information) |
| 2:00 pm      | EMPSi arrive at Inupiat Heritage Center to begin meeting set-up (take taxi from hotel to IHC, <b>Barrow Taxi - 907-852-2222</b> )                       |
| 3:30 pm      | BLM to arrive at Inupiat Heritage Center                                                                                                                |
| 4:00 pm      | <b>Public Scoping Meeting</b> - open house period begins                                                                                                |
| 5:00 pm      | BLM presentation, followed by public comment period                                                                                                     |
| 9:00 pm      | Anticipated end of meeting and clean-up                                                                                                                 |
| 9:30 pm      | Transfer to lodging and overnight at Top of the World Hotel (907-852-3900)                                                                              |

**Friday, June 1, 2018 – Utqiagvik/Anchorage**

| Time            | Activity                                                        |
|-----------------|-----------------------------------------------------------------|
| 10:00 am or TBD | Hotel shuttle to airport (confirm time with front desk on 5/31) |
| 11:45 am        | Commercial flight departure (AK Air #55) for Anchorage          |
| 2:56 pm         | Arrive in Anchorage                                             |

**ATTENDEES**

| Fairbanks                                  | Anchorage                                  | Utqiagvik                                  |
|--------------------------------------------|--------------------------------------------|--------------------------------------------|
| Nicole Hayes (BLM)                         | Nicole Hayes (BLM)                         | Nicole Hayes (BLM)                         |
| Ted Murphy (BLM)                           | Ted Murphy (BLM)                           | Ted Murphy (BLM)                           |
| Joe Balash (DOI)                           | Joe Balash (DOI)                           | Joe Balash (DOI)                           |
| Steve Wackowski (DOI)                      | Steve Wackowski (DOI)                      | Steve Wackowski (DOI)                      |
| Kate MacGregor (DOI)                       | Kate MacGregor (DOI)                       | Kate MacGregor (DOI)                       |
| Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)                      |
| David Batts (EMPSi)                        | David Batts (EMPSi)                        | Molly McCarter (EMPSi)                     |
| John King (EMPSi)                          | John King (EMPSi)                          | Mary Vavrik (Midnight Sun Court Reporting) |
| Molly McCarter (EMPSi)                     | Molly McCarter (EMPSi)                     |                                            |
| Lindsay Chipman (EMPSi)                    | Lindsay Chipman (EMPSi)                    |                                            |
| Andy Spellmeyer (EMPSi)                    | Andy Spellmeyer (EMPSi)                    |                                            |
| Sue Signor (HDR)                           | Nicole Deren (HDR)                         |                                            |
| Terry Griffin (HDR)                        | Nora Hotch (HDR)                           |                                            |
| Mary Vavrik (Midnight Sun Court Reporting) | Mary Vavrik (Midnight Sun Court Reporting) |                                            |

**PRIMARY CONTACT INFORMATION**

|                                                                                                                      |                                                                                                                      |                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Nicole Hayes, BLM</b><br>(Project Manager)<br>mnhayes@blm.gov<br>Office: 907-271-4354<br>Cell: (b) (6) or (b) (6) | <b>Chad Ricklefs, EMPSi</b><br>(Project Manager)<br>chad.ricklefs@empsi.com<br>Office: 303-495-5129<br>Cell: (b) (6) | <b>LOGISTICAL SUPPORT:</b><br><b>Amy Lewis, EMPSi</b><br>(Public Involvement Lead)<br>amy.lewis@empsi.com<br>Office: 503-308-4667<br>Cell: (b) (6) |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

**Air Transportation**

Fairbanks – BLM and EMPSi to book own commercial travel  
 Anchorage – BLM and EMPSi to book own commercial travel  
 Utqiagvik – BLM and EMPSi to book own commercial travel

**Ground Transportation**

Fairbanks – by individual; EMPSi will have rental cars  
 Anchorage – by individual; EMPSi will have rental cars  
 Utqiagvik – Top of the World airport shuttle to pick up at airport on 5/31; arrange with front desk for transport back to hotel on 6/1. Around town: Barrow Taxi - 907-852-2222

**Lodging**

Fairbanks: Best Western-Chena River Lodge – Kristin Koch (907-328-3500)  
 Anchorage: EMPSi staff at Embassy Suites and TownePlace Suites Anchorage Midtown  
 Utqiagvik: Top of the World Hotel – Alice Aviuk Solomon (907-852-3900); Names of each traveler have been attached to the BLM room block, DOI-BLM had made individual reservations

### Meals & Gear

Fairbanks, Anchorage, Utqiagvik – Meals are on your own

### **Pack**

Personal food and snacks, water bottles, cold weather gear, medicine, cash for paying for transport and other incidentals

## **Meeting Set-Up – Outside the Meeting Room**

- EMPSi/HDR staff will coordinate snacks/food for BLM and contractor staff
- Distribute nametags as staff arrive
- Security:
  - No metal detectors in Fairbanks. Venue security will be performing bag checks at door into the meeting room. BLM security will have a team present and will provide a safety briefing to BLM/contractor staff. Fairbanks PD will have an officer at the venue as well.
  - Anchorage will have metal detectors at the entrance to the Idlughet Hall. Venue security staff will be manning the metal detectors. BLM security will have a team present and provide a safety briefing to BLM/contractor staff.

### **Line Formation/Crowd Control**

- Venue (outer) doors open at 2:00pm; meeting room doors open at 3:00pm
- Stanchions provided by venue
- Tape for floor in case needed
- Hand stamper – BLM to provide staff person for this role?
- Directional arrows to be placed around venue as needed

### **Sign-in Tables**

- 4 tables, with three sign-in sheets per table
- 1 staff member to stay at sign in table for entire meeting duration

### **Media Sign-in Table**

- Staffed by BLM; BLM will be scanning crowd and pull members of the media to separate area for sign-in
- EMPSi to provide media sign-in sheets
- Media will be seated in designated area set up next to Art's tech table

## **Meeting Set-Up – Inside the Meeting Room**

### **Speaker Card Table**

- 1 table (2 staff people)
- Speaker cards (blue and white/evens and odds)
- Review speaker guidelines
- List of pre-determined speakers for reference (Lesli/BLM to provide)
- 1 staff stationed throughout the meeting

### **Boards/Easels**

- 11 boards total and easels (transported by EMPSi)
- Speaker guidelines board should go outside by the line/hand stamper

### **Comment Station**

- Laptops (2 provided by EMPSi)
- Comment forms
- Comment box
- Pens

### **Materials Table**

- Locate near “How to Comment” board (if possible)
- Presentation handout
- Scoping comments handout
- Comment forms

### **Projector/Presentation/Laptop**

- Timer/clock to be shown on screen for each person
- Interest group representatives get 5 minutes each
- General public get 3 minutes each

### **Microphone Stands**

- 2 microphone stations, one in each aisle
- Microphones provided by the BLM/Art F.; stands provided by venue
- EMPSi to tape box on floor around each microphone to let speakers know where to go
- One EMPSi at each station
  - o Collect cards from people, make sure they are filled out and they are in the correct line, put people in proper order
  - o Fill out speaker tracking sheet

### **General Room Set-Up**

- Meeting moderator (**David Batts, EMPSi**) – will announce the beginning of the meeting; announce numbers of speakers to line up; need to take breaks for court reporter and captioner
- Stage with podium and table for four BLM staff
- Tech table coordination led by Art F. (BLM). Media seating will be located nearby to allow for feed connection.
- Court reporter table located on floor in front of stage.



## **Meeting Flow**

- General public can begin lining up inside venue lobby at 2:00 pm for sign-in.
- Sign-in begins at 3:00 pm; doors to meeting room open at 3:00pm
- When a person moves from the line to the sign-in table, they will get their hand stamped to show that they had gone through the line.
- As the person signs in, ask them if they would like to speak/provide comments. If so, direct them to the speaker card table after they go through security.
- Person leaves sign-in table and goes through security into the meeting room.
- At the speaker card table, they fill out their information. Staff at speaker table review guidelines, determine whether the person is representing themselves or an organization – cross check against pre-determined speaker list.
- Open house period runs until 4:30 pm
  - BLM staff to be present around poster boards to answer questions/talk about the project
- At 4:30 pm, EMPSi moderator (David) will open the meeting. BLM will say a few opening remarks and then give a short PowerPoint presentation
- At approximately 5:00 pm, the interest group representative speakers will begin giving testimony
  - BLM will provide the confirmed speaker list. Each speaker gets 5 minutes
  - EMPSi staff to man laptop timer on screen
  - EMPSi staff to moderate speakers and meeting flow (including breaks)
- At approximately 6:30 pm, the pre-arranged speakers will conclude.
  - 10 minute break to transition
- At approximately 6:40 pm, the general public speakers will begin
  - Speakers will be called to the microphones in groups of 10 based on the number on the speaker card (evens and odds will be divided).
  - Microphone station attendants will collect speaker cards and make sure people are in proper order.
  - Moderator to call up numbers
    - Consider Mary (court reporter) and captioner might need to take a break at some point
- Public comment period advertised to close at 9:00pm
  - Will be BLM/EMPSi decision to extend comment period to accommodate remaining speakers

**From:** [Joanna Fox](#)  
**To:** [Wendy Loya](#); [John Trawicki](#); [Drew Crane](#); [stephanie brady](#)  
**Cc:** [Steve Berendzen](#)  
**Subject:** Fwd: Cancelling Seismic EA Meeting this Afternoon  
**Date:** Tuesday, May 29, 2018 2:22:20 PM

---

In light of the fact that this afternoon's 3pm EA meeting has been cancelled, Shelly provided the following update on the project. Steve should be sending the Project Initiation Letter (PIL) out today.

---

Joanna L. Fox  
Deputy Refuge Manager  
Arctic National Wildlife Refuge  
101 12th Avenue, Room 236  
Fairbanks, AK 99701  
(907) 456-0549

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[www.facebook.com/arcticnationalwildliferefuge](http://www.facebook.com/arcticnationalwildliferefuge)

*"Do what you can, with what you have, where you are." -- Theodore Roosevelt*

----- Forwarded message -----

From: Jones, Nichelle (Shelly) <[njones@blm.gov](mailto:njones@blm.gov)>  
Date: Tue, May 29, 2018 at 12:20 PM  
Subject: Cancelling Seismic EA Meeting this Afternoon  
To: Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Fox, Joanna <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>, LaMarr, Sarah <[slamarr@blm.gov](mailto:slamarr@blm.gov)>, Donna Wixon <[dwixon@blm.gov](mailto:dwixon@blm.gov)>, Robert Brumbaugh <[rbrumbau@blm.gov](mailto:rbrumbau@blm.gov)>

Hello All: We have a couple of us out this afternoon. In lieu of a meeting, I have the following update:

Donna sent the request for additional information last week. We also issued the PIL to the IDT members. I have a meeting with our state office on Thursday to get someone to cover the acoustic section. IDT members should be working on the affected environment and consequences sections.

The next milestones from the schedule are as follows:

**May 22-June 1** – Draft Affected Environment (FWS and Key BLM IDT members)  
**May 31** – Deadline for applicant response to questions  
**May 31-June 6** - Finalize Proposed Action and post to BLM ePlanning website (IDT Lead)  
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**June 6** – IDT Lead sends Proposed Action to team to draft Issue Statements.

See some of you at the scoping meeting for the CPLEIS this evening.

-Shelly

Shelly Jones  
Acting Manager  
Arctic District Office  
222 University Avenue  
Fairbanks, AK 99709

(907) 474-2310 (w)  
(907) 460-0086 (c)

----- Forwarded message -----

From: Wixon, Donna <[dwixon@blm.gov](mailto:dwixon@blm.gov)>

Date: Tue, May 29, 2018 at 3:26 PM

Subject: New Meeting?

To: Jones, Nichelle (Shelly) <[njones@blm.gov](mailto:njones@blm.gov)>

Cc: Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Fox, Joanna <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>, LaMarr, Sarah <[slamarr@blm.gov](mailto:slamarr@blm.gov)>, Robert Brumbaugh <[rbrumbau@blm.gov](mailto:rbrumbau@blm.gov)>

Good Afternoon,

I just spoke with Sue Simonds with SAE, she had some questions on our questions about the project. SAE has offered to give a couple of presentations about seismic to all of the people working on the EA. The first presentation would be an on-line skype presentation going over the basics of how SAE conducts seismic in the Arctic. They would like to do this June 5th. Does that seem like an okay day? Would 10am work?

On July 10, they would like to come to Fairbanks and give a presentation and/or answer questions. Would 11am work for this?

Once we decide on a date and time I will send out a meeting invite.

Thanks,

Donna

Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office  
907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)

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**From:** [Joanna Fox](#)  
**To:** [Roger Kaye](#); [Christopher Latty](#); [Jennifer Reed](#); [Stephen Arthur](#); [Burkart, Greta](#); [Hollis Twitchell](#); [Joshua Rose](#); [Brown, Randy](#); [Patrick O'Dell](#); [Edward Decleva](#); [Erin Carver](#); [Swem, Ted](#); [Susan LaKowski](#)  
**Cc:** [Wendy Loya](#); [Drew Crane](#); [John Trawicki](#); [stephanie brady](#); [Steve Berendzen](#)  
**Subject:** Re: New Meeting?  
**Date:** Wednesday, May 30, 2018 2:06:39 PM

---

Thanks to those of you who got right back to me on your availability June 5. It turns out June 5 does not work well for the majority of the BLM interdisciplinary team staff, so they're now proposing June 4 at 10am. If you're available then please let me know as soon as possible.

Thanks!

---

Joanna L. Fox  
Deputy Refuge Manager  
Arctic National Wildlife Refuge  
101 12th Avenue, Room 236  
Fairbanks, AK 99701  
(907) 456-0549

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*"Do what you can, with what you have, where you are." -- Theodore Roosevelt*

On Tue, May 29, 2018 at 3:48 PM Joanna Fox <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)> wrote:

In response to some of the questions we asked, the seismic applicant would like to give a couple of presentations about how they conduct seismic work in the Arctic. They're proposing the first as an on-line webinar-type presentation, to be offered June 5 at 10 am. If this date and/or time will not fit into your schedule, will you please let me know asap? I'd like to give Donna an indication of how well this might work for us.

(Arctic Refuge staff - if need be we will change our standing bi-weekly staff meeting to accommodate this presentation).

Thanks!  
Joanna

---

Joanna L. Fox  
Deputy Refuge Manager  
Arctic National Wildlife Refuge  
101 12th Avenue, Room 236  
Fairbanks, AK 99701  
(907) 456-0549

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Date: Tue, May 29, 2018 at 3:26 PM

Subject: New Meeting?

To: Jones, Nichelle (Shelly) <[njones@blm.gov](mailto:njones@blm.gov)>

Cc: Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Fox, Joanna <[joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)>, LaMarr, Sarah <[slamarr@blm.gov](mailto:slamarr@blm.gov)>, Robert Brumbaugh <[rbrumbau@blm.gov](mailto:rbrumbau@blm.gov)>

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Donna L Wixon  
Natural Resource Specialist  
BLM Arctic District Office  
222 University Ave  
Fairbanks, Alaska 99709  
907-474-2301 Office  
907-474-2386 Fax  
[dwixon@blm.gov](mailto:dwixon@blm.gov)

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-Shelly

Shelly Jones  
Acting Manager  
Arctic District Office  
[222 University Avenue](#)  
[Fairbanks, AK 99709](#)

(907) 474-2310 (w)  
(907) 460-0086 (c)



**From:** [Hayes, Miriam \(Nicole\)](#)  
**To:** [Erin Julianus](#); [Twitchell, Hollis](#)  
**Subject:** Fwd: [EXTERNAL] Coastal EIS - Section 810 discussion  
**Date:** Thursday, May 31, 2018 3:56:33 PM

---

Hi Erin and Hollis,  
Please complete the doodle poll for meeting on 810 Subsistence below. Hollis - I will also touch bases with you on inclusion of other staff from FWS if appropriate.

Thanks,

Nicole

**Nicole Hayes**

Project Coordinator

Bureau of Land Management

222 W. 7th Avenue #13

Anchorage, Alaska 99513

Desk: (907) 271-4354

----- Forwarded message -----

From: **Amy Lewis** <[amy.lewis@empsi.com](mailto:amy.lewis@empsi.com)>

Date: Thu, May 31, 2018 at 11:44 AM

Subject: [EXTERNAL] Coastal EIS - Section 810 discussion

To: "Hayes, Miriam (Nicole)" <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>, Paul Lawrence  
<[Paul.Lawrence@srbak.com](mailto:Paul.Lawrence@srbak.com)>, Stephen Braund <[Stephen.Braund@srbak.com](mailto:Stephen.Braund@srbak.com)>, Liz Sears  
<[liz.sears@srbak.com](mailto:liz.sears@srbak.com)>, Chad Ricklefs <[chad.ricklefs@empsi.com](mailto:chad.ricklefs@empsi.com)>

Hi Nicole and Paul –

I would like to get a meeting set for next week to start discussing what the Section 810 analysis will look like for the Coastal Plain EIS – what communities BLM will be considering, what resources will be covered, etc.

Please go to the link below and fill in your availability for the times I offered (note that I built the poll using PACIFIC STANDARD time, so double check what time shows up for your calendar). Once we've got a date/time chosen, I'll send out an official meeting invite.

**NICOLE** – please forward this email to anyone on the BLM team that you would like to participate in this discussion.

<https://doodle.com/poll/2hy2vtnmry66w88u>

0000011100

**Amy Lewis**

EMPSi Environmental Management and Planning Solutions, Inc.

[121 SW Salmon St., Suite 1100](#)

Portland, OR 97204

tel: 503-308-4667

[www.EMPSi.com](http://www.EMPSi.com)

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**From:** [dwixon@blm.gov](mailto:dwixon@blm.gov)  
**To:** [bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov); [sfritz@blm.gov](mailto:sfritz@blm.gov); [randy\\_i\\_brown@fws.gov](mailto:randy_i_brown@fws.gov); [slamarr@blm.gov](mailto:slamarr@blm.gov); [stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov); [lbrvant@blm.gov](mailto:lbrvant@blm.gov); [njones@blm.gov](mailto:njones@blm.gov); [rheath@blm.gov](mailto:rheath@blm.gov); [charles\\_hamilton@fws.gov](mailto:charles_hamilton@fws.gov); [i75murph@blm.gov](mailto:i75murph@blm.gov); [BLM-AK.FDO.Steese.White.Mountains.Conference.Room@fws.gov](mailto:BLM-AK.FDO.Steese.White.Mountains.Conference.Room@fws.gov); [gilbert\\_castellanos@fws.gov](mailto:gilbert_castellanos@fws.gov); [roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov); [jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov); [rgoodwin@blm.gov](mailto:rgoodwin@blm.gov); [jkeenev@blm.gov](mailto:jkeenev@blm.gov); [chamfler@blm.gov](mailto:chamfler@blm.gov); [greta\\_burkart@fws.gov](mailto:greta_burkart@fws.gov); [sheila\\_dufford@fws.gov](mailto:sheila_dufford@fws.gov); [tvosburgh@blm.gov](mailto:tvosburgh@blm.gov); [rkemnitz@blm.gov](mailto:rkemnitz@blm.gov); [BLM-AK.FDO.Kobuk.Room@fws.gov](mailto:BLM-AK.FDO.Kobuk.Room@fws.gov); [stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov); [patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov); [hollis\\_twitchell@fws.gov](mailto:hollis_twitchell@fws.gov); [tmeares@blm.gov](mailto:tmeares@blm.gov); [christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov); [kdebenham@blm.gov](mailto:kdebenham@blm.gov); [ted\\_swem@fws.gov](mailto:ted_swem@fws.gov); [dniagro@blm.gov](mailto:dniagro@blm.gov); [erin\\_carver@fws.gov](mailto:erin_carver@fws.gov); [susan\\_lakomski@fws.gov](mailto:susan_lakomski@fws.gov); [edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov); [joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov); [BLM-AK.SO.Bridge.4.1.888.560.9564.Passcode.9132107@fws.gov](mailto:BLM-AK.SO.Bridge.4.1.888.560.9564.Passcode.9132107@fws.gov); [angela\\_matz@fws.gov](mailto:angela_matz@fws.gov); [joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov); [mwhitman@blm.gov](mailto:mwhitman@blm.gov); [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)  
**Subject:** Invitat on: SAEExploration Presentation @ Mon Jun 4, 2018 2pm - 4pm (EDT) (bud\_cribley@fws.gov)  
**Attachments:** [invlta.ics](#)

more details » <[https://www.google.com/calendar/event?action=VIEW&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew\\_York&hl=en&es=1](https://www.google.com/calendar/event?action=VIEW&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew_York&hl=en&es=1)>  
SAExploration Presentation  
SAExploration would like to give an on-line "skype" presentation to go over their proposed seismic action and answer some of the questions on the proposal that were submitted to them. I do not have the url for the meeting as of yet, but will let everyone know once we have it. I have reserved the Kobuk Room at BLM for anyone that would like to come here for the meeting.  
When Mon Jun 4, 2018 2pm – 4pm Eastern Time  
Where BLM-AK FDO Kobuk Room, BLM-AK SO Bridge 4 1 888 560 9564 Passcode 9132107, BLM-AK FDO Steese White Mountains Conference Room&hl=en>  
AK SO Bridge 4 1 888 560 9564 Passcode 9132107, BLM-AK FDO Steese White Mountains Conference Room&hl=en>  
Video call [https://hangouts.google.com/hangouts/\\_/doi/gw/dwixon](https://hangouts.google.com/hangouts/_/doi/gw/dwixon) <[https://hangouts.google.com/hangouts/\\_/doi/gw/dwixon?hceid=ZHDpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew\\_York&hl=en&es=1](https://hangouts.google.com/hangouts/_/doi/gw/dwixon?hceid=ZHDpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew_York&hl=en&es=1)>  
Calendar bud\_cribley@fws.gov  
Who • dwixon@blm.gov - organizer  
• bud\_cribley@fws.gov  
• sfritz@blm.gov  
• randy\_i\_brown@fws.gov  
• slamarr@blm.gov  
• stephanie\_brady@fws.gov  
• lbrvant@blm.gov  
• njones@blm.gov  
• rheath@blm.gov  
• charles\_hamilton@fws.gov  
• i75murph@blm.gov  
• gilbert\_castellanos@fws.gov  
• roger\_kaye@fws.gov  
• jennifer\_reed@fws.gov  
• rgoodwin@blm.gov  
• rtrumbau@blm.gov  
• jkeenev@blm.gov  
• chamfler@blm.gov  
• greta\_burkart@fws.gov  
• sheila\_dufford@fws.gov  
• tvosburgh@blm.gov  
• rkemnitz@blm.gov  
• stephen\_arthur@fws.gov  
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• ted\_swem@fws.gov  
• dniagro@blm.gov  
• erin\_carver@fws.gov  
• susan\_lakomski@fws.gov  
• edward\_decleva@fws.gov  
• joshua\_rose@fws.gov  
• angela\_matz@fws.gov  
• joanna\_fox@fws.gov  
• mwhitman@blm.gov  
• steve\_berendzen@fws.gov  
Going? Yes <[https://www.google.com/calendar/event?action=RESPOND&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&rst=1&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew\\_York&hl=en&es=1](https://www.google.com/calendar/event?action=RESPOND&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&rst=1&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew_York&hl=en&es=1)>  
- Maybe <[https://www.google.com/calendar/event?action=RESPOND&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&rst=3&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew\\_York&hl=en&es=1](https://www.google.com/calendar/event?action=RESPOND&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&rst=3&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew_York&hl=en&es=1)>  
- No <[https://www.google.com/calendar/event?action=RESPOND&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&rst=2&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew\\_York&hl=en&es=1](https://www.google.com/calendar/event?action=RESPOND&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&rst=2&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew_York&hl=en&es=1)>  
more options » <[https://www.google.com/calendar/event?action=VIEW&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew\\_York&hl=en&es=1](https://www.google.com/calendar/event?action=VIEW&eid=Nm2MGYycG84NTc1Nzh2c2JpczlycGRlNTcgYnVlX2NyaWJsZXlAZndzLmdvdg&tok=MTQqZHdpeG9uQGJsbS5nb3YxNmU0MTQ1ZDdmNmFhNmJlZDlJOWQxZDI1MmQwYzdhMDE3YjlkMTQ1&ctz=America%2FNew_York&hl=en&es=1)>  
Invitation from Google Calendar <<https://www.google.com/calendar?more=0>>  
You are receiving this email at the account bud\_cribley@fws.gov because you are subscribed for invitations on calendar bud\_cribley@fws.gov.  
To stop receiving these emails, please log in to <https://www.google.com/calendar/> and change your notification settings for this calendar.  
Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More <<https://support.google.com/calendar/answer/37135#forwarding>> .

**From:** [Berendzen, Steve](#)  
**To:** [Christopher Latty](#); [Stephen Arthur](#); [Roger Kaye](#); [Hollis Twitchell](#); [Joshua Rose](#); [Joanna Fox](#); [Ted Swem](#); [Conn. Sarah](#)  
**Subject:** Fwd: Invitation: SAExploration Presentation @ Mon Jun 4, 2018 10am - 12pm (AKDT) (steve\_berendzen@fws.gov)  
**Date:** Friday, June 1, 2018 7:55:59 PM  
**Attachments:** [invite.ics](#)

---

Greetings,

I talked with Shelly about this presentation, and she encouraged us to come over to the BLM office for it. She said they'd have adequate room, and I think it would be good to have the ability to interact and ask clarifying questions of them.

Please plan to attend this.

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

----- Forwarded message -----

**From:** Donna Wixon <[dwixon@blm.gov](mailto:dwixon@blm.gov)>  
**Date:** Fri, Jun 1, 2018 at 11:49 AM  
**Subject:** Invitation: SAExploration Presentation @ Mon Jun 4, 2018 10am - 12pm (AKDT) ([steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov))  
**To:** [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov), [joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov), [roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov), [jkeeney@blm.gov](mailto:jkeeney@blm.gov), [edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov), [tvosburgh@blm.gov](mailto:tvosburgh@blm.gov), [randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov), [joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov), [slamarr@blm.gov](mailto:slamarr@blm.gov), [rbrumbau@blm.gov](mailto:rbrumbau@blm.gov), [rgoodwin@blm.gov](mailto:rgoodwin@blm.gov), [t75murph@blm.gov](mailto:t75murph@blm.gov), [gilbert\\_castellanos@fws.gov](mailto:gilbert_castellanos@fws.gov), [greta\\_burkart@fws.gov](mailto:greta_burkart@fws.gov), [chamfler@blm.gov](mailto:chamfler@blm.gov), [christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov), [lbryant@blm.gov](mailto:lbryant@blm.gov), [patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov), [angela\\_matz@fws.gov](mailto:angela_matz@fws.gov), [jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov), [sheila\\_dufford@fws.gov](mailto:sheila_dufford@fws.gov), [dnigro@blm.gov](mailto:dnigro@blm.gov), [ted\\_swem@fws.gov](mailto:ted_swem@fws.gov), [stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov), [bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov), [mwhitman@blm.gov](mailto:mwhitman@blm.gov), [erin\\_carver@fws.gov](mailto:erin_carver@fws.gov), [njones@blm.gov](mailto:njones@blm.gov), [susan\\_lakomski@fws.gov](mailto:susan_lakomski@fws.gov), [hollis\\_twitchell@fws.gov](mailto:hollis_twitchell@fws.gov), [rkemnitz@blm.gov](mailto:rkemnitz@blm.gov), [kdebenham@blm.gov](mailto:kdebenham@blm.gov), [charles\\_hamilton@fws.gov](mailto:charles_hamilton@fws.gov), [sfritz@blm.gov](mailto:sfritz@blm.gov), [tmearas@blm.gov](mailto:tmearas@blm.gov), [stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov), [nheath@blm.gov](mailto:nheath@blm.gov)

## SAExploration Presentation

[more details »](#)

SAExploration would like to give an on-line "skype" presentation to go over their proposed seismic action and answer some of the questions on the proposal that were submitted to them. I do not have the url for the meeting as of yet, but will let everyone know once we have it. I have reserved the Kobuk Room at BLM for anyone that would like to come here for the meeting.

**When** Mon Jun 4, 2018 10am – 12pm Alaska Time

**Where** BLM-AK FDO Kobuk Room, BLM-AK SO Bridge (b) (5) CIP, BLM-AK FDO Steese White Mountains Conference Room ([map](#)) Passcode (b) (5) CIP

**Video call** [https://hangouts.google.com/hangouts/\\_/doi.gov/dwixon](https://hangouts.google.com/hangouts/_/doi.gov/dwixon)

**Calendar** [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)

**Who** • [dwixon@blm.gov](mailto:dwixon@blm.gov) - organizer

- [joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov)
- [roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov)
- [jkeeney@blm.gov](mailto:jkeeney@blm.gov)
- [edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov)
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- [randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov)
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- [slamarr@blm.gov](mailto:slamarr@blm.gov)
- [rbrumbau@blm.gov](mailto:rbrumbau@blm.gov)
- [rgoodwin@blm.gov](mailto:rgoodwin@blm.gov)
- [t75murph@blm.gov](mailto:t75murph@blm.gov)
- [gilbert\\_castellanos@fws.gov](mailto:gilbert_castellanos@fws.gov)
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- [patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov)
- [angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)
- [jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov)
- [sheila\\_dufford@fws.gov](mailto:sheila_dufford@fws.gov)
- [dnigro@blm.gov](mailto:dnigro@blm.gov)
- [ted\\_swem@fws.gov](mailto:ted_swem@fws.gov)
- [stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov)
- [bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov)
- [mwhitman@blm.gov](mailto:mwhitman@blm.gov)
- [erin\\_carver@fws.gov](mailto:erin_carver@fws.gov)
- [njones@blm.gov](mailto:njones@blm.gov)
- [susan\\_lakowski@fws.gov](mailto:susan_lakowski@fws.gov)
- [hollis\\_twitchell@fws.gov](mailto:hollis_twitchell@fws.gov)
- [rkemnitz@blm.gov](mailto:rkemnitz@blm.gov)
- [kdebenham@blm.gov](mailto:kdebenham@blm.gov)
- [charles\\_hamilton@fws.gov](mailto:charles_hamilton@fws.gov)
- [sfritz@blm.gov](mailto:sfritz@blm.gov)
- [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)
- [tmeares@blm.gov](mailto:tmeares@blm.gov)
- [stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov)
- [nheath@blm.gov](mailto:nheath@blm.gov)

Going? [Yes](#) - [Maybe](#) - [No](#) [more options »](#)

Invitation from [Google Calendar](#)

You are receiving this email at the account [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov) because you are subscribed for invitations on calendar [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov).

To stop receiving these emails, please log in to <https://www.google.com/calendar/> and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to modify your RSVP response. [Learn More](#).

**From:** [dwixon@blm.gov](mailto:dwixon@blm.gov)  
**To:** [ssimonds@saexploration.com](mailto:ssimonds@saexploration.com); [gilbert\\_castellanos@fws.gov](mailto:gilbert_castellanos@fws.gov); [rgoodwin@blm.gov](mailto:rgoodwin@blm.gov); [tvosburgh@blm.gov](mailto:tvosburgh@blm.gov); [lbryant@blm.gov](mailto:lbryant@blm.gov); [christopher\\_latty@fws.gov](mailto:christopher_latty@fws.gov); [randy\\_j\\_brown@fws.gov](mailto:randy_j_brown@fws.gov); [stephen\\_arthur@fws.gov](mailto:stephen_arthur@fws.gov); [sheila\\_dufford@fws.gov](mailto:sheila_dufford@fws.gov); [sfritz@blm.gov](mailto:sfritz@blm.gov); [jkeeney@blm.gov](mailto:jkeeney@blm.gov); [erin\\_carver@fws.gov](mailto:erin_carver@fws.gov); [chamfler@blm.gov](mailto:chamfler@blm.gov); [mwhitman@blm.gov](mailto:mwhitman@blm.gov); [tmeares@blm.gov](mailto:tmeares@blm.gov); [t75murph@blm.gov](mailto:t75murph@blm.gov); [joanna\\_fox@fws.gov](mailto:joanna_fox@fws.gov); [joshua\\_rose@fws.gov](mailto:joshua_rose@fws.gov); [ted\\_swem@fws.gov](mailto:ted_swem@fws.gov); BLM-AK FDO Steese White Mountains Conference Room; [angela\\_matz@fws.gov](mailto:angela_matz@fws.gov); [njones@blm.gov](mailto:njones@blm.gov); [kpeck@blm.gov](mailto:kpeck@blm.gov); [hollis\\_twitchell@fws.gov](mailto:hollis_twitchell@fws.gov); [stephanie\\_brady@fws.gov](mailto:stephanie_brady@fws.gov); [dnigro@blm.gov](mailto:dnigro@blm.gov); [greta\\_burkart@fws.gov](mailto:greta_burkart@fws.gov); [jennifer\\_reed@fws.gov](mailto:jennifer_reed@fws.gov); [nheath@blm.gov](mailto:nheath@blm.gov); [roger\\_kaye@fws.gov](mailto:roger_kaye@fws.gov); [kdebenham@blm.gov](mailto:kdebenham@blm.gov); [slamarr@blm.gov](mailto:slamarr@blm.gov); [bud\\_cribley@fws.gov](mailto:bud_cribley@fws.gov); [rbrumbau@blm.gov](mailto:rbrumbau@blm.gov); [rtrupp@saexploration.com](mailto:rtrupp@saexploration.com); [rkemnitz@blm.gov](mailto:rkemnitz@blm.gov); [patrick\\_odell@fws.gov](mailto:patrick_odell@fws.gov); [susan\\_lakomski@fws.gov](mailto:susan_lakomski@fws.gov); BLM-AK SO Bridge 4 1 888 560 9564 Passcode 9132107; [edward\\_decleva@fws.gov](mailto:edward_decleva@fws.gov); [charles\\_hamilton@fws.gov](mailto:charles_hamilton@fws.gov); BLM-AK FDO Kobuk Room; [steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)  
**Subject:** Canceled event with note: SAEExploration Presentation @ Mon Jun 4, 2018 10am - 12pm (AKDT)  
(sheila\_dufford@fws.gov)  
**Attachments:** [invite.ics](#)

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This event has been canceled and removed from your calendar with this note:

"I'm sorry but SAE has requested that we reschedule this meeting. I do not have a proposed date yet but will let you know as soon as we have a date."  
SAExploration Presentation

SAExploration would like to give an on-line "skype" presentation to go over their proposed seismic action and answer some of the questions on the proposal that were submitted to them. I do not have the url for the meeting as of yet, but will let everyone know once we have it. I have reserved the Kobuk Room at BLM for anyone that would like to come here for the meeting.

When Mon Jun 4, 2018 10am – 12pm Alaska Time

Where BLM-AK FDO Kobuk Room, BLM-AK SO Bridge (b) (5) CIP Passcode (b) (5) CIP, BLM-AK FDO Steese White Mountains Conference Room (map <<https://maps.google.com/maps?q=BLM-AK+FDO+Kobuk+Room,+BLM-AK+SO+Bridge+4+1+888+560+9564+Passcode+9132107,+BLM-AK+FDO+Steese+White+Mountains+Conference+Room&hl=en>> )

Video call [https://hangouts.google.com/hangouts/\\_/doi.gov/dwixon](https://hangouts.google.com/hangouts/_/doi.gov/dwixon) <[https://hangouts.google.com/hangouts/\\_/doi.gov/dwixon?hceid=ZHDpeG9uQGJsbS5nb3Y.6kv0f2po857578vsbis9rpde57](https://hangouts.google.com/hangouts/_/doi.gov/dwixon?hceid=ZHDpeG9uQGJsbS5nb3Y.6kv0f2po857578vsbis9rpde57)>

Calendar sheila\_dufford@fws.gov

Who • dwixon@blm.gov - organizer

- ssimonds@saexploration.com
- gilbert\_castellanos@fws.gov
- rgoodwin@blm.gov
- tvosburgh@blm.gov
- lbryant@blm.gov
- christopher\_latty@fws.gov
- randy\_j\_brown@fws.gov
- stephen\_arthur@fws.gov
- sheila\_dufford@fws.gov
- sfritz@blm.gov
- jkeeney@blm.gov
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**From:** [Berendzen, Steve](#)  
**To:** [Joanna Fox](#); [Hollis Twitchell](#)  
**Cc:** [Doug Damberg](#); [Loya, Wendy](#)  
**Subject:** Fwd: Week 3 Itinerary - Venetie/Kaktovik/Washington, D.C.  
**Date:** Monday, June 4, 2018 5:06:14 PM  
**Attachments:** [Week 3 June11-June15 VEN KAK DC v1.docx.docx](#)

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FYI - Itinerary for next weeks meetings.

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

----- Forwarded message -----

**From:** **Hayes, Miriam (Nicole)** <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>  
**Date:** Mon, Jun 4, 2018 at 2:23 PM  
**Subject:** Week 3 Itinerary - Venetie/Kaktovik/Washington, D.C.  
**To:** Joseph Balash <[joseph\\_balash@ios.doi.gov](mailto:joseph_balash@ios.doi.gov)>, Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Mouritsen <[kmourits@blm.gov](mailto:kmourits@blm.gov)>, Michael Gieryic <[mike.gieryic@sol.doi.gov](mailto:mike.gieryic@sol.doi.gov)>  
**Cc:** Lesli Ellis-Wouters <[lellis@blm.gov](mailto:lellis@blm.gov)>, "Murphy, Ted" <[t75murph@blm.gov](mailto:t75murph@blm.gov)>, "Nichelle (Shelly) Jones" <[njones@blm.gov](mailto:njones@blm.gov)>, "Seidlitz, Joseph (Gene)" <[gseidlit@blm.gov](mailto:gseidlit@blm.gov)>, Jill Moran <[jcmoran@blm.gov](mailto:jcmoran@blm.gov)>, Tracie Lassiter <[tracie\\_lassiter@ios.doi.gov](mailto:tracie_lassiter@ios.doi.gov)>, Hilary Zarin <[hzarin@blm.gov](mailto:hzarin@blm.gov)>, Jeff Brune <[jbrune@blm.gov](mailto:jbrune@blm.gov)>, Michael Nedd <[mnedd@blm.gov](mailto:mnedd@blm.gov)>, "Twitchell, Hollis" <[hollis\\_twitchell@fws.gov](mailto:hollis_twitchell@fws.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Jeff Krauss <[jkrauss@blm.gov](mailto:jkrauss@blm.gov)>, Beverly Winston <[bwinston@blm.gov](mailto:bwinston@blm.gov)>, Steven Wells <[s1wells@blm.gov](mailto:s1wells@blm.gov)>, "Frost, Eileen" <[efrost@blm.gov](mailto:efrost@blm.gov)>, Leslie Rosenberger <[rosenberger@blm.gov](mailto:rosenberger@blm.gov)>, Stephen Wackowski <[stephen\\_wackowski@ios.doi.gov](mailto:stephen_wackowski@ios.doi.gov)>, Lesia Monson <[lesia\\_monson@ios.doi.gov](mailto:lesia_monson@ios.doi.gov)>

All,

Attached is the itinerary for next week as they stand TODAY. There are a few details that are still being finalized, however, meeting times and DOI flight times are confirmed so that travel to/from Fairbanks and to/from DC may be arranged.

Please let me know if you have any questions.

Nicole

**Nicole Hayes**  
Project Coordinator  
Bureau of Land Management  
222 W. 7th Avenue #13  
Anchorage, Alaska 99513  
Desk: (907) 271-4354

0000011106

## Coastal Plain Oil and Gas Leasing Program EIS – Scoping Meetings

**WEEK 3 – June 11 through June 15, 2018**

**Venetie, Kaktovik, Washington DC**

### Monday, June 11, 2018 – Venetie

| Time     | Activity                                                                                                                                                                                     |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am | <b>Government to Government Meeting with <u>Native Village of Venetie, Venetie Village Council, Arctic Village Council</u> at the Community Hall</b><br>Contact: Tonya Garnett, 907-587-5128 |

### Tuesday, June 12, 2018 – Venetie and Kaktovik

| Time               | Activity                                                                                                                                                           |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am – 2:00 pm | <b>Public Scoping Meeting in <u>Venetie</u> at the Community Hall</b><br>Contact: Tonya Garnett, 907-587-5128                                                      |
| 4:00 pm            | <b>Public Scoping Meeting in <u>Kaktovik</u> at Harold Kaveolook School (North Slope Borough, Leroy Stigen (Maintenance), 907-640-0015, leroy.stigen@nsbsd.org</b> |

### Wednesday, June 13, 2018 – Kaktovik – **START TIME STILL TO BE CONFIRMED**

| Time              | Activity                                                                                                                                                                          |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am – 1:00pm | <b>Government to Government Meeting with <u>Native Village of Kaktovik</u> at the NVK Office</b><br>Matthew Rexford (Tribal Administrator NVK and President of KIC), 907-640-0082 |

### Friday, June 15, 2018 – Washington DC

| Time        | Activity                                                                                                                                                                                                                                                 |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3:00-9:00pm | <b>Public Scoping Meeting in <u>Washington DC</u> at the National Housing Center (Auditorium)</b><br>1201 15 <sup>th</sup> Street NW, Washington DC 20005<br>Contact: Katrina Mbaye 202-266-8429 (d), (b) (6) (c)<br>BLM Security: Eric Singletary (XXX) |

### ATTENDEES

| Venetie                                    | Kaktovik                                   | Washington DC            |
|--------------------------------------------|--------------------------------------------|--------------------------|
| Nicole Hayes (BLM)                         | Nicole Hayes (BLM)                         | Nicole Hayes (BLM)       |
| Karen Mouritsen (BLM)                      | Karen Mouritsen (BLM)                      | Karen Mouritsen (BLM)    |
| Joe Balash (DOI)                           | Joe Balash (DOI)                           | Joe Balash (DOI)         |
| Mike Gieryic (DOI)                         | Mike Gieryic (DOI)                         | Mike Gieryic (DOI)       |
| Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)    |
| Amy Lewis (EMPSi)                          | Amy Lewis (EMPSi)                          | Amy Lewis (EMPSi)        |
| Mary Vavrik (Midnight Sun Court Reporting) | Mary Vavrik (Midnight Sun Court Reporting) | David Batts (EMPSi)      |
| Greg Siekaniec (FWS)                       | Greg Siekaniec (FWS)                       | John King (EMPSi)        |
| Hollis Twitchell (FWS)                     | Hollis Twitchell (FWS)                     | Molly McCarter (EMPSi)   |
|                                            |                                            | Lindsay Chipman (EMPSi)  |
|                                            |                                            | Andy Spellmeyer (EMPSi)  |
|                                            |                                            | Alderson Court Reporting |



## PRIMARY CONTACT INFORMATION

|                                                                                                                      |                                                                                                                      |                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Nicole Hayes, BLM</b><br>(Project Manager)<br>mnhayes@blm.gov<br>Office: 907-271-4354<br>Cell: (b) (6) or (b) (6) | <b>Chad Ricklefs, EMPSi</b><br>(Project Manager)<br>chad.ricklefs@empsi.com<br>Office: 303-495-5129<br>Cell: (b) (6) | <b>LOGISTICAL SUPPORT:</b><br><b>Amy Lewis, EMPSi</b><br>(Public Involvement Lead)<br>amy.lewis@empsi.com<br>Office: 503-308-4667<br>Cell: (b) (6) |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

## DETAILED ITINERARY

### Monday, June 11, 2018 – Venetie

| Time         | Activity                                                                                                                                                                    |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 07:00 am     | Meet at Fairbanks International Airport for transport to Fort Wainwright (POC: Shelly Jones, 907-460-0086 or 907-474-2310) - <b>PICK UP LOCATIONS TO BE CONFIRMED</b>       |
| 07:05 am     | Depart BLM Arctic District Office for Fort Wainwright (transport provided by BLM Arctic DO)                                                                                 |
| 08:30 am     | DOI aircraft departs Fairbanks for Venetie                                                                                                                                  |
| 09:06 am     | Arrive in Venetie                                                                                                                                                           |
| 09:10 am     | Transfer from airstrip to Venetie Community Hall<br>Pick-up by Manual Gamboa (907-849-9114)                                                                                 |
| 10:00 am     | <b>Government to Government meeting</b> with Native Village of Venetie Tribal Government, Venetie Village Council, and Arctic Village Council at the Venetie Community Hall |
| 1:30 pm      | Check in at School for lodging. <b>BLM payment by check (\$XX/night pp) for X people. XXX POC, (phone)</b>                                                                  |
| 1:30 pm      | On your own for the remainder of the day                                                                                                                                    |
| 4:00-5:00 pm | Set up Community Hall for public scoping meeting (if available)                                                                                                             |

### Tuesday, June 12, 2018 – Venetie, Kaktovik

| Time     | Activity                                                                                                                                                                               |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00 am  | Meet at <b>Community Hall</b> to finish set up for meeting                                                                                                                             |
| 10:00 am | <b>Public Scoping Meeting</b> at the <b>Venetie Community Hall</b> (\$XXX per day with check made payable to Arctic Village Council from the BLM<br>Translator: Mary Rose Gamboa (XXX) |
| 1:00 pm  | Meeting room clean up                                                                                                                                                                  |
| 1:30 pm  | Depart for airstrip<br>Coordinate transport with <b>Manual Gamboa (907-849-9114)</b>                                                                                                   |
| 2:00 pm  | Translator flight departs– Wright Air from Venetie to Fort Yukon                                                                                                                       |
| 2:00 pm  | DOI aircraft depart Venetie for Kaktovik (depart no later than <b>2:00 pm</b> )                                                                                                        |
| 2:54 pm  | Arrive in Kaktovik.<br><b>Transport: Sue (907-640-0111); \$20/pp cash roundtrip to/from airstrip. Coordinate with Sue on time for pick-up and transport to airstrip for Wednesday.</b> |

|         |                                                                                                       |
|---------|-------------------------------------------------------------------------------------------------------|
| 3:15 pm | Meet at Harold Kaveolook School to set up for meeting                                                 |
| 4:00 pm | <b>Public Scoping Meeting</b> at Harold Kaveolook School (BLM payment by check),<br>Translator: (XXX) |
| 9:00 pm | Meeting room clean up                                                                                 |
| 9:30 pm | Transfer to lodging and overnight at Marsh Creek Inn                                                  |

### Wednesday, June 13, 2018 – Kaktovik

| Time     | Activity                                                                              |
|----------|---------------------------------------------------------------------------------------|
| 10:00 am | <b>Government to Government meeting</b> with Native Village of Kaktovik at NVK Office |
| 1:00 pm  | Depart for airstrip<br>Coordinate transport with Sue (907-640-0111)                   |
| 1:30 pm  | DOI aircraft depart Kaktovik for Fairbanks (depart no later than XXX pm)              |
| 3:00 pm  | Arrive in Fairbanks                                                                   |

### Friday, June 15, 2018 – Washington DC

| Time     | Activity                                                                                     |
|----------|----------------------------------------------------------------------------------------------|
| 10:00 am | EMPSi staff meet at National Housing Center to begin set up for public scoping meeting       |
| 2:00 pm  | BLM to arrive at National Housing Center                                                     |
| 2:00 pm  | Open <u>outer</u> venue doors; allow people to begin lining up outside of the meeting room   |
| 2:00 pm  | Venue security guards begin duty                                                             |
| 2:30 pm  | BLM safety briefing                                                                          |
| 3:00 pm  | <b>Public Scoping Meeting</b> – open house period begins (open doors to meeting room at 3pm) |
| 4:30 pm  | BLM presentation, followed by public comment period                                          |
| 9:00 pm  | Anticipated end of meeting and clean up                                                      |
| 9:30 pm  | Venue security ends duty                                                                     |

### Air Transportation

Venetie – DOI, BLM, FWS (Greg S.) and EMPSi team on DOI aircraft  
Kaktovik – DOI, BLM, FWS (Greg S.) and EMPSi team on DOI aircraft  
Washington DC – BLM and EMPSi to book own commercial travel

### **Contractor Staff Flights to Fairbanks**

Chad Ricklefs – June 10 (Sunday) Alaska Air #123, arriving FAI at 4:42pm  
Amy Lewis – June 10 (Sunday) Alaska Air #195, arriving FAI at 2:45pm

### Ground Transportation

Venetie – Manual Gamboa (907-849-9114)  
Kaktovik – **Pick up will be by Sue; Steve will coordinate pick-up once the plane lands (907-640-0111)**  
Washington DC – by individual

### Lodging

Venetie: Venetie School (**Contact XX**)  
Kaktovik: Marsh Creek Inn (Theresa, 907-349-3342)  
Washington DC:  
EMPSi staff – Westin Washington DC City Center, 1400 M Street NW, 202-429-1700

### Meals & Gear

#### Venetie

- You will be staying in the Venetie School in their classrooms. **Bring a sleeping bag and thermarest/sleeping pad.**
- **There is a kitchen and showers available in the school.**
- There are no restaurants in town. Plan for food for **1 breakfast, 2 lunches, and 1 dinner.**

Kaktovik – Meals provided at Marsh Creek Inn

Washington DC – Meals are on your own

### **Pack (for Venetie and Kaktovik)**

Personal food and snacks (see above), water bottles, cold weather gear, medicine, cash for paying for transport and other incidentals

**From:** [Hayes, Miriam \(Nicole\)](#)  
**To:** [Joseph Balash](#); [Greg Siekaniec](#); [Karen Mouritsen](#); [Michael Gieryic](#)  
**Cc:** [Lesli Ellis-Wouters](#); [Murphy, Ted](#); [Nichelle \(Shelly\) Jones](#); [Seidlitz, Joseph \(Gene\)](#); [Jill Moran](#); [Tracie Lassiter](#); [Hilary Zarin](#); [Jeff Brune](#); [Michael Nedd](#); [Twitchell, Hollis](#); [Steve Berendzen](#); [Karen Clark](#); [Jeff Krauss](#); [Beverly Winston](#); [Steven Wells](#); [Frost, Eileen](#); [Leslie Rosenberger](#); [Stephen Wackowski](#); [Lesia Monson](#); [Chad Ricklefs](#); [amy lewis](#)  
**Subject:** Updated Week 3 Itinerary - Venetie/Kaktovik/Washington, D.C.  
**Date:** Friday, June 8, 2018 11:43:31 AM  
**Attachments:** [Week 3 June11-June15 VEN\\_KAK\\_DC\\_v3.docx](#)

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Attached is the updated itinerary. Please let me know if you have any questions.  
Nicole

**Nicole Hayes**

Project Coordinator  
Bureau of Land Management  
222 W. 7th Avenue #13  
Anchorage, Alaska 99513  
Desk: (907) 271-4354

## Coastal Plain Oil and Gas Leasing Program EIS – Scoping Meetings

**WEEK 3 – June 11 through June 15, 2018**

**Venetie, Kaktovik, Washington DC**

### Monday, June 11, 2018 – Venetie

| Time     | Activity                                                                                                                                                                                     |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am | <b>Government to Government Meeting with <u>Native Village of Venetie, Venetie Village Council, Arctic Village Council</u> at the Community Hall</b><br>Contact: Tonya Garnett, 907-587-5128 |

### Tuesday, June 12, 2018 – Venetie and Kaktovik

| Time               | Activity                                                                                                                                                           |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am – 2:00 pm | <b>Public Scoping Meeting in <u>Venetie</u> at the Community Hall</b><br>Contact: Tonya Garnett, 907-587-5128                                                      |
| 4:00 pm            | <b>Public Scoping Meeting in <u>Kaktovik</u> at Harold Kaveolook School (North Slope Borough, Leroy Stigen, Maintenance, 907-640-0015, leroy.stigen@nsbsd.org)</b> |

### Wednesday, June 13, 2018 – Kaktovik

| Time              | Activity                                                                                                                                                                                                                      |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11:00 am – 1:00pm | <b>Government to Government Meeting with <u>Native Village of Kaktovik</u> and the <u>Kaktovik Iñupiat Corporation</u> at the KIC Office</b><br>Matthew Rexford (Tribal Administrator NVK and President of KIC), 907-640-0082 |

### Friday, June 15, 2018 – Washington DC

| Time        | Activity                                                                                                                                                                                                                                                          |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3:00-9:00pm | <b>Public Scoping Meeting in <u>Washington DC</u> at the National Housing Center (Auditorium)</b><br>1201 15 <sup>th</sup> Street NW, Washington DC 20005<br>Contact: Katrina Mbaye 202-266-8429 (d), (b) (6) (c)<br>BLM Security: Eric Singletary (760) 384-5409 |

### ATTENDEES

| Venetie                                    | Kaktovik                                   | Washington DC            |
|--------------------------------------------|--------------------------------------------|--------------------------|
| Nicole Hayes (BLM)                         | Nicole Hayes (BLM)                         | Nicole Hayes (BLM)       |
| Karen Mouritsen (BLM)                      | Karen Mouritsen (BLM)                      | Karen Mouritsen (BLM)    |
| Joe Balash (DOI)                           | Joe Balash (DOI)                           | Joe Balash (DOI)         |
| Mike Gieryic (DOI)                         | Mike Gieryic (DOI)                         | Jim Hart (BLM)           |
| Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)    |
| Amy Lewis (EMPSi)                          | Amy Lewis (EMPSi)                          | Amy Lewis (EMPSi)        |
| Mary Vavrik (Midnight Sun Court Reporting) | Mary Vavrik (Midnight Sun Court Reporting) | David Batts (EMPSi)      |
| Greg Siekaniec (FWS)                       | Greg Siekaniec (FWS)                       | John King (EMPSi)        |
| Hollis Twitchell (FWS)                     | Hollis Twitchell (FWS)                     | Molly McCarter (EMPSi)   |
|                                            |                                            | Lindsay Chipman (EMPSi)  |
|                                            |                                            | Andy Spellmeyer (EMPSi)  |
|                                            |                                            | Alderson Court Reporting |

## PRIMARY CONTACT INFORMATION

|                                                                                                                      |                                                                                                                      |                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Nicole Hayes, BLM</b><br>(Project Manager)<br>mnhayes@blm.gov<br>Office: 907-271-4354<br>Cell: (b) (6) or (b) (6) | <b>Chad Ricklefs, EMPSi</b><br>(Project Manager)<br>chad.ricklefs@empsi.com<br>Office: 303-495-5129<br>Cell: (b) (6) | <b>LOGISTICAL SUPPORT:</b><br><b>Amy Lewis, EMPSi</b><br>(Public Involvement Lead)<br>amy.lewis@empsi.com<br>Office: 503-308-4667<br>Cell: (b) (6) |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

## DETAILED ITINERARY

### Monday, June 11, 2018 – Venetie

| Time         | Activity                                                                                                                                                                    |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 07:00 am     | JOE, KAREN, GREG, and MIKE: Meet at Pike's Waterfront Lodge for transport to Fort Wainwright<br>(POC: Shelly Jones, 907-460-0086 or 907-474-2310) - DOI FLIGHT              |
| 07:00 am     | NICOLE, AMY, CHAD, AND MARY: Meet at Wright's Air Service (POC: Nicole Hayes, 907-351-6226 or Wright's 907-474-0502) – CHARTER FLIGHT                                       |
| 08:00 am     | Charter flight departs Fairbanks for Venetie                                                                                                                                |
| 08:00 am     | DOI aircraft departs Fairbanks for Venetie                                                                                                                                  |
| 08:52 am     | Charter flight arrives in Venetie                                                                                                                                           |
| 09:09 am     | DOI flight arrives in Venetie                                                                                                                                               |
| 09:10 am     | Transfer from airstrip to Venetie Community Hall<br>Pick-up by Myra Thumma (907-849-8165), Lance Whitwell                                                                   |
| 10:00 am     | <b>Government to Government meeting</b> with Native Village of Venetie Tribal Government, Venetie Village Council, and Arctic Village Council at the Venetie Community Hall |
| 1:30 pm      | Check in at School for lodging. BLM payment by check (\$100/night pp) for 10 people.<br>Tonya Garnett POC, (907-587-5128)                                                   |
| 1:30 pm      | On your own for the remainder of the day                                                                                                                                    |
| 4:00-5:00 pm | Set up Community Hall for public scoping meeting (if available)                                                                                                             |

### Tuesday, June 12, 2018 – Venetie, Kaktovik

| Time     | Activity                                                                                                                                                                                              |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00 am  | Meet at Community Hall to finish set up for meeting                                                                                                                                                   |
| 10:00 am | <b>Public Scoping Meeting</b> at the Venetie Community Hall (\$250 per day with check made payable to Venetie Village Council from the BLM<br>Translator: Mary Rose Gamboa (contact thru Myra Thumma) |
| 1:30 pm  | Meeting room clean up                                                                                                                                                                                 |
| 1:45 pm  | Depart for airstrip<br>Coordinate transport with Myra Thumma (907-849-8165), Lance Whitwell                                                                                                           |
| 2:00 pm  | Translator flight departs– Wright Air from Venetie to Fort Yukon                                                                                                                                      |
| 2:00 pm  | DOI aircraft depart Venetie for Kaktovik                                                                                                                                                              |

|         |                                                                                                                                                                                             |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2:00 pm | Charter flight departs Venetie for Kaktovik                                                                                                                                                 |
| 3:26 pm | Charter flight arrives in Kaktovik Transport: Sue (907-640-0111); \$20/pp cash roundtrip to/from airstrip. Coordinate with Sue on time for pick-up and transport to airstrip for Wednesday. |
| 3:30 pm | Meet at Harold Kaveolook School to set up for meeting                                                                                                                                       |
| 3:41 pm | DOI flight arrives in Kaktovik Transport: Sue (907-640-0111); \$20/pp cash roundtrip to/from airstrip. Coordinate with Sue on time for pick-up and transport to airstrip for Wednesday.     |
| 4:00 pm | <b>Public Scoping Meeting</b> at Harold Kaveolook School (BLM to be invoiced by NSB), Translator: Edward Rexford, Sr. (907-640-0058)                                                        |
| 9:00 pm | Meeting room clean up                                                                                                                                                                       |
| 9:30 pm | Transfer to lodging and overnight at Marsh Creek Inn                                                                                                                                        |

#### Wednesday, June 13, 2018 – Kaktovik

| Time     | Activity                                                                                                               |
|----------|------------------------------------------------------------------------------------------------------------------------|
| 11:00 am | <b>Government to Government meeting</b> with Native Village of Kaktovik and Kaktovik Iñupiat Corporation at KIC Office |
| 12:30 pm | Depart for airstrip<br>Coordinate transport with Sue (907-640-0111)                                                    |
| 1:00 pm  | DOI aircraft depart Kaktovik for Fairbanks                                                                             |
| 2:30 pm  | Arrive in Fairbanks                                                                                                    |

#### Friday, June 15, 2018 – Washington DC

| Time      | Activity                                                                                                                                            |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am  | EMPSi staff meet at National Housing Center to begin set up for public scoping meeting                                                              |
| 12:00 pm  | Venue security guards begin duty                                                                                                                    |
| 2:00 pm   | BLM to arrive at National Housing Center                                                                                                            |
| 2:30 pm   | BLM safety briefing                                                                                                                                 |
| 3:00 pm   | <b>Public Scoping Meeting</b> – open house period begins (open house will be held in Atrium; doors to Auditorium will be open at this time as well) |
| 4:00-4:20 | Press briefing/Q&A – held in Room D                                                                                                                 |
| 4:30 pm   | BLM presentation, followed by public comment period                                                                                                 |
| 9:00 pm   | Anticipated end of meeting and clean up                                                                                                             |
| 9:30 pm   | Venue security ends duty                                                                                                                            |

### Air Transportation

Venetie – DOI (Joe and Mike), BLM (Karen), FWS (Greg S.) on DOI aircraft  
Venetie- BLM (Nicole) and EMPSi team on Charter flight  
Kaktovik – DOI (Joe and Mike), BLM (Karen), FWS (Greg S.) on DOI aircraft  
Kaktovik- BLM (Nicole) and EMPSi team on Charter flight  
Washington DC – BLM and EMPSi to book own commercial travel

### **Contractor Staff Flights to Fairbanks**

Chad Ricklefs – June 10 (Sunday) Alaska Air #123, arriving FAI at 4:42pm  
Amy Lewis – June 10 (Sunday) Alaska Air #195, arriving FAI at 2:45pm

### Ground Transportation

Venetie – Manual Gamboa (907-849-9114)  
Kaktovik – Pick up will be by Sue (907-640-0111)  
Washington DC – by individual

### Lodging

Venetie: Venetie School Myra Thumma (907-849-8165)  
Kaktovik: Marsh Creek Inn (Theresa, 907-349-3342)  
Washington DC:  
EMPSi staff – Westin Washington DC City Center, 1400 M Street NW, 202-429-1700

### Meals & Gear

#### Venetie

- You will be staying in the Venetie School in their classrooms. **Bring a sleeping bag and thermarest/sleeping pad.**
- There is a kitchen and showers available in the school. PLEASE CLEAN UP AFTER SELF
- There are no restaurants in town. Plan for food for **1 breakfast, 2 lunches, and 1 dinner.**

Kaktovik – Meals provided at Marsh Creek Inn

Washington DC – Meals are on your own

#### **Pack (for Venetie and Kaktovik)**

Personal food and snacks (see above), water bottles, cold weather gear, medicine, cash for paying for transport and other incidentals



**From:** [Berendzen, Steve](#)  
**To:** [Joanna Fox](#); [Hollis Twitchell](#)  
**Cc:** [Doug Damberg](#)  
**Subject:** Fwd: Updated Week 3 Itinerary - Venetie/Kaktovik/Washington, D.C.  
**Date:** Friday, June 8, 2018 12:41:59 PM  
**Attachments:** [Week 3 June11-June15 VEN\\_KAK\\_DC\\_v3.docx](#)

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Joanna, I don't think you were included as a recipient of this.

And, just a reminder to both of you that it would be great if you can work out a brief visit with Edward and Greg so that Greg can compliment Edward for all the work he's involved with and lead into the PB viewing management team role that he assigned himself to, with additional bragging that with his busy schedule he might delegate that to a council member such as Ida.

Hope you both have safe, successful meetings next week :)

Steve Berendzen  
Refuge Manager, Arctic National Wildlife Refuge  
907-456-0253

----- Forwarded message -----

**From:** **Hayes, Miriam (Nicole)** <[mnhayes@blm.gov](mailto:mnhayes@blm.gov)>  
**Date:** Fri, Jun 8, 2018 at 9:42 AM  
**Subject:** Updated Week 3 Itinerary - Venetie/Kaktovik/Washington, D.C.  
**To:** Joseph Balash <[joseph\\_balash@ios.doi.gov](mailto:joseph_balash@ios.doi.gov)>, Greg Siekaniec <[greg\\_siekaniec@fws.gov](mailto:greg_siekaniec@fws.gov)>, Karen Mouritsen <[kmourits@blm.gov](mailto:kmourits@blm.gov)>, Michael Gieryic <[mike.gieryic@sol.doi.gov](mailto:mike.gieryic@sol.doi.gov)>  
**Cc:** Lesli Ellis-Wouters <[lellis@blm.gov](mailto:lellis@blm.gov)>, "Murphy, Ted" <[t75murph@blm.gov](mailto:t75murph@blm.gov)>, "Nichelle (Shelly) Jones" <[njones@blm.gov](mailto:njones@blm.gov)>, "Seidlitz, Joseph (Gene)" <[gseidlitz@blm.gov](mailto:gseidlitz@blm.gov)>, Jill Moran <[jcmoran@blm.gov](mailto:jcmoran@blm.gov)>, Tracie Lassiter <[tracie\\_lassiter@ios.doi.gov](mailto:tracie_lassiter@ios.doi.gov)>, Hilary Zarin <[hizarin@blm.gov](mailto:hizarin@blm.gov)>, Jeff Brune <[jbrune@blm.gov](mailto:jbrune@blm.gov)>, Michael Nedd <[mnedd@blm.gov](mailto:mnedd@blm.gov)>, "Twitchell, Hollis" <[hollis\\_twitchell@fws.gov](mailto:hollis_twitchell@fws.gov)>, Steve Berendzen <[steve\\_berendzen@fws.gov](mailto:steve_berendzen@fws.gov)>, Karen Clark <[karen\\_clark@fws.gov](mailto:karen_clark@fws.gov)>, Jeff Krauss <[jkrauss@blm.gov](mailto:jkrauss@blm.gov)>, Beverly Winston <[bwinston@blm.gov](mailto:bwinston@blm.gov)>, Steven Wells <[s1wells@blm.gov](mailto:s1wells@blm.gov)>, "Frost, Eileen" <[efrost@blm.gov](mailto:efrost@blm.gov)>, Leslie Rosenberger <[rosenberger@blm.gov](mailto:rosenberger@blm.gov)>, Stephen Wackowski <[stephen\\_wackowski@ios.doi.gov](mailto:stephen_wackowski@ios.doi.gov)>, Lesia Monson <[lesia\\_monson@ios.doi.gov](mailto:lesia_monson@ios.doi.gov)>, Chad Ricklefs <[chad.ricklefs@empsi.com](mailto:chad.ricklefs@empsi.com)>, amy lewis <[amy.lewis@empsi.com](mailto:amy.lewis@empsi.com)>

Attached is the updated itinerary. Please let me know if you have any questions.  
Nicole

**Nicole Hayes**  
Project Coordinator  
Bureau of Land Management  
222 W. 7th Avenue #13  
Anchorage, Alaska 99513  
Desk: (907) 271-4354

## Coastal Plain Oil and Gas Leasing Program EIS – Scoping Meetings

**WEEK 3 – June 11 through June 15, 2018**

**Venetie, Kaktovik, Washington DC**

### Monday, June 11, 2018 – Venetie

| Time     | Activity                                                                                                                                                                                     |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am | <b>Government to Government Meeting with <u>Native Village of Venetie, Venetie Village Council, Arctic Village Council</u> at the Community Hall</b><br>Contact: Tonya Garnett, 907-587-5128 |

### Tuesday, June 12, 2018 – Venetie and Kaktovik

| Time               | Activity                                                                                                                                                           |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am – 2:00 pm | <b>Public Scoping Meeting in <u>Venetie</u> at the Community Hall</b><br>Contact: Tonya Garnett, 907-587-5128                                                      |
| 4:00 pm            | <b>Public Scoping Meeting in <u>Kaktovik</u> at Harold Kaveolook School (North Slope Borough, Leroy Stigen, Maintenance, 907-640-0015, leroy.stigen@nsbsd.org)</b> |

### Wednesday, June 13, 2018 – Kaktovik

| Time              | Activity                                                                                                                                                                                                                      |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11:00 am – 1:00pm | <b>Government to Government Meeting with <u>Native Village of Kaktovik</u> and the <u>Kaktovik Iñupiat Corporation</u> at the KIC Office</b><br>Matthew Rexford (Tribal Administrator NVK and President of KIC), 907-640-0082 |

### Friday, June 15, 2018 – Washington DC

| Time        | Activity                                                                                                                                                                                                                                                          |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3:00-9:00pm | <b>Public Scoping Meeting in <u>Washington DC</u> at the National Housing Center (Auditorium)</b><br>1201 15 <sup>th</sup> Street NW, Washington DC 20005<br>Contact: Katrina Mbaye 202-266-8429 (d), (b) (6) (c)<br>BLM Security: Eric Singletary (760) 384-5409 |

### ATTENDEES

| Venetie                                    | Kaktovik                                   | Washington DC            |
|--------------------------------------------|--------------------------------------------|--------------------------|
| Nicole Hayes (BLM)                         | Nicole Hayes (BLM)                         | Nicole Hayes (BLM)       |
| Karen Mouritsen (BLM)                      | Karen Mouritsen (BLM)                      | Karen Mouritsen (BLM)    |
| Joe Balash (DOI)                           | Joe Balash (DOI)                           | Joe Balash (DOI)         |
| Mike Gieryic (DOI)                         | Mike Gieryic (DOI)                         | Jim Hart (BLM)           |
| Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)                      | Chad Ricklefs (EMPSi)    |
| Amy Lewis (EMPSi)                          | Amy Lewis (EMPSi)                          | Amy Lewis (EMPSi)        |
| Mary Vavrik (Midnight Sun Court Reporting) | Mary Vavrik (Midnight Sun Court Reporting) | David Batts (EMPSi)      |
| Greg Siekaniec (FWS)                       | Greg Siekaniec (FWS)                       | John King (EMPSi)        |
| Hollis Twitchell (FWS)                     | Hollis Twitchell (FWS)                     | Molly McCarter (EMPSi)   |
|                                            |                                            | Lindsay Chipman (EMPSi)  |
|                                            |                                            | Andy Spellmeyer (EMPSi)  |
|                                            |                                            | Alderson Court Reporting |

## PRIMARY CONTACT INFORMATION

|                                                                                                                      |                                                                                                                      |                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Nicole Hayes, BLM</b><br>(Project Manager)<br>mnhayes@blm.gov<br>Office: 907-271-4354<br>Cell: (b) (6) or (b) (6) | <b>Chad Ricklefs, EMPSi</b><br>(Project Manager)<br>chad.ricklefs@empai.com<br>Office: 303-495-5129<br>Cell: (b) (6) | <b>LOGISTICAL SUPPORT:</b><br><b>Amy Lewis, EMPSi</b><br>(Public Involvement Lead)<br>amy.lewis@empai.com<br>Office: 503-308-4667<br>Cell: (b) (6) |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

## DETAILED ITINERARY

### Monday, June 11, 2018 – Venetie

| Time         | Activity                                                                                                                                                                    |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 07:00 am     | JOE, KAREN, GREG, and MIKE: Meet at Pike's Waterfront Lodge for transport to Fort Wainwright<br>(POC: Shelly Jones, 907-460-0086 or 907-474-2310) - DOI FLIGHT              |
| 07:00 am     | NICOLE, AMY, CHAD, AND MARY: Meet at Wright's Air Service (POC: Nicole Hayes, 907-351-6226 or Wright's 907-474-0502) – CHARTER FLIGHT                                       |
| 08:00 am     | Charter flight departs Fairbanks for Venetie                                                                                                                                |
| 08:00 am     | DOI aircraft departs Fairbanks for Venetie                                                                                                                                  |
| 08:52 am     | Charter flight arrives in Venetie                                                                                                                                           |
| 09:09 am     | DOI flight arrives in Venetie                                                                                                                                               |
| 09:10 am     | Transfer from airstrip to Venetie Community Hall<br>Pick-up by Myra Thumma (907-849-8165), Lance Whitwell                                                                   |
| 10:00 am     | <b>Government to Government meeting</b> with Native Village of Venetie Tribal Government, Venetie Village Council, and Arctic Village Council at the Venetie Community Hall |
| 1:30 pm      | Check in at School for lodging. BLM payment by check (\$100/night pp) for 10 people.<br>Tonya Garnett POC, (907-587-5128)                                                   |
| 1:30 pm      | On your own for the remainder of the day                                                                                                                                    |
| 4:00-5:00 pm | Set up Community Hall for public scoping meeting (if available)                                                                                                             |

### Tuesday, June 12, 2018 – Venetie, Kaktovik

| Time     | Activity                                                                                                                                                                                              |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00 am  | Meet at Community Hall to finish set up for meeting                                                                                                                                                   |
| 10:00 am | <b>Public Scoping Meeting</b> at the Venetie Community Hall (\$250 per day with check made payable to Venetie Village Council from the BLM<br>Translator: Mary Rose Gamboa (contact thru Myra Thumma) |
| 1:30 pm  | Meeting room clean up                                                                                                                                                                                 |
| 1:45 pm  | Depart for airstrip<br>Coordinate transport with Myra Thumma (907-849-8165), Lance Whitwell                                                                                                           |
| 2:00 pm  | Translator flight departs– Wright Air from Venetie to Fort Yukon                                                                                                                                      |
| 2:00 pm  | DOI aircraft depart Venetie for Kaktovik                                                                                                                                                              |

|         |                                                                                                                                                                                             |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2:00 pm | Charter flight departs Venetie for Kaktovik                                                                                                                                                 |
| 3:26 pm | Charter flight arrives in Kaktovik Transport: Sue (907-640-0111); \$20/pp cash roundtrip to/from airstrip. Coordinate with Sue on time for pick-up and transport to airstrip for Wednesday. |
| 3:30 pm | Meet at Harold Kaveolook School to set up for meeting                                                                                                                                       |
| 3:41 pm | DOI flight arrives in Kaktovik Transport: Sue (907-640-0111); \$20/pp cash roundtrip to/from airstrip. Coordinate with Sue on time for pick-up and transport to airstrip for Wednesday.     |
| 4:00 pm | <b>Public Scoping Meeting</b> at Harold Kaveolook School (BLM to be invoiced by NSB), Translator: Edward Rexford, Sr. (907-640-0058)                                                        |
| 9:00 pm | Meeting room clean up                                                                                                                                                                       |
| 9:30 pm | Transfer to lodging and overnight at Marsh Creek Inn                                                                                                                                        |

#### Wednesday, June 13, 2018 – Kaktovik

| Time     | Activity                                                                                                               |
|----------|------------------------------------------------------------------------------------------------------------------------|
| 11:00 am | <b>Government to Government meeting</b> with Native Village of Kaktovik and Kaktovik Iñupiat Corporation at KIC Office |
| 12:30 pm | Depart for airstrip<br>Coordinate transport with Sue (907-640-0111)                                                    |
| 1:00 pm  | DOI aircraft depart Kaktovik for Fairbanks                                                                             |
| 2:30 pm  | Arrive in Fairbanks                                                                                                    |

#### Friday, June 15, 2018 – Washington DC

| Time      | Activity                                                                                                                                            |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 am  | EMPSi staff meet at National Housing Center to begin set up for public scoping meeting                                                              |
| 12:00 pm  | Venue security guards begin duty                                                                                                                    |
| 2:00 pm   | BLM to arrive at National Housing Center                                                                                                            |
| 2:30 pm   | BLM safety briefing                                                                                                                                 |
| 3:00 pm   | <b>Public Scoping Meeting</b> – open house period begins (open house will be held in Atrium; doors to Auditorium will be open at this time as well) |
| 4:00-4:20 | Press briefing/Q&A – held in Room D                                                                                                                 |
| 4:30 pm   | BLM presentation, followed by public comment period                                                                                                 |
| 9:00 pm   | Anticipated end of meeting and clean up                                                                                                             |
| 9:30 pm   | Venue security ends duty                                                                                                                            |

### Air Transportation

Venetie – DOI (Joe and Mike), BLM (Karen), FWS (Greg S.) on DOI aircraft  
Venetie- BLM (Nicole) and EMPSi team on Charter flight  
Kaktovik – DOI (Joe and Mike), BLM (Karen), FWS (Greg S.) on DOI aircraft  
Kaktovik- BLM (Nicole) and EMPSi team on Charter flight  
Washington DC – BLM and EMPSi to book own commercial travel

### **Contractor Staff Flights to Fairbanks**

Chad Ricklefs – June 10 (Sunday) Alaska Air #123, arriving FAI at 4:42pm  
Amy Lewis – June 10 (Sunday) Alaska Air #195, arriving FAI at 2:45pm

### Ground Transportation

Venetie – Manual Gamboa (907-849-9114)  
Kaktovik – Pick up will be by Sue (907-640-0111)  
Washington DC – by individual

### Lodging

Venetie: Venetie School Myra Thumma (907-849-8165)  
Kaktovik: Marsh Creek Inn (Theresa, 907-349-3342)  
Washington DC:  
EMPSi staff – Westin Washington DC City Center, 1400 M Street NW, 202-429-1700

### Meals & Gear

#### Venetie

- You will be staying in the Venetie School in their classrooms. **Bring a sleeping bag and thermarest/sleeping pad.**
- There is a kitchen and showers available in the school. PLEASE CLEAN UP AFTER SELF
- There are no restaurants in town. Plan for food for **1 breakfast, 2 lunches, and 1 dinner.**

Kaktovik – Meals provided at Marsh Creek Inn

Washington DC – Meals are on your own

### **Pack (for Venetie and Kaktovik)**

Personal food and snacks (see above), water bottles, cold weather gear, medicine, cash for paying for transport and other incidentals

**From:** [Chad Ricklefs](#)  
**To:** [patrick\\_odell@fws.gov](#); [joshua\\_rose@fws.gov](#); [paul\\_leonard@fws.gov](#); [edward\\_decleva@fws.gov](#); [peter\\_butteri@fws.gov](#); [tim\\_allen@fws.gov](#); [catherine\\_collins@fws.gov](#); [randy\\_j\\_brown@fws.gov](#); [christopher\\_latty@fws.gov](#); [eric\\_taylor@fws.gov](#); [ryan\\_r\\_wilson@fws.gov](#); [stephen\\_arthur@fws.gov](#); [hollis\\_twitchell@fws.gov](#); [carl\\_johnson@fws.gov](#); [joshua\\_ream@fws.gov](#); [susan\\_lakomski@fws.gov](#); [jennifer\\_reed@fws.gov](#); [angela\\_matz@fws.gov](#); [roger\\_kaye@fws.gov](#); [john\\_brewer@fws.gov](#); [john\\_w\\_martin@fws.gov](#)  
**Cc:** [Hayes, Miriam \(Nicole\)](#); [Amy Lewis](#)  
**Subject:** [EXTERNAL] Coastal Plain Oil and Gas Leasing Program EIS: Affected Environment Kick-off  
**Date:** Monday, June 18, 2018 7:48:33 PM  
**Attachments:** [CoastalEIS\\_AE\\_kickoff-Agnda\\_20180620.pdf](#)  
[140L6318F0003\\_CoastalPlain\\_CH3Template\\_USFWS.pdf](#)  
[Coastal-EIS\\_Ch3-StartupPackage\\_20180620\\_for\\_USFWS\\_ID\\_Team.pdf](#)  
[Coastal Plain EIS\\_DataNeedsReport\\_20180615\\_USFWS.pdf](#)

---

Please find the following items attached for the Chapter 3 kick-off call.

- Agenda
- Start-up Package
- Chapter 3 template
- Data Need

**Chad Ricklefs, AICP**

EMPSi Environmental Management and Planning Solutions, Inc.  
3005 Center Green Drive, Suite 205  
Boulder, CO 80301  
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[www.EMPSi.com](#) Twitter: EMPSInc Facebook: EMPSi

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# ***Coastal Plain Oil and Gas Leasing Program EIS***

## **Affected Environment Kick-off Agenda**

June 20, 2018  
10:00 – 11:00 a.m. AKST

Dial-in Phone: (b) (5) CIP  
Passcode: (b) (5) CIP

- Welcome/Introductions
- Project Background
- Interdisciplinary Team Communication
  - BLM ID team
  - USFWS ID team
  - GIS
- Affected Environment (AE) Scope of Work
- Background Information
- Preparing AE Section
  - Template
  - Data Needs Report and Internal Scoping Report
- Decision File
- Schedule
  - Affected Environment
  - Draft EIS
- Questions





# TABLE OF CONTENTS

Chapter Page

## CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES .....3

|        |                                  |   |
|--------|----------------------------------|---|
| 3.1    | Introduction .....               | 3 |
| 3.2    | Physical Environment.....        | 3 |
| 3.2.1  | Climate and Meteorology .....    | 3 |
| 3.2.2  | Air Quality.....                 | 3 |
| 3.2.3  | Physiography .....               | 3 |
| 3.2.4  | Geology and Minerals .....       | 3 |
| 3.2.5  | Petroleum Resources .....        | 3 |
| 3.2.6  | Paleontological Resources .....  | 4 |
| 3.2.7  | Soil Resources .....             | 4 |
| 3.2.8  | Sand and Gravel Resources.....   | 4 |
| 3.2.9  | Water Resources.....             | 4 |
| 3.2.10 | Solid and Hazardous Waste .....  | 4 |
| 3.3    | Biological Resources .....       | 4 |
| 3.3.1  | Vegetation.....                  | 4 |
| 3.3.2  | Wetlands and Floodplains.....    | 5 |
| 3.3.3  | Wildland Fire .....              | 5 |
| 3.3.4  | Fish and Aquatic Species .....   | 5 |
| 3.3.5  | Birds.....                       | 5 |
| 3.3.6  | Terrestrial Mammals.....         | 5 |
| 3.3.7  | Marine Mammals.....              | 5 |
| 3.3.8  | Special Status Species.....      | 6 |
| 3.4    | Social Systems.....              | 6 |
| 3.4.1  | Land Ownership and Uses.....     | 6 |
| 3.4.2  | Cultural Resources.....          | 6 |
| 3.4.3  | Subsistence .....                | 6 |
| 3.4.4  | Sociocultural Systems .....      | 6 |
| 3.4.5  | Environmental Justice.....       | 6 |
| 3.4.6  | Recreation .....                 | 7 |
| 3.4.7  | Wild and Scenic Rivers.....      | 7 |
| 3.4.8  | Wilderness Characteristics ..... | 7 |
| 3.4.1  | Wilderness .....                 | 7 |
| 3.4.2  | Visual Resources.....            | 7 |
| 3.4.3  | Transportation .....             | 7 |
| 3.4.4  | Economy .....                    | 8 |
| 3.4.5  | Public Health.....               | 8 |

## TABLES

Page

No table of figures entries found.



I

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2

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# **Chapter 3. Affected Environment and Environmental Consequences**

## **3.1 INTRODUCTION**

## **3.2 PHYSICAL ENVIRONMENT**

### **3.2.1 Climate and Meteorology**

*Affected Environment*

*Environmental Consequences*

### **3.2.2 Air Quality**

*Affected Environment*

*Environmental Consequences*

### **3.2.3 Physiography**

*Affected Environment*

*Environmental Consequences*

### **3.2.4 Geology and Minerals**

*Affected Environment*

*Environmental Consequences*

### **3.2.5 Petroleum Resources**

*Affected Environment*

*Environmental Consequences*

**3.2.6 Paleontological Resources**

***Affected Environment***

***Environmental Consequences***

**3.2.7 Soil Resources**

***Affected Environment***

***Environmental Consequences***

**3.2.8 Sand and Gravel Resources**

***Affected Environment***

***Environmental Consequences***

**3.2.9 Water Resources**

***Affected Environment***

***Environmental Consequences***

**3.2.10 Solid and Hazardous Waste**

***Affected Environment***

***Environmental Consequences***

**3.3 BIOLOGICAL RESOURCES**

**3.3.1 Vegetation**

***Affected Environment***

***Environmental Consequences***

**3.3.2 Wetlands and Floodplains**

***Affected Environment***

***Environmental Consequences***

**3.3.3 Wildland Fire**

***Affected Environment***

***Environmental Consequences***

**3.3.4 Fish and Aquatic Species**

***Affected Environment***

***Environmental Consequences***

**3.3.5 Birds**

***Affected Environment***

***Environmental Consequences***

**3.3.6 Terrestrial Mammals**

***Affected Environment***

***Environmental Consequences***

**3.3.7 Marine Mammals**

***Affected Environment***

***Environmental Consequences***

**3.3.8 Special Status Species**

*Affected Environment*

*Environmental Consequences*

**3.4 SOCIAL SYSTEMS**

**3.4.1 Land Ownership and Uses**

*Affected Environment*

*Environmental Consequences*

**3.4.2 Cultural Resources**

*Affected Environment*

*Environmental Consequences*

**3.4.3 Subsistence**

*Affected Environment*

*Environmental Consequences*

**3.4.4 Sociocultural Systems**

*Affected Environment*

*Environmental Consequences*

**3.4.5 Environmental Justice**

*Affected Environment*

*Environmental Consequences*

**3.4.6 Recreation**

***Affected Environment***

***Environmental Consequences***

**3.4.7 Wild and Scenic Rivers**

***Affected Environment***

***Environmental Consequences***

**3.4.8 Wilderness Characteristics**

***Affected Environment***

***Environmental Consequences***

**3.4.1 Wilderness**

***Affected Environment***

***Environmental Consequences***

**3.4.2 Visual Resources**

***Affected Environment***

***Environmental Consequences***

**3.4.3 Transportation**

***Affected Environment***

***Environmental Consequences***



**3.4.4 Economy**

***Affected Environment***

***Environmental Consequences***

**3.4.5 Public Health**

***Affected Environment***

***Environmental Consequences***

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# Startup Package for the Coastal Plain EIS Affected Environment

## Project Background

The Bureau of Land Management (BLM) Alaska State Office, Anchorage, Alaska, is preparing an Environmental Impact Statement (EIS) to implement an oil and gas leasing program within the Arctic National Wildlife Refuge Coastal Plain. The area comprising the Coastal Plain includes approximately 1.6 million acres within the approximately 19.3 million-acre Arctic National Wildlife Refuge.

The BLM is undertaking the Coastal Plain Oil and Gas Leasing Program EIS to implement the leasing program pursuant to the Tax Act (Public Law 115-97, Dec. 22, 2017). The Leasing EIS will serve to inform BLM's implementation of the Tax Act, including the requirement to hold not fewer than two lease sales area-wide. It may also inform post-lease activities, including seismic and drilling exploration, development, and transportation of oil and gas in and from the Coastal Plain. Specifically, the Leasing EIS will consider and analyze the potential environmental impacts of various leasing alternatives, including the areas to offer for sale, and the terms and conditions (i.e., lease stipulations and best management practices) to be applied to leases and associated oil and gas activities to properly balance oil and gas development with existing uses and conservation of surface resources, and to limit the footprint of production and support facilities on Federal lands to no more than 2,000 surface acres.

## Interdisciplinary Team Communication

The EMPSi Resource Leads/Specialists will correspond directly with their BLM ID team counterparts. If needed, EMPSi specialists can contact USFWS counterparts directly to obtain information (after coordinating with the BLM, and then cc-ing the BLM with the USFWS communication). A contact list will be provided at the kick-off call. The BLM is expecting EMPSi staff to call them before beginning to prepare your affected environment sections. You **MUST** call your BLM counterparts to discuss your approach to the affected environment and to ask them if they have any particular things that they would like to see in your sections. Please complete a contact record (Attachment 1) of your conversation with BLM.

## Affected Environment Scope of Work

The EMPSi ID team will prepare the affected environment and environmental consequences for the EIS (combined in Chapter 3). The first task is to prepare the preliminary draft affected environment sections. To accommodate page limit restrictions, we will be incorporating by reference as much existing information as possible into the Chapter 3 section, and then including any necessary supporting information as an appendix. Specific steps for preparing the affected environment include:

1. Review Chapter 3 start-up package
2. Review Data Needs Report
3. Attend affected environment kick-off teleconference with BLM ID team
4. EMPSi ID team contacts BLM ID team counterparts to initiate approach
5. Provide GIS and map requests to Marcia Rickey (EMPSi) by **June 25**
6. EMPSi ID team prepares draft affected environment sections using the provided template
7. Draft affected environment sections, including all complete citations for references used, due to EMPSi on **July 11**
8. All supporting appendices due to EMPSi on **July 18**



## Background Information

Additional guidelines and references are as follows.

News Releases, Federal Register Notices, and Historical Documents are located on the Project website:

<https://www.blm.gov/programs/planning-and-nepa/plans-in-development/alaska/coastal-plain-eis>

## Affected Environment (AE) Section:

The AE describes all the resources that will be analyzed in detail in the EIS. The AE section will contain an overview of current resource (e.g., vegetation) or resource use (e.g., recreation) conditions.

Each section must adhere to the following:

1. Use the MS Word template for each section. If there is information that you feel is essential for your resource that does not seem to fit the template, please contact Amy Lewis.
2. Discuss the Data Needs Report with your BLM counterpart and how you will approach the affected environment with the data available.
  - a. For resources, describe regulatory considerations, current conditions, and trends.
  - b. For resource uses, describe the regulatory considerations, current uses and conditions, and trends.
3. At the bottom of your section, include a comprehensive list of references, including authors, publication information, website addresses, and dates.
4. Following your references, include a list of acronyms used. Define acronyms the first time they are used.

Clearly define section Heading Levels (i.e., Heading 1.1, Heading 1.1.1, etc.) in order to facilitate final formatting.

## Preparing Affected Environment

The following steps are recommended for preparing resource sections:

1. Review Chapter 3 start-up package
2. Review Data Needs Report and Internal Scoping Meeting notes: Z:\Shared\Projects\F-0270 BLM Coastal Plain EIS\2.Deliv\5\_AdminDrftEIS\5.3\_Ch3\Ch3\_v1\1.0\_EMPSi-Startup\For review
3. Attend affected environment kick-off teleconference with BLM ID team
4. Attend follow-up EMPSi ID team kick-off teleconference
5. Contact your BLM counterpart [*mandatory step*] to discuss your approach; ask them what they want to see in the section [including maps and GIS calculations]; and other resource materials you should use to prepare the section.
6. Provide GIS and map requests to Marcia Rickey (EMPSi) by **June 25**
7. EMPSi ID team prepares draft affected environment sections using the provided template
8. Draft affected environment sections, including all complete citations for references used, due to EMPSi on **July 11**
9. All supporting appendices due to EMPSi on **July 18**

**Decision File Guidance**

EMPSi is responsible for maintaining the Decision File for work associated with the EIS, including the affected environment and environmental consequences. The information will include relevant communication with other ID Team members and/or agency representatives, and material referenced in the EIS. This includes e-mails, phone logs, letters, meeting notes, and documents or portions of documents.

Sarah sent an email to the team on June 7, 2018. Please review the direction she provided, which notes what to save, when to save, and where to save your decision file records. Help Sarah by staying on top of your emails, call notes, and references to make the final records deliverable efficient.

References **MUST** be saved with the same name as noted in your citation. E.g., if your document reference "Smith et al 2013", then your PDF will be titled "Smith\_etal\_2013". If you use a lettering marker ("Smith and Jones 2013a"), then use the same lettering marker in your PDF title.

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**U.S. Department of the Interior  
Bureau of Land Management**

**Alaska State Office**

**Coastal Plain Oil and Gas Leasing Program  
Environmental Impact Statement**

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**DATA NEEDS REPORT**

USFWS

**JUNE 2018**

# TABLE OF CONTENTS

Section Page

|           |                                        |            |
|-----------|----------------------------------------|------------|
| <b>I.</b> | <b>DATA NEEDS REPORT .....</b>         | <b>I-1</b> |
| I.1       | Climate and Meteorology .....          | I-1        |
| I.1.1     | Literature and Databases Reviewed..... | I-1        |
| I.1.2     | Proposed Data Sources for EIS.....     | I-1        |
| I.1.3     | Data Needs .....                       | I-1        |
| I.2       | Air Quality.....                       | I-2        |
| I.2.1     | Literature and Databases Reviewed..... | I-2        |
| I.2.2     | Proposed Data Sources for EIS.....     | I-2        |
| I.2.3     | Data Needs .....                       | I-2        |
| I.3       | Physiography .....                     | I-3        |
| I.3.1     | Literature and Databases Reviewed..... | I-3        |
| I.3.2     | Proposed Data Sources for EIS.....     | I-3        |
| I.3.3     | Data Needs .....                       | I-5        |
| I.4       | Geology and Minerals .....             | I-5        |
| I.4.1     | Literature and Databases Reviewed..... | I-5        |
| I.4.2     | Proposed Data Sources for EIS.....     | I-5        |
| I.4.3     | Data Needs/Gaps.....                   | I-7        |
| I.5       | Petroleum Resources .....              | I-7        |
| I.5.1     | Literature and Databases Reviewed..... | I-7        |
| I.5.2     | Proposed Data Sources for EIS.....     | I-8        |
| I.5.3     | Data Needs .....                       | I-8        |
| I.6       | Paleontological Resources.....         | I-9        |
| I.6.1     | Literature and Databases Reviewed..... | I-9        |
| I.6.2     | Proposed Data Sources for EIS.....     | I-9        |
| I.6.3     | Data Needs .....                       | I-10       |
| I.7       | Soil Resources .....                   | I-10       |
| I.7.1     | Literature and Databases Reviewed..... | I-10       |
| I.7.2     | Proposed Data Sources for EIS.....     | I-10       |
| I.7.3     | Data Needs .....                       | I-11       |
| I.8       | Sand and Gravel Resources.....         | I-11       |
| I.8.1     | Literature and Databases Reviewed..... | I-11       |
| I.8.2     | Proposed Data Sources for EIS.....     | I-11       |
| I.8.3     | Data Needs .....                       | I-11       |
| I.9       | Water Resources.....                   | I-12       |
| I.9.1     | Literature and Databases Reviewed..... | I-12       |
| I.9.2     | Proposed Data Sources for EIS.....     | I-12       |
| I.9.3     | Data Needs .....                       | I-13       |
| I.10      | Solid and Hazardous Waste.....         | I-13       |
| I.10.1    | Literature and Databases Reviewed..... | I-13       |
| I.10.2    | Proposed Data Sources for EIS.....     | I-13       |
| I.10.3    | Data Needs .....                       | I-14       |
| I.11      | Vegetation.....                        | I-14       |
| I.11.1    | Literature and Databases Reviewed..... | I-14       |
| I.11.2    | Proposed Data Sources for EIS.....     | I-14       |
| I.11.3    | Data Needs .....                       | I-15       |

|    |      |                                               |      |
|----|------|-----------------------------------------------|------|
| 1  | I.12 | Wetlands.....                                 | I-16 |
| 2  |      | I.12.1 Literature and Databases Reviewed..... | I-16 |
| 3  |      | I.12.2 Proposed Data Sources for EIS.....     | I-16 |
| 4  |      | I.12.3 Data Needs .....                       | I-16 |
| 5  | I.13 | Wildland Fire .....                           | I-16 |
| 6  |      | I.13.1 Literature and Databases Reviewed..... | I-16 |
| 7  |      | I.13.2 Proposed Data Sources for EIS.....     | I-16 |
| 8  |      | I.13.3 Data Needs .....                       | I-17 |
| 9  | I.14 | Fish and Aquatic Species .....                | I-17 |
| 10 |      | I.14.1 Literature and Databases Reviewed..... | I-17 |
| 11 |      | I.14.2 Proposed Data Sources for EIS.....     | I-18 |
| 12 |      | I.14.3 Data Needs .....                       | I-20 |
| 13 | I.15 | Birds.....                                    | I-20 |
| 14 |      | I.15.1 Literature and Databases Reviewed..... | I-20 |
| 15 |      | I.15.2 Proposed Data Sources for EIS.....     | I-20 |
| 16 |      | I.15.3 Data Needs .....                       | I-21 |
| 17 | I.16 | Terrestrial Mammals.....                      | I-21 |
| 18 |      | I.16.1 Literature and Databases Reviewed..... | I-21 |
| 19 |      | I.16.2 Proposed Data Sources for EIS.....     | I-21 |
| 20 |      | I.16.3 Data Needs .....                       | I-22 |
| 21 | I.17 | Marine Mammals.....                           | I-22 |
| 22 |      | I.17.1 Literature and Databases Reviewed..... | I-22 |
| 23 |      | I.17.2 Proposed Data Sources for EIS.....     | I-22 |
| 24 |      | I.17.3 Data Needs .....                       | I-23 |
| 25 | I.18 | Special Status Species.....                   | I-25 |
| 26 |      | I.18.1 Literature and Databases Reviewed..... | I-25 |
| 27 |      | I.18.2 Proposed Data Sources for EIS.....     | I-25 |
| 28 |      | I.18.3 Data Needs .....                       | I-26 |
| 29 | I.19 | Special Designations.....                     | I-26 |
| 30 |      | I.19.1 Literature and Databases Reviewed..... | I-26 |
| 31 |      | I.19.2 Proposed Data Sources for EIS.....     | I-26 |
| 32 |      | I.19.3 Data Needs .....                       | I-27 |
| 33 | I.20 | Cultural Resources.....                       | I-27 |
| 34 |      | I.20.1 Literature and Databases Reviewed..... | I-27 |
| 35 |      | I.20.2 Proposed Data Sources for EIS.....     | I-28 |
| 36 |      | I.20.3 Data Needs .....                       | I-28 |
| 37 | I.21 | Subsistence.....                              | I-29 |
| 38 |      | I.21.1 Literature and Databases Reviewed..... | I-29 |
| 39 |      | I.21.2 Proposed Data Sources for EIS.....     | I-29 |
| 40 |      | I.21.3 Data Needs .....                       | I-30 |
| 41 | I.22 | Sociocultural Systems .....                   | I-31 |
| 42 |      | I.22.1 Literature and Databases Reviewed..... | I-31 |
| 43 |      | I.22.2 Proposed Data Sources for EIS.....     | I-31 |
| 44 |      | I.22.3 Data Needs .....                       | I-31 |
| 45 | I.23 | Environmental Justice.....                    | I-32 |
| 46 |      | I.23.1 Literature and Databases Reviewed..... | I-32 |
| 47 |      | I.23.2 Proposed Data Sources for EIS.....     | I-32 |
| 48 |      | I.23.3 Data Needs .....                       | I-32 |

|    |      |                                               |      |
|----|------|-----------------------------------------------|------|
| I  | I.24 | Recreation .....                              | I-33 |
| 2  |      | I.24.1 Literature and Databases Reviewed..... | I-33 |
| 3  |      | I.24.2 Proposed Data Sources for EIS.....     | I-33 |
| 4  |      | I.24.3 Data Needs .....                       | I-34 |
| 5  | I.25 | Visual Resources.....                         | I-34 |
| 6  |      | I.25.1 Literature and Databases Reviewed..... | I-34 |
| 7  |      | I.25.2 Proposed Data Sources for EIS.....     | I-35 |
| 8  |      | I.25.3 Data Needs .....                       | I-35 |
| 9  | I.26 | Transportation .....                          | I-35 |
| 10 |      | I.26.1 Literature and Databases Reviewed..... | I-35 |
| 11 |      | I.26.2 Proposed Data Sources for EIS.....     | I-36 |
| 12 |      | I.26.3 Data Needs .....                       | I-37 |
| 13 | I.27 | Economy .....                                 | I-37 |
| 14 |      | I.27.1 Literature and Databases Reviewed..... | I-37 |
| 15 |      | I.27.2 Proposed Data Sources for EIS.....     | I-37 |
| 16 |      | I.27.3 Data Needs .....                       | I-38 |
| 17 |      |                                               |      |
| 18 |      |                                               |      |

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USFWS

**I. DATA NEEDS REPORT**

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# DATA NEEDS REPORT

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## I.1 CLIMATE AND METEOROLOGY

### I.1.1 Literature and Databases Reviewed

- Climate model projections in NPR-A Climate Change Analysis: An Assessment of Climate Change Variables in the National Petroleum Reserve in Alaska (Appendix C).
- The Alaska Climate Research Center (annual temperature trends (1949-2014) for 19 individual stations statewide. Web site: <http://climate.gi.alaska.edu/ClimTrends/Location>
- Western Regional Climate Center – (climate divisional plots of temperature and precipitation trends from 1895-2017). Web site: <https://wrcc.dri.edu/cgi-bin/divplot1.pl>

### I.1.2 Proposed Data Sources for EIS

- Climate model projections in NPR-A Climate Change Analysis: An Assessment of Climate Change Variables in the National Petroleum Reserve in Alaska (Appendix C).
- The Alaska Climate Research Center (annual temperature trends (1949-2014) for 19 individual stations statewide. Web site: <http://climate.gi.alaska.edu/ClimTrends/Location>
- Western Regional Climate Center – (climate divisional plots of temperature and precipitation trends from 1895-2017). Web site: <https://wrcc.dri.edu/cgi-bin/divplot1.pl>

### I.1.3 Data Needs

- No additional (fresh) climate data need to be collected for this EIS, as the historical records, plus modeling studies, should be adequate to assess trends and make findings regarding the extent or potential and likely climate change within the future period of interest.

## 1.2 AIR QUALITY

### 1.2.1 Literature and Databases Reviewed

- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement
- BLM. 2012. National Petroleum Reserve-Alaska Final Integrated Activity Plan/Environmental Impact Statement. Appendix H, Dispersion Modeling Assessment of Potential Future Development in the NPR-A Air Quality Impact Assessments in Support of the Bureau of Land Management Integrated Activity Plan/Environmental Impact Statement Update.
- Do, B., L. Dayton, N. Hilliard, and P. Fields Simms. 2017. Arctic Air Quality Modeling Study – Final Near-Field Modeling Report. Prepared by Eastern Research Group, Incorporated for U.S. Department of the Interior, Bureau of Ocean Energy Management. OCS Study BOEM 2017-029, 59 pp.
- EPA. 2018. Alaska Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. Internet website: [https://www3.epa.gov/airquality/greenbook/anayo\\_ak.html](https://www3.epa.gov/airquality/greenbook/anayo_ak.html).
- Alaska Division of Air Quality. 2018 Proposed Air Monitoring Network. Internet website: <https://dec.alaska.gov/air/air-monitoring/monitoring-plans>.

### 1.2.2 Proposed Data Sources for EIS

- Reasonably Foreseeable Development Scenario well counts and surface disturbance estimates
- Existing regional air modeling reports

### 1.2.3 Data Needs

- Air monitoring data from BOEM/BLM/state sources (there are no Alaska Division of Air Resources air monitoring sites in or near the planning area) to assess baseline conditions
- Emissions inventory by alternative
- Description of future modeling requirements if not performed as part of this EIS
- Air modeling protocols for regional air modeling efforts to determine if drilling in the Arctic NWR was included in any of these efforts (both effects on the Arctic NWR and if drilling in the Arctic NWR was included in the emissions sources modeled)

### 1.3 PHYSIOGRAPHY

#### 1.3.1 Literature and Databases Reviewed

- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement.
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.
- Wahrhaftig, Clyde. 1965. Physiographic divisions of Alaska: U.S. Geological Survey. Professional Paper 482. Plate I. Scale 1:2,500,000.
- BLM. 2012. National Petroleum Reserve-Alaska (NPR-A) Final Integrated Activity Plan/Environmental Impact Statement.
- USACE. 2012. Point Thomson Project Final Environmental Impact Statement.
- OCS (Office of Coast Survey). 2015. Nautical Charts: 16045 Bullen Point to Brownlow Point. 16044 Camden Bay and Approaches, 16043 Barter Island and Approaches, 16042, Griffin Pt. and approaches, 16041 Demarcation Bay and approaches National Oceanic and Atmospheric Administration, Office of Coast Survey.. <http://www.charts.noaa.gov/OnLineViewer>.

#### 1.3.2 Proposed Data Sources for EIS

- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement.
- Select references cited within USFWS (2015) sections 4.2.1.1 Landforms and Geology Beaufort Sea Coastal Plain, 4.2.1.7 Landforms and Geology Coastal Marine System.
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.
- USGS. 1996. Digital Map of Physiographic Divisions of Alaska U.S. Geological Survey EROS Alaska Field Office. <https://agdc.usgs.gov/agdc.html>.
- Wahrhaftig, Clyde, 1965, Physiographic divisions of Alaska: U.S. Geological Survey. Professional Paper 482. Plate I. Scale 1:2,500,000.

- Gibbs, A.E., and Richmond, B.M., 2015, National assessment of shoreline change—Historical shoreline change along the north coast of Alaska, U.S.–Canadian border to Icy Cape: U.S. Geological Survey Open-File Report 2015–1048, 96 p. <http://dx.doi.org/10.3133/ofr20151048>. And updated report: i. <https://pubs.er.usgs.gov/publication/ofr20171107> ii. GIS data: <https://www.sciencebase.gov/catalog/item/57e96bd2e4b09082500c91b0>.
- Erikson, L.H., Gibbs, A.E., Richmond, B.M., Storlazzi, C.D., Jones, B.M., Ohman, K.A., 2018, Changing Storm Conditions in Response to Projected 21st Century Climate Change Scenarios and the Potential Impact on an Arctic Barrier Island –Lagoon System: A Pilot Study for Arey Island and Lagoon, Eastern Arctic Alaska, U.S. Geological Survey Open File report, in press.
- USACE. 2012. Point Thomson Project Final Environmental Impact Statement.
- 1998. Northeast National Petroleum Reserve-Alaska Final Integrated Activity Plan/Environmental Impact Statement. Anchorage, AK.
- BLM. 2012. National Petroleum Reserve-Alaska (NPR-A) Final Integrated Activity Plan/Environmental Impact Statement.
- Colonell, J.M. and A.W. Niedoroda. 1990. “Appendix B: Coastal Oceanography of the Alaska Beaufort Sea.” In *An Assessment of Marine Environmental Impacts of West Dock Causeway*, ed. J.M. Colonell and B.J. Gallaway, BI-B74. Prepared for Prudhoe Bay Unit Owners represented by ARCO Alaska, Inc., by LGL Alaska Research Associates, Inc. and Environmental Science and Engineering, Inc., Anchorage, AK. (cited in Point Thomson EIS)
- Jorgenson, M.T. and Y. Shur. 2007. “Evolution of Lakes and Basins in Northern Alaska and Discussion of the Thaw Lake Cycle.” *Journal of Geophysical Research* 112, F02S17. (cited in Point Thomson EIS)
- Sellman, P.V., J. Brown, R.I. Lewellen, H. McKim, and C. Merry. 1975. *The Classification and Geomorphic Implications of Thaw Lakes on the Arctic Coastal Plain, Alaska*. Research Report 344, Hanover, NH: U.S. Army Cold Regions Research and Engineering Laboratory. (cited in Point Thomson EIS)
- Rawlinson, S.E. 1993. Surficial Geology and Morphology of the Alaskan Central Arctic Coastal Plain. Report of Investigation 93-1, 172 p., 6 sheets, scale 1:63,360, Alaska Division of Geological & Geophysical Surveys. (cited in Point Thomson EIS)
- PND Engineers, Inc. 2009. *Point Thomson Project Coastal Engineering Assessment - DRAFT*. Prepared for ExxonMobil, Anchorage, AK by PND Engineers Inc., Anchorage, AK. (cited in Point Thomson EIS)

- OCS (Office of Coast Survey). 2015. Nautical Charts: 16045 Bullen Point to Brownlow Point. 16044 Camden Bay and Approaches, 16043 Barter Island and Approaches, 16042, Griffin Pt. and approaches, 16041 Demarcation Bay and approaches National Oceanic and Atmospheric Administration, Office of Coast Survey.. <http://www.charts.noaa.gov/OnLineViewer>.

### 1.3.3 Data Needs

- None identified.

## 1.4 GEOLOGY AND MINERALS

### 1.4.1 Literature and Databases Reviewed

- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement. Sections 4.2.1.1, 4.2.1.2, 4.2.7, 4.2.8
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.
- BLM. 2012. National Petroleum Reserve-Alaska (NPR-A) Final Integrated Activity Plan/Environmental Impact Statement.
- USACE. 2012. Point Thomson Project Final Environmental Impact Statement.
- USGS. 1998. Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998, Including Economic Analysis.
- Houseknecht, D.W. et al. 2012. Assessment of Potential Oil and Gas Resources in Source Rocks of the Alaska North Slope, 2012. USFS Fact Sheet 2012-3013.
- Attanasi, Emil D. and Philip A. Freeman. 2009. Economics of Undiscovered Oil and Gas in the North Slope of Alaska: Economic Update and Synthesis. USGS Open-File Report 2009-1112.
- Attanasi, E.D. 2005. Undiscovered oil resources in the Federal portion of the 1002 Area of the Arctic National Wildlife Refuge: an economic update. USGS Open-File Report 2005-1217.

### 1.4.2 Proposed Data Sources for EIS

- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement. Sections 4.2.1.1, 4.2.1.2, 4.2.7, 4.2.8
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge

in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.

- Resource Data, Inc. (RDI), Alaska Earth Sciences, Inc. (AES), and U.S. Bureau of Mines (USBM). 1995. Mineral Terranes and Known Mineral Deposit Areas: Published by U.S. Bureau of Mines, metadata 5 p., plus Arc/INFO database.
- USACE. 2012. Point Thomson Project Final Environmental Impact Statement.
- USGS. 1998. Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998, Including Economic Analysis.
- Houseknecht, D.W. et al. 2012. Assessment of Potential Oil and Gas Resources in Source Rocks of the Alaska North Slope, 2012. USFS Fact Sheet 2012-3013.
- Attanasi, Emil D. and Philip A. Freeman. 2009. Economics of Undiscovered Oil and Gas in the North Slope of Alaska: Economic Update and Synthesis. USGS Open-File Report 2009-1112.
- Attanasi, E.D. 2005. Undiscovered oil resources in the Federal portion of the 1002 Area of the Arctic National Wildlife Refuge: an economic update. USGS Open-File Report 2005-1217.
- Plafker, G., and H.C. Berg. 1994. "The Geology of Alaska: Book and Plates." *The Geology of North America Volume G-1*. The Geological Society of America, 1056 p. available on ADNR website at <http://dggs.alaska.gov/pubs/id/22261>. (cited in Point Thomson EIS)
- Molenaar, C.M., K.J. Bird, and T.S. Collett. 1986. *Regional Correlation Sections Across the North Slope of Alaska*. U.S. Geological Survey Miscellaneous Field Study Map MF-1907. (cited in Point Thomson EIS)
- ADNR. 2006. "Right-of-Way Leasing Act AS 38.35.050 Application for Pipeline Right-of-Way Lease for the Eastern North Slope Gas Pipeline." State of Alaska, ROW lease application. Point Thomson DEIS Attachment C of Title Document: Eastern North Slope Gas Pipeline Design Basis. (cited in Point Thomson EIS)
- Combellick, R.A. 1994. *Geologic Hazards In and Near Proposed State of Alaska Oil and Gas Lease Sale 80 (Shaviovik)*. Division of Geological & Geophysical Surveys. U.S. Government Printing Office, 1994. Public Data File 94-98. (cited in Point Thomson EIS)
- Page, R.A., N.N. Biswas, J.C. Lahr, and H. Pulpan. 1991. "Seismicity of Continental Alaska." In *Neotectonics of North America*, ed. D.B. Slemmons, E.R. Engdahl, M.D. Zoback and D.D. Blackwell, 47-68. Geological Society of America. (cited in Point Thomson EIS)

- Pinney, D.S., and R.A. Combellick. 2000. *Geologic Hazards in and Near Proposed State of Alaska Oil and Gas Sale, North Slope Foothills*. Vol. 39. Alaska Division of Geological & Geophysical Surveys. (cited in Point Thomson EIS)
- Wesson, R.L., O.S. Boyd, C.S. Mueller, C.G. Bufe, A.D. Frankel, and M.D. Petersen. 2007. *Revision of Time-Independent Probabilistic Seismic Hazard Maps for Alaska*. Open file report 2007-1043, U.S. Department of the Interior, U.S. Geological Survey, Washington, D.C.: U.S. Government Printing Office. (cited in Point Thomson EIS)
- USGS. 2007. Earthquake Hazards Program Maps, Alaska. USGS web site: <https://earthquake.usgs.gov/hazards/hazmaps/ak/index.php#2007>.
- USGS and ADNR. Quaternary fault and fold database for the United States 2006. USGS web site: <https://earthquake.usgs.gov/hazards/qfaults/>.
- Beikman, H.M., compiler. 1980. Geologic map of Alaska: U.S. Geological Survey Map SG0002-IT and 2T, Scale 1:2,500,000.
- USGS. Alaska Resource Data Files. Descriptions of mines, prospects, and mineral occurrences. <https://ardf.wr.usgs.gov/index.php>.
- BLM. 2017. Alaska Minerals Information System database. <http://www.arlis.org/docs/vol2/mic-mas/MDIRA/MAS%20Scanned%20Images/>
- Flores, R.M., Stricker, G.D., and Kinney, S.A. 2004. Alaska Coal Geology, Resources, and Coalbed Methane Potential, U.S. Geological Survey, DDS-77.
- Stricker, G.D., Spear, B.D., Sprowl, J.M., Dietrich, J.D., McCauley, M.I., and Kinney, S.A., 2011, Coal database for Cook Inlet and North Slope, Alaska: U.S. Geological Survey Digital Data Series 599, 11 p.

#### I.4.3 Data Needs/Gaps

- None identified.

### I.5 PETROLEUM RESOURCES

#### I.5.1 Literature and Databases Reviewed

- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan. Section 4.2.7
- USGS. 1998. Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998, Including Economic Analysis.



- USGS. 1998. Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998. Including Play Descriptions
- Attanasi. 2005. Economics of 1998 U.S. Geological Survey's 1002 Area Regional Assessment: An Economic Update. USGS Open File Report 2005-1359.
- USGS. 2012. Assessment of Potential Oil and Gas Resources in Source Rocks of the Alaska North Slope, 2012.
- Attanasi, Emil D. and Philip A. Freeman. 2009. Economics of Undiscovered Oil and Gas in the North Slope of Alaska: Economic Update and Synthesis. USGS Open-File Report 2009-1112.
- Attanasi, E.D. 2005. Undiscovered oil resources in the Federal portion of the 1002 Area of the Arctic National Wildlife Refuge: an economic update. USGS Open-File Report 2005-1217.
- Alaska Department of Natural Resources, Division of Oil and Gas. 2017. ANWR Revenue Model v1.0.

#### **I.5.2 Proposed Data Sources for EIS**

- USGS. 1998. Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998, Including Economic Analysis.
- USGS. 1998. Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998. Including Play Descriptions
- Attanasi. 2005. Economics of 1998 U.S. Geological Survey's 1002 Area Regional Assessment: An Economic Update. USGS Open File Report 2005-1359.
- USGS. 2012. Assessment of Potential Oil and Gas Resources in Source Rocks of the Alaska North Slope, 2012.
- Attanasi, Emil D. and Philip A. Freeman. 2009. Economics of Undiscovered Oil and Gas in the North Slope of Alaska: Economic Update and Synthesis. USGS Open-File Report 2009-1112.
- Attanasi, E.D. 2005. Undiscovered oil resources in the Federal portion of the 1002 Area of the Arctic National Wildlife Refuge: an economic update. USGS Open-File Report 2005-1217.

#### **I.5.3 Data Needs**

- A Reasonable Foreseeable Development Scenario (RFD) will be developed to predict future oil and gas development in the 1002 Area and support the EIS. The baseline scenario will be unconstrained and will depict estimates of the most likely general locations for development as well as estimated amounts of development. A scenario will also be prepared for each EIS alternative. The RFD will use existing data and will not generate any

new data. Specific key components of the RFD and how they will be developed include:

- Oil and gas occurrence and development potential – This will be developed based on available data sources, such as USGS 1998.
- Surface disturbance estimates from oil and gas exploration and development facilities – Estimates will be based on those used in nearby areas, such as NPR-A.
- Estimated exploration, drilling, and production activity by alternative – Estimates will be developed by overlaying the baseline unconstrained RFD scenario with management actions considered under each alternative. Allocations such as closures or major constraints (e.g., no surface occupancy stipulations) would result in a percentage reduction in development in areas where they are applied. Percentage reduction will be based on the development potential of the area as well as the type of allocation. Specific percentages will be developed using examples from other RFDs.
- Estimated economic outputs from oil and gas activities by alternative – Estimates will be developed using existing data, such as USGS 1998 and Alaska DNR 2017, as well as economic modeling tools.

## **I.6 PALEONTOLOGICAL RESOURCES**

### **I.6.1 Literature and Databases Reviewed**

- BLM, 2002. Final Environmental Impact Statement: Renewal of the Federal Grant for the Trans-Alaska Pipeline Right-of-Way.
- BLM. 2012. National Petroleum Reserve-Alaska (NPR-A) Final Integrated Activity Plan/Environmental Impact Statement.
- USACE. 2012. Point Thomson Project Final Environmental Impact Statement.
- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement.
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.

### **I.6.2 Proposed Data Sources for EIS**

- Alaska Paleontological Database, [www.alaskafossil.org](http://www.alaskafossil.org)

- BLM. In progress. Potential Fossil Yield Classification regarding the Arctic Plain 1002 area. (cited in USFWS 2018 Rapid-Response Resource Assessment)
- Mull, C.G., 1987, Kemik Sandstone, Arctic National Wildlife Refuge, northeastern Alaska, in Tailleur, I.L., and Weimer, Paul, eds., Alaskan North Slope geology; Volume I: Society of Economic Paleontologists and Mineralogists, Pacific Section, North Slope Seminar II, AAPG/SEPM/SEG Pacific Section annual meeting, Anchorage, AK, May 22-24, 1985, book 50, p. 405-431. Prepared by SEPM Pacific Section and Alaska Geological Society.
- USACE. 2012. Point Thomson Project Final Environmental Impact Statement.
- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement.
- USGS. 1987. Petroleum geology of the northern part of the Arctic National Wildlife Refuge, northeastern Alaska. U.S. Geological Survey Bulletin 1778.

#### **I.6.3 Data Needs**

- None identified.

### **I.7 SOIL RESOURCES**

#### **I.7.1 Literature and Databases Reviewed**

- Rapid Response Resource Assessment (Jorgenson, DNR)
- USFWS 2015 CCP
- Alaska DGGs Publications Search
- USGS
- DNR Tundra Travel modeling project

#### **I.7.2 Proposed Data Sources for EIS**

- DOT&PF geotechnical/soils reports for community facilities within project area (Northern Region)
- USACE geotechnical investigations
- Wahrhaftig 1965 Physiographic Subdivisions
- Nelson et al. 1998 *Active-layer thickness in north central Alaska*
- Osterkamp 2003 *Thermal history of permafrost in Alaska*
- Ping et al. 2004 *Characteristics of cryogenic soils along a latitudinal transect in Arctic Alaska*

- DGGs Barter Island & Demarcation Point & Mount Michelson Quadrangles resources (<http://dggs.alaska.gov/pubs/quad/barter-island>, <http://dggs.alaska.gov/pubs/quad/demarcation-point>)
- DGGs SR 42
- MP 49
- MP 66
- MP 95
- USGS Data
- OF 86-334
- I 1791

### I.7.3 Data Needs

- Updated SNAP climate data
- DOT&PF geotechnical reports
- USACE Geotechnical Reports

## I.8 SAND AND GRAVEL RESOURCES

### I.8.1 Literature and Databases Reviewed

- Rapid Response Resource Assessment (Jorgenson, DNR)
- USFWS 2015 CCP
- Alaska DGGs Publications Search
- USGS

### I.8.2 Proposed Data Sources for EIS

- DOT&PF geotechnical/soils reports for community facilities within project area (Northern Region)
- USACE geotechnical investigations
- DGGs Barter Island & Demarcation Point & Mount Michelson Quadrangles resources (<http://dggs.alaska.gov/pubs/quad/barter-island>, <http://dggs.alaska.gov/pubs/quad/demarcation-point>)
- DGGs SR 42
- MP 49
- MP 66
- MP 95

### I.8.3 Data Needs

- Updated SNAP climate data

- DOT&PF geotechnical reports
- USACE Geotechnical Reports

## **I.9 WATER RESOURCES**

### **I.9.1 Literature and Databases Reviewed**

- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement.
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.
- BLM. 2012. National Petroleum Reserve-Alaska (NPR-A) Final Integrated Activity Plan/Environmental Impact Statement.
- USFWS. 2008. Water Resources Arctic national Wildlife Refuge, stream segments and lakes water rights applications filed. [https://www.fws.gov/alaska/water/arctic\\_water\\_rights.htm](https://www.fws.gov/alaska/water/arctic_water_rights.htm)
- USGS. 2018. Discharge data on the Canning, Tamayariak, and Hulahula Rivers for discharge (Hulahula still operational). <https://nwis.waterdata.usgs.gov/ak/nwis/sw>

### **I.9.2 Proposed Data Sources for EIS**

- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement.
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.
- USACE. 2012. Point Thomson Project Final Environmental Impact Statement.
- BLM. 2012. National Petroleum Reserve-Alaska (NPR-A) Final Integrated Activity Plan/Environmental Impact Statement.
- USFWS. 2008. Water Resources Arctic national Wildlife Refuge, stream segments and lakes water rights applications filed. [https://www.fws.gov/alaska/water/arctic\\_water\\_rights.htm](https://www.fws.gov/alaska/water/arctic_water_rights.htm)
- USGS. 2018. Discharge data on the Canning, Tamayariak, and Hulahula Rivers for discharge (Hulahula still operational). <https://nwis.waterdata.usgs.gov/ak/nwis/sw>

- Childers, J.M., C.E. Sloan, J.P. Meckel and J.W. Nauman. 1977, Hydrologic reconnaissance of the eastern North Slope, Alaska, 1975: U.S. Geological Survey Open-File Report 77-492, 65 p.
- Grunblatt J. and D. Atwood. 2014. Mapping lake for winter liquid water availability using SAR on the North Slope of Alaska Int. J. Appl. Earth Obs. Geoinformatics 27 63–9
- Lyons, S. M., and J. M. Trawicki 1994. Water resource inventory and assessment, coastal plain, Arctic National Wildlife Refuge: 1987-1992 Final Report. U.S. Fish and Wildlife Service, Water Resource Branch Anchorage, AK. WRB 94-3.
- Trawicki, J. M., S. M. Lyons and G. V. Elliott. 1991. Distribution and quantification of water within lakes of the 1002 area, Arctic National Wildlife Refuge, Alaska. Alaska Fisheries Technical Report No. 10, U.S. Fish and Wildlife Service, Anchorage, AK.
- USFWS. 2012. Appendix I: Wild and Scenic River Review, Arctic NWR Comprehensive Conservation Plan. <https://www.fws.gov/home/arctic-ccp/>

### **I.9.3 Data Needs**

- Additional monitoring data on water resources will be essential prior to exploration and development, including lake recharge, stream low.
- Increased active layer will lower water table and result in drier surface conditions.

## **I.10 SOLID AND HAZARDOUS WASTE**

### **I.10.1 Literature and Databases Reviewed**

- Rapid Response Resource Assessment (Jorgensen, DNR)
- USFWS 2015 CCP
- DEC Contaminated sites program Database <http://dec.alaska.gov/spar/csp.aspx>
- DEC Prevention, preparedness, and response spills database <http://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillSearch>
- EPA Environmapper <https://geopub.epa.gov/myem/efmap/index.html?ve=15.44.279221,-88.315926&pText=513%20Grand%20Ave,%20Little%20Chute,%20WI%2054140-1707>

### **I.10.2 Proposed Data Sources for EIS**

- BLM and State of Alaska Reserve Pits/Legacy Wells
- EDR report: searches datasets from;

- Federal Comprehensive Environmental Response, Compensation, and Liability Information System
- Federal Resource Conservation and Recovery Act
- Federal Emergency Response Notification System
- Alaska Department of Environmental Conservation Contaminated Sites Program
- EPA Brownfields Program
- Other ascertainable records related to either reserve pit closure of legacy wells
- Airforce studies
  - Phase I ESA/Phase II ESA
  - Spill reports
  - Contamination cleanup activities

### **I.10.3 Data Needs**

- Generators of solid or hazardous waste
- Are there baseline studies of natural background concentrations of heavy metals?
- Handling and disposal methods of solid and hazardous waste
  - BMPs

## **I.11 VEGETATION**

### **I.11.1 Literature and Databases Reviewed**

- Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement, January 2015
- Rapid-response Resource Assessments and Select References for the 1002 Area of the Arctic National Wildlife Refuge in Anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I

### **I.11.2 Proposed Data Sources for EIS**

- Most references in the USFWS documents listed above will be data sources. Those listed below are of particular interest. All should be readily available.
- Alaska Exotic Plants Information Clearinghouse (AKEPIC) website. Alaska Center for Conservation Science, University of Alaska Anchorage, Anchorage AK. <http://accs.uaa.alaska.edu/invasive-species/non-native-plants/>

- RCCP (4.3.3.5) states that non-native plants are currently uncommon on the refuge. However, the reference cited is from 2000, so the information is likely outdated. The RCCP states correctly that the lack of non-native plants in the Refuge is likely to change in the near future. They cite Carlson and Shephard (2007) saying that non-native plants are spreading into natural ecosystems in Alaska at an accelerating rate.
- AKNHP Rare Plant Data Portal website. Alaska Center for Conservation Science, University of Alaska Anchorage, Anchorage, AK. <http://aknhp.uaa.alaska.edu/apps/rareplants/>
- Carlson, M. L. and M. Shephard 2007. The spread of invasive exotic plants in Alaska: is establishment of exotics accelerating? Pages 117–133 in T. B. Harrington and S. H. Reichard, editors. Meeting the Challenge: Invasive Plants in Pacific Northwestern Ecosystems. U.S. Forest Service, Pacific Northwest Research Station General Technical Report 694, Portland, OR.
- North Slope Rapid Ecoregional Assessment, 2013 (prepared for BLM by AKNHP, SNAP, and ISER). (Includes a list of non-native plants known to occur in the North Slope ecoregion)
- Homer et al. 2004 National Land Cover Database and map of ANWR land cover classes from Landsat 7.
- Jorgenson et al. 1994 field sampling of vegetation types and cover estimates for land cover classes. Also, the land-cover map will be needed.
- Martin et al. 2009 greenup dates advancing
- Verbyla 2008 showed increasing greenness on ACP.
- National Research Council. (2003). *Cumulative environmental effects of oil and gas activities on Alaska's North Slope*. National Academies Press.
- Reynolds, M. K., Walker, D. A., Ambrosius, K. J., Brown, J., Everett, K. R., Kanevskiy, M., & Webber, P. J. 2014. Cumulative geoecological effects of 62 years of infrastructure and climate change in ice-rich permafrost landscapes, Prudhoe Bay Oilfield, Alaska. *Global Change Biology* 20: 1211-1224.

### I.11.3 Data Needs

- An updated vegetation map is needed prior to development. The most detailed vegetation map that exists for the area is from 1994; it is outdated and not accurate enough for planning purposes.
- A survey of non-native plants is needed to establish baseline
- A survey of rare plants may be needed prior to development.



## I.12 WETLANDS

### I.12.1 Literature and Databases Reviewed

- Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement, January 2015
- Rapid-response Resource Assessments and Select References for the 1002 Area of the Arctic National Wildlife Refuge in Anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 20001

### I.12.2 Proposed Data Sources for EIS

- Most references in the USFWS documents listed above will be data sources. Those listed below are of particular interest. All should be readily available.
- U.S. Fish and Wildlife Service. May 2014. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington DC. <http://www.fws.gov/wetlands/>

### I.12.3 Data Needs

- A wetland map of the area is needed prior to development. The National Wetland Inventory (NWI) is currently the only wetland map of the area. It is not detailed or accurate enough for planning purposes.

## I.13 WILDLAND FIRE

### I.13.1 Literature and Databases Reviewed

- Tetlin NWR Fire Management Plan
- Yukon Flats NWR Fire Management Plan
- Alpine Satellite Development Plan for the Proposed Greater Mooses Tooth 2 Development Project Draft Supplemental Environmental Impact Statement
- Alaska Interagency Wildland Fire Management Plan 2016
- Alaska Master Cooperative Wildland Fire Management and Stafford Act Response Agreement

### I.13.2 Proposed Data Sources for EIS

- BLM Alaska Fire Service (AFS)
- USGS Gap Analysis Program
- Protected Areas Database of the United States (PAD-US)
- Fire Effects Information System (FEIS)

- ANWR Fire Management Plan
- U.S. National Fire Danger Rating System
- Alaska Fire and Fuels (AKFF) Mesowest maps
- Alaska Interagency Coordination Center (AICC) Weather Database

### I.13.3 Data Needs

- Basic burnable vegetation types in project area (Acres)
  - Descriptions of each vegetation type including spatial data
- Fire fuels maps (from LANDSAT)
- Real Property and Values on Refuge
  - Include spatial data
- Historical and Cultural resources on refuge
- Fire history and frequency on Refuge
  - How many fires by year and acreage burned
    - Prescribed and wildland fires
      - Spatial data for historical fires
- Fuel models from National Forest Fire Laboratory National Fire Danger Rating System for each vegetation type
- Reports on wildlife, vegetation, air quality, soils, and socio-cultural resources
- Habitat management objectives and constraints on Refuge
- Fire management units on Refuge
  - Descriptions and spatial data
- Historical climate data

## I.14 FISH AND AQUATIC SPECIES

### I.14.1 Literature and Databases Reviewed

- Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement, January 2015
- Rapid-response Resource Assessments and Select References for the 1002 Area of the Arctic National Wildlife Refuge in Anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 20001

**I.14.2 Proposed Data Sources for EIS**

- Most references contained in the USFWS documents listed above will be data sources. Those listed below are of particular interest. All should be readily available.
- Brackney 2008 for information on calculated area of streams and lakes in the refuge areas.
- Craig and McCart 1975 classification of North Slope streams and rivers as mountain, spring-fed, and tundra.
- Huryn et al. 2004 factors controlling invertebrate density in tundra streams.
- Unfrozen water exists in winter downstream from springs (Craig 1989, Childers et al. 1977, Craig 1989a), in deep pools or lakes (Trawicki et al. 1991, Lyons and Trawicki 1994, Ward and Craig 1974), and below ice hummocks (Elliot and Lyons 1990, Lyons and Trawicki 1994).
- As much as 50 percent of the annual flow may occur during break-up (Clough et al. 1987).
- Relative to the rest of the North Slope, glaciers (Nolan et al. 2011) and springs (Yoshikawa et al. 2007) contribute large volumes of water to a number of streams and rivers in the Refuge. contributions from glaciers may disappear completely in the next 50 years (Nolan et al. 2011)
- In the foothills, deepening of the active layer may lead to increased base flow at mid to lower elevation slopes (Martin et al. 2009). In the coastal plain, however, increased active layer depth will likely lower water tables and lead to an overall loss of water availability and instream connectivity at the surface.
- As the potential for groundwater storage in the active layer increases, a shift from surface-water dominated flows to groundwater dominated flows may occur (Frey and McClelland 2009).
- Although the density is low compared to the rest of the North Slope, there are over four thousand lakes covering over 37,000 ac in the Refuge. Most (73 percent) of the lakes are in the coastal plain ecoregion. Most lakes in this region are shallow, freeze to the bottom during winter (Trawicki et al. 1991), and are recharged by snowmelt, overbank flooding, and precipitation. Delta lakes include thaw, riverine, and tidal lakes and most are found in deltas of the Hulahula, Jago, Aichilik, and Canning rivers. Up to 80 percent of the winter water volume is in lakes in the Canning River delta
- Aufeis large reservoir of freshwater (Kane and Slaughter 1973).

- Loss of instream connectivity in dry seasons with negative effects on fish migration to overwintering habitat (Lyons and Trawicki 1994, Deegan and Peterson 1992).
- Glaciers and springs large contributors to a number of refuge streams (Nolan et al. 2011, Yoshikawa et al. 2007).
- Contributions by glaciers may disappear in next 50 years (Nolan et al. 2011).
- Lakes generally shallow, freeze to bottom (Trawicki et al. 1991).
- Species composition and distribution info from the CCP including references therein.
- Climate change effects from CCP and references therein.
- Lagoons support higher densities of inverts compared to streams and rivers, making anadromy an advantageous life history (Craig 1989).
- Surges of cold, saline marine water associated with these upwellings can contribute to destratification of nearshore waters, increasing salinity and decreasing temperature in the nearshore environment (Hale 1991)
- Substantial increases in air temperature and storm frequency, combined with decreases in summer sea ice in recent decades, have increased erosion along the southern Beaufort Sea coastline in recent decades (Wendler et al. 2010).
- McPhail and Lindsey 1970, Morrow 1980, Mecklenburg et al. 2002 fish taxonomy, presence/absence as well as other references listed for specific species
- Additional Dolly Varden work recently completed by USFWS in the Canning River (Dolly Varden tracking, Overwintering habitat-Randy Brown et al. 2014- present?)
- Nearshore fyke net surveys completed by USGS in 2017/2018 near Koktovik (Vanessa von Biela)
- Water lake depth surveys conducted by oil companies in deep lakes just outside the 1002 (Larry Moulton) – info may or may not be publicly available. May have to cite the EISs or permit applications in which the information is used.
- ADFG Anadromous Waters Catalog: Johnson, J. and B. Blossom. 2017. Catalog of waters important for spawning, rearing, or migration of anadromous fishes – Arctic Region, Effective June 1, 2017, Alaska Department of Fish and Game, Special Publication No. 17-01 Anchorage.

### 1.14.3 Data Needs

- Pearce et al. 2018 (Summary of wildlife-related research on the Coastal Plain of the ANWR, AK, 2002–17.
- Evaluation of the efficacy, applicability and transferability of BMPs, permit stipulations and mitigation measures used in the NPR-A for use on the coastal plain, 1002 area (per National Research Council ([NRC] 2003) for all phases of industrial activity (seismic, exploration, development, restoration).

## 1.15 BIRDS

### 1.15.1 Literature and Databases Reviewed

- Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement, January 2015
- Rapid-response Resource Assessments and Select References for the 1002 Area of the Arctic National Wildlife Refuge in Anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 20001

### 1.15.2 Proposed Data Sources for EIS

- Douglas et al. 2002 distribution of Snow Geese. Also Kendall 2006.
- Species composition and distribution info from the CCP including references therein.
- Coastal Plain Breeding Bird Survey data (Larned et al. 2009 and more recent annual reports and datasets)—portions in ANWR.
- Common Eider survey data from ANWR (Dau and Taylor 2000 and more recent annual reports and datasets). Also ground-based surveys 2003–2004, and 2014–2017.
- Lagoon surveys for molting Long-tailed Ducks (Brackney et al. 1987, Lysne et al. 2004).
- Martin et al. 2009 impacts of climate change on NS birds.
- Stenhouse and Senner 2005, USFWS 2008a, Brown et al. 2001, Alaska Shorebird Group 2008
- Brown et al. 2007b
- NRC 2003.
- Garner and Reynolds 1986 and 1987
- Bart et al. 2013: no evidence of reduced density of birds near development in Prudhoe. Flint et al. 2003, Lacroix et al. 2003, Flint et al. 2016: no clear effect of seismic activity on foraging LTDU.

- Liebezeit et al. 2009: no effect of oil development on nesting success of shorebirds, some decline for passerines within 5 km.

### I.15.3 Data Needs

- Pearce et al. 2018 Summary of wildlife-related research on the Coastal Plain of the Arctic National Wildlife Refuge, Alaska, 2002–17.
- (RRA quote: "Much of the data from surveys and studies conducted in the 1002 Area are not widely available. The Refuge is working with FWS Science Applications to build a publically accessible database for the long-term dataset for the Canning River Delta tundra nesting bird project. Comparable efforts should follow for other projects to ensure appropriate storage and management of important data and allow for public data access to both contemporary and historical data.").

## I.16 TERRESTRIAL MAMMALS

### I.16.1 Literature and Databases Reviewed

- Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement, January 2015
- Rapid-response Resource Assessments and Select References for the 1002 Area of the Arctic National Wildlife Refuge in Anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 20001

### I.16.2 Proposed Data Sources for EIS

- Mammal species composition and distribution information from the RCCP, including references therein.
- Wolf data from Delach and Matson 2011
- Golden Eagle distribution in relation to calving (Mauer 1987)
- Caribou papers and reports (Cameron et al. 2002, Griffith et al. 2002, Wertz et al. 2006, etc.)
- Citations from RRRA of particular interest:
  - Arthur, S. M., and P. A. Del Vecchio. 2017. Effects of grizzly bear predation on muskoxen in northeastern Alaska. *Ursus* 28: 81-91.
  - Boyle, B., D. Carlson, A. Johnson, and D. Sowards. 2001. Small mammal trapping on the coastal plain and Arctic Ocean coast, Arctic National Wildlife Refuge, 1999. Fairbanks, AK: U.S. Department of the Interior, Fish and Wildlife Service, Arctic National Wildlife Refuge, unpublished report.

**I.16.3 Data Needs**

- Not in RCCP:
  - Caikoski, J. R. 2015. Units 25A, 25B, 25D, and 26C—Caribou. Chapter 15, Pages 15-1 through 15-24 in P. Harper and L. A. McCarthy, editors. Caribou management report of survey and inventory activities, 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-4, Juneau.
  - Lenart, E. A. 2015. Units 26B and 26C—Caribou. Chapter 18, Pages 18-1 through 18-38 in P. Harper and L. A. McCarthy, editors. Caribou management report of survey and inventory activities, 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-4, Juneau.
  - Russell, D. E., A. M. Martell, and W. A. C. Nixon. 1993. Range ecology of the Porcupine caribou herd in Canada. Rangifer, Special Issue No. 8. 167 pp.
- Caribou herd population estimates and seasonal ranges from Alaska Department of Fish and Game (updated since 2010).
- RCCP does not cover potential effects of oil and gas development. Other sources will be needed.
- Pearce et al. 2018 Summary of wildlife-related research on the Coastal Plain of the Arctic National Wildlife Refuge, Alaska, 2002–2017.

**I.17 MARINE MAMMALS****I.17.1 Literature and Databases Reviewed**

- Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement, January 2015
- Rapid-response Resource Assessments and Select References for the 1002 Area of the Arctic National Wildlife Refuge in Anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 20001

**I.17.2 Proposed Data Sources for EIS**

- Polar bears were treated as terrestrial mammals in the RCCP, but are managed as marine mammals and are protected under the Marine Mammal Protection Act, as well as the Endangered Species Act.
- GIS layers of designated critical habitat units for polar bears.

- GIS layers of telemetry data showing onshore movements of collared polar bears.

### I.17.3 Data Needs

- NOTE: RCCP does not cover marine mammals except polar bears, so guidance is needed on inclusion of other marine mammal species in the EIS. The polar bear is listed as threatened under the ESA, so will it be discussed under marine mammals or special status species?
- GIS layers mapping suitable polar bear denning habitat (see Pearce et al. 2018).
- Pearce et al. 2018 Summary of wildlife-related research on the Coastal Plain of the Arctic National Wildlife Refuge, Alaska, 2002–2017.
- Durner, G. M., and T. C. Atwood. 2018. A comparison of photograph-interpreted and IfSAR-derived maps of polar bear denning habitat for the 1002 Area of the Arctic National Wildlife Refuge, Alaska. U.S. Geological Survey Open-File Report 2018-1083, 12 pp. doi:10.3133/ofr20181083.
- Pagano, A. M., G. M. Durner, K. D. Rode, T. C. Atwood, S. N. Atkinson, E. Peacock, D. P. Costa, M. A. Owen, and T. M. Williams. 2018. High-energy, high-fat lifestyle challenges an Arctic apex predator, the polar bear. *Science* 359: 568-572.
- Wilson, R. R., E. V. Regehr, M. St Martin, T. C. Atwood, E. Peacock, S. Miller, and G. Divoky. 2017. Relative influences of climate change and human activity on the onshore distribution of polar bears. *Biological Conservation* 214: 288-294. doi: 10.1016/j.biocon.2017.08.005
- McKinney, M. A., T. C. Atwood, S. J. Iverson, and E. Peacock. 2017. Temporal complexity of southern Beaufort Sea polar bear diets during a period of increasing land use. *Ecosphere* 8(1): e01633. doi:10.1002/ecs2.1633
- Olson, J. W., K. D. Rode, D. L. Eggett, T. S. Smith, R. R. Wilson, G. M. Durner, A. S. Fischbach, T. C. Atwood, and D. C. Douglas. 2017. Collar temperature sensor data reveal long-term patterns in southern Beaufort Sea polar bear den distribution on pack ice and land. *Marine Ecology Progress Series* 564: 211-224. doi: 10.3354/meps12000
- Atwood, T. C., B. G. Marcot, D. C. Douglas, S. C. Amstrup, K. D. Rode, G. M. Durner, and J. F. Bromaghin. 2016. Forecasting the relative influence of environmental and anthropogenic stressors on polar bears. *Ecosphere* 11(6): e01370. doi:10.1002/ecs2.1370



- Atwood, T. C., E. Peacock, M. A. McKinney, K. Lillie, R. R. Wilson, D. C. Douglas, S. Miller, and P. Terletzky. 2016. Rapid environmental change drives increased land use by an Arctic marine predator. *PLoS One* 11(6):e0155932. doi:10.1371/journal.pone.0155932
- Regehr, E. V., K. L. Laidre, H. R. Akçakaya, S. C. Amstrup, T. C. Atwood, N. J. Lunn, M. E. Obbard, H. Stern, G. W. Thiemann, and Ø. Wiig. 2016. Conservation status of polar bears (*Ursus maritimus*) in relation to projected sea-ice declines. *Biology Letters* 12: 0160556. doi:10.1098/rsbl.2016.0556
- Wilson, R. R., E. V. Regehr, K. D. Rode, and M. St. Martin. 2016. Invariant polar bear habitat selection during a period of sea ice loss. *Proceedings of the Royal Society B* 283(1836): 20160380. doi:10.1098/rspb.2016.0380
- Atwood, T. C., E. M. Peacock, M. A. McKinney, K. Lillie, R. R. Wilson, and S. Miller. 2015. Demographic composition and behavior of polar bears summering on shore in Alaska. Anchorage, AK: U.S. Department of the Interior, Geological Survey Administrative Report prepared under BOEM Interagency Award No. M09PG00025, AK-09-05B
- Atwood, T. C., B. G. Marcot, D. C. Douglas, S. C. Amstrup, K. D. Rode, G. M. Durner, and J. F. Bromaghin. 2015. Evaluating and ranking threats to the long-term persistence of polar bears. USGS Open-File Report 2014-1254, 114 p. doi:10.3133/ofr20141254
- Bromaghin, J. F., T. L. McDonald, I. Stirling, A. E. Derocher, E. S. Richardson, E. V. Regehr, D. C. Douglas, G. M. Durner, T. C. Atwood, and S. C. Amstrup. 2015. Polar bear population dynamics in the southern Beaufort Sea during a period of sea ice decline. *Ecological Applications* 25:634-651. doi:10.1890/14-1129.1
- Regehr, E. V., R. R. Wilson, K. D. Rode, and M. C. Runge. 2015. Resilience and risk—A demographic model to inform conservation planning for polar bears. USGS Open-File Report 2015-1029, 56 pp. doi:10.3133/ofr20151029
- Rode, K. D., C. T. Robbins, L. Nelson, and S. C. Amstrup. 2015. Can polar bears use terrestrial foods to offset lost ice-based hunting opportunities? *Frontiers in Ecology and the Environment* 13:138-145. doi:10.1890/140202
- Rogers, M. C., E. Peacock, K. S. Simac, M. B. O'Dell, and J. M. Welker. 2015. Diet of female polar bears in the southern Beaufort Sea of Alaska: evidence for an emerging alternative foraging strategy in response to environmental change. *Polar Biology*. doi:10.1007/s00300-015-1665-4

- Whiteman, J. P., H. J. Harlow, G. M. Durner, R. Anderson-Sprecher, S. E. Albeke, E. V. Regehr, S. C. Amstrup, and M. Ben-David. 2015. Summer declines in activity and body temperature offer polar bears limited energy savings. *Science* 349: 295-298. doi:10.1126/science.aaa8623
- Gleason, J. S., and K. D. Rode. 2009. Apparent shift in polar bear distribution and habitat association as a function of changing sea ice conditions during the fall open-water period in the Alaskan Beaufort Sea. *Arctic* 62: 405-417.
- Updated GIS data layers of maternal denning habitat mapped in study area, maternal den locations, and onshore movements of collared polar bears.

## I.18 SPECIAL STATUS SPECIES

### I.18.1 Literature and Databases Reviewed

- Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement, January 2015
- Rapid-response Resource Assessments and Select References for the 1002 Area of the Arctic National Wildlife Refuge in Anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 20001

### I.18.2 Proposed Data Sources for EIS

- RCCP lists all mammals in ANWR as species of special interest, BLM to confirm that the BLM list of special status species should be used instead
- “Of the 57 species known to regularly occur in the 1002 Area, 24 are USFWS Birds of Management Concern, 14 are USFWS Alaska Region Priority Species, and 10 are listed as Near Threatened or Vulnerable by the International Union for Conservation of Nature or are on the Audubon Red List. Two species listed under the provisions of the Endangered Species Act have been reported in the 1002 Area, although only spectacled eiders are known to currently reside and breed there.” — from RRRRA.
- Special species mentioned in RCCP: Yellow-billed Loon (listing precluded), Red-throated Loon, Arctic Tern, Short-eared Owl, Hoary Redpoll (Service 2008a), Audubon (Stenhouse and Senner 2005), and ADFG (ADFG 2006).
- 21 or 27 shorebird species in ANWR are of Moderate or High Conservation Concern by U.S. Shorebird Conservation Plan (Brown et al. 2001), Alaska Shorebird Conservation Plan (Alaska Shorebird

Group 2008, Service (2008a), or Audubon Alaska (Stenhouse and Senner 2005).

- PRISM study on shorebird abundance and habitat use (Brown et al. 2007b).
- Shorebird use of coastal habitats (Connors 1984, Taylor et al. 2010).
- ANWR study since 2005 on shorebird use of coastal areas.

### I.18.3 Data Needs

- Updated list of BLM Special Status Species is needed

## I.19 SPECIAL DESIGNATIONS

### I.19.1 Literature and Databases Reviewed

- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.
- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan. Appendix H Wilderness Review. Appendix I Wild and Scenic River Review.
- USFWS. 2015. Internet website: <https://www.fws.gov/refuge/arctic/ccpwrsumfindings.html>.
- USFWS. 2010. Public Use Summary Arctic National Wildlife Refuge. April 2010.
- USACE. 2012. Final Environmental Impact Statement. July 2012.
- Christensen, N. and Christensen, L. 2009. Arctic National Wildlife Refuge Visitor Study: The Characteristics, Experiences, and Preferences of Refuge Visitors. Arctic National Wildlife Refuge, Aldo Leopold Wilderness Research Institute. <http://arctic.fws.gov/pdf/visitorstudy.pdf>.

### I.19.2 Proposed Data Sources for EIS

- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.
- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan. Appendix H Wilderness Review. Appendix I Wild and Scenic River Review.
- USFWS. 2015. Internet Website: <https://www.fws.gov/refuge/arctic/ccpwrsumfindings.html>.

- USFWS. 2010. Public Use Summary Arctic National Wildlife Refuge. April 2010.
- USACE. 2012. Point Thomson Project EIS. Final Environmental Impact Statement. July 2012.
- Christensen, N. and Christensen, L. 2009. Arctic National Wildlife Refuge Visitor Study: The Characteristics, Experiences, and Preferences of Refuge Visitors. Arctic National Wildlife Refuge, Aldo Leopold Wilderness Research Institute. <http://arctic.fws.gov/pdf/visitorstudy.pdf>.

### I.19.3 Data Needs

- The following are not critical, but are needed to support impact analysis on opportunities for solitude in the Coastal Plain WSA and adjacent Mollie Beattie Wilderness (as outlined in the Rapid-Response Assessments):
  - Noise data
    - Baseline acoustic conditions
    - Acoustic characteristics of specific development-related noise sources
    - Modeled spatial predications of acoustic impacts
    - Disturbance-response information
    - Long-term acoustic monitoring
  - Updated Visitor Survey data

## I.20 CULTURAL RESOURCES

### I.20.1 Literature and Databases Reviewed

- Alaska Heritage Resources Survey (AHRs) database
- North Slope Borough (NSB) Traditional Land Use Inventory (TLUI) database will need to be consulted; request must go through Iñupiat History, Language and Culture (IHLC)
- North Slope Science Initiative (NSSI) website (Alaska Center for Conservation Science 2017)
- Bureau of Ocean Energy Management (BOEM) Alaska Shipwreck Inventory and National Oceanic and Atmospheric Administration (NOAA) Automated Wreck and Obstruction Information System (AWOIS)
- RS-2477 Trail Inventory
- Cultural resource survey reports (e.g., (Grover and Ryder 2011, Hall 1982))

- Previous EISs (e.g., Point Thomson, Arctic National Wildlife Refuge)
- FWS Rapid Response Resource Assessment

### **I.20.2 Proposed Data Sources for EIS**

- Cultural resource survey reports within and adjacent to I002 area
- Cultural resource databases and inventories (e.g., AHRS, TLUI, Shipwreck)
- Cultural resource related information including projects, reports, and data available on NSSI website
- Technical and academic literature, studies, and research related to cultural resources including cultural chronologies, site investigations, and ethnographic resources (e.g., sacred sites, traditional cultural properties [TCPs], ethnographic landscapes)
- Geological/geomorphological studies related to coastal erosion and potential effects to the archaeological record
- Traditional Knowledge sources (including scoping) to identify local knowledge regarding culturally important places and potential effects to cultural resources

### **I.20.3 Data Needs**

- Download AHRS data for I002 area
- Download previous survey reports from AHRS system
- Identify RS-2477 Trails for I002 area
- Request TLUI data from NSB, IHLC for I002 area
- Review Alaska Shipwreck Inventory and AWOIS system vis-à-vis potential landing or dredging areas
- Identification-level surveys across a broad spectrum of landscapes to better characterize the distribution of sites, site types, and to inform and refine GIS models for Section I06 process
- Evaluate sites for NRHP eligibility for Section I06 process
- Identification and documentation of ethnographic resources including oral histories, place names, TCPs, cultural landscapes, and sacred sites. Information regarding these resources may be gleaned from previous studies and scoping testimony but will also likely require focused interviews and research with Iñupiaq and Gwich'in groups. Scoping comments received at the Arctic Village 5/24/18 scoping meeting indicated there are many documented and undocumented TCPs that could be potentially affected by the proposed project.

- GIS modeling of potential site locations to inform future survey priorities and leasing areas incorporating known site characteristics, landscape features, and/or theory driven approaches.

## **I.21 SUBSISTENCE**

### **I.21.1 Literature and Databases Reviewed**

- Alaska Department of Fish and Game (ADF&G) Community Subsistence Information System (CSIS) (ADF&G 2018a)
- ADF&G Fisheries, Subsistence, and Habitat Publications Searchable Database (ADF&G 2018b)
- North Slope Borough (NSB) subsistence reports (e.g., (Brower, Olemaun, and Hepa 2000, Bacon, Hepa, Brower, Pederson, Olemaun, George, and Corrigan 2009))
- North Slope Science Initiative (NSSI) website (Alaska Center for Conservation Science 2017)
- Bureau of Ocean Energy Management (BOEM) reports (e.g., (Impact Assessment Inc. 1990))
- Technical and academic reports (e.g., (Jacobson and Wentworth 1982, Dinero 2005))
- Publicly available scoping reports and transcripts for Point Thomson projects (2002-2003; 2009-2012) and current Coastal Plains EIS
- Arctic National Wildlife Refuge EIS
- FWS Rapid Response Resource Assessment

### **I.21.2 Proposed Data Sources for EIS**

- Harvest studies for Kaktovik, Arctic Village, and Venetie in the ADF&G CSIS
- Subsistence reports for Kaktovik, Arctic Village, and Venetie in ADF&G Fisheries, Subsistence, and Habitat Publications Searchable Database
- Kaktovik harvest data and use areas from NSB and BOEM subsistence reports
- Subsistence related information including projects, reports, and data available on NSSI website
- Kaktovik, Arctic Village, and Venetie subsistence reports available in technical and academic literature
- Kaktovik, Arctic Village, and Venetie traditional knowledge, comments, and concerns in publicly available scoping reports and transcripts for Point Thomson projects and current Coastal Plains EIS

- Oral Histories and Traditional Knowledge for Coastal Plain and related to migratory resources (e.g., caribou, birds, marine mammals).
- Tribal government or non-agency subsistence information (e.g., Council of Athabascan Tribal Governments [CATG] studies)

### 1.21.3 Data Needs

- Subsistence Use Area Information
  - Data gaps for long-term subsistence use areas for potentially affected communities exist if the mapping information is greater than 10 years old. The most recent comprehensive (i.e., all resources), long-term use area mapping studies are available for Kaktovik (1996-2006 study period), Arctic Village (pre-1982 study period), and Venetie (pre-1982 study period). All three communities' use area information is greater than 10 years old. Subsistence use area mapping field studies would be required to address these data gaps in the three study communities.
- Harvest Information
  - Typically, lead agencies (state or federal) determine when harvest information is outdated, and in past projects these recommendations for updating harvest information have been given when the data are older than 3-5 years. The most recent comprehensive (i.e., all resources) harvest information are available for Kaktovik (2010-11) and Venetie (2009). Comprehensive harvest data are not available for Arctic Village although there are data available for birds (2000) and non-salmon fish harvests (2001-02, 2002-03). All three communities' harvest information is greater than 5 years old. Harvest survey field studies, including documentation of the cultural importance of caribou, would be required to address these data gaps in the three study communities.
  - Scoping comments received at the Arctic Village 5/24/18 scoping meeting indicated that the CATG has harvest information for potentially affected communities. Coordination with CATG is needed to determine the availability and suitability of these data for incorporation into the EIS.
  - Information on sharing practices in Kaktovik and Venetie has recently been updated (Kofinas, BurnSilver, Magdanz, Stotts, and Okada 2016); information on sharing practices, which could be affected if there are changes to migratory resources, is lacking for Arctic Village. Scoping comments received at the Arctic Village 5/24/18 also identified concerns regarding changes to sharing practices.

- Traditional Knowledge
  - Existing traditional knowledge related to the Coastal Plain, resources that migrate through the area, and potential effects needs to be compiled including documentation of the cultural importance of caribou to study community residents and their cultural identity. This would include a desktop review of scoping comments (including past projects) and traditional knowledge literature search. Subsistence use area mapping studies and/or harvest surveys (see above) would also be an avenue for documenting traditional knowledge regarding these topics.

## **I.22 SOCIOCULTURAL SYSTEMS**

### **I.22.1 Literature and Databases Reviewed**

- Previous EISs, EAs, and other studies relating to oil and gas development in the Alaska North Slope and containing baseline descriptions of and/or the potential for impacts to sociocultural systems of the North Slope, particularly in the domains of cultural values, social organization, and characteristics of the population.

### **I.22.2 Proposed Data Sources for EIS**

- Liberty Development and Production Plan Final EIS
- Northstar Final EIS
- Multiple Beaufort Sea and Chukchi Sea Planning Area Lease Sale EIS's
- Multiple MMS/BOEM Social and Economic Program Technical Studies encompassing North Slope communities
- Multiple Alaska Department of Fish and Game Subsistence Division technical papers encompassing North Slope communities
- NPR-A FINAL Integrated Activity Plan/ Environmental Impact Statement
- Greater Mooses Tooth I Final SEIS
- Greater Mooses Tooth II Modified NEPA Analysis Document

### **I.22.3 Data Needs**

- Description of sociocultural systems are available in the public domain.
- Impacts on sociocultural systems can be described using socioeconomic impact information that will be developed in the economy and subsistence sections of the EIS.



## I.23 ENVIRONMENTAL JUSTICE

### I.23.1 Literature and Databases Reviewed

- Previous EISs, EAs, and other studies relating to oil and gas development in the Alaska North Slope and containing baseline descriptions of and/or the potential for disproportionate high and adverse impacts to minority and/or low-income populations of the North Slope.

### I.23.2 Proposed Data Sources for EIS

- US Census data on race, ethnicity, and income, including poverty thresholds
- Alaska Department of Labor and Workforce Development (ADOLWD) income and employment data
- Multiple Beaufort Sea and Chukchi Sea Planning Area Lease Sale EIS's
- Multiple MMS/BOEM Social and Economic Program Technical Studies encompassing North Slope communities
- Multiple Alaska Department of Fish and Game Subsistence Division technical papers encompassing North Slope communities
- NPR-A FINAL Integrated Activity Plan/ Environmental Impact Statement
- Greater Mooses Tooth I Final SEIS
- Greater Mooses Tooth II Modified NEPA Analysis Document

### I.23.3 Data Needs

- Description of minority populations and low-income populations are available in the public domain.
- Disproportionate high and adverse impacts on minority and/or low-income populations can be described using socioeconomic impact information that will be developed in the sociocultural systems, economy, subsistence sections of the EIS, in addition to any other sections of the EIS analysis reporting environmental or human health impacts that could disproportionately accrue to relevant local populations.
- Information on potential concerns expressed during the EIS scoping process itself will also be screened for applicability to the Environmental Justice analysis.

## I.24 RECREATION

### I.24.1 Literature and Databases Reviewed

- Alaska Department of Fish and Game. 2018. Game Management Unit 26 Hunting Restrictions. <http://www.adfg.alaska.gov/index.cfm?adfg=huntingmaps.restrictionsbygmu&gmu=26>
- Alaska Department of Fish and Game. 2017. 2017-2018 Alaska Hunting Regulations.
- BLM. 2012. National Petroleum Reserve-Alaska. Final Integrated Activity Plan/Environmental Impact Statement. November 2012.
- Christensen, N. and Christensen, L. 2009. Arctic National Wildlife Refuge Visitor Study: The Characteristics, Experiences, and Preferences of Refuge Visitors. Arctic National Wildlife Refuge, Aldo Leopold Wilderness Research Institute. <http://arctic.fws.gov/pdf/visitorstudy.pdf>.
- USACE. 2012. Point Thomson Project EIS. Final Environmental Impact Statement. July 2012.
- USFWS. 2006. Refuge Management, Parts 603: National Wildlife Refuge System of Uses and Part 605: Wildlife-Dependent Recreation.
- USFWS. 2010. Public Use Summary Arctic National Wildlife Refuge. April 2010.
- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan. Appendix H Wilderness Review. Appendix I Wild and Scenic River Review.
- USFWS. 2015. Internet website: <https://www.fws.gov/refuge/arctic/ccpwrsumfindings.html>.
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.

### I.24.2 Proposed Data Sources for EIS

- Alaska Department of Fish and Game. 2018. Game Management Unit 26 Hunting Restrictions. <http://www.adfg.alaska.gov/index.cfm?adfg=huntingmaps.restrictionsbygmu&gmu=26>
- Alaska Department of Fish and Game. 2017. 2017-2018 Alaska Hunting Regulations.
- Christensen, N. and Christensen, L. 2009. Arctic National Wildlife Refuge Visitor Study: The Characteristics, Experiences, and Preferences of Refuge Visitors. Arctic National Wildlife Refuge,

Aldo Leopold Wilderness Research Institute. <http://arctic.fws.gov/pdf/visitorstudy.pdf>.

- USACE. 2012. Point Thomson Project EIS. Final Environmental Impact Statement. July 2012.
- USFWS. 2006. Refuge Management, Parts 603: National Wildlife Refuge System of Uses and Part 605: Wildlife-Dependent Recreation.
- USFWS. 2010. Public Use Summary Arctic National Wildlife Refuge. April 2010.
- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan. Appendix H Wilderness Review. Appendix I Wild and Scenic River Review.
- USFWS. 2015. Internet website: <https://www.fws.gov/refuge/arctic/ccpwrsumfindings.html>.
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the I002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.

#### **I.24.3 Data Needs**

- The following data are needed to support impact analysis on recreation opportunities:
  - Updated visitor use data
  - Updated animal harvest data for Game Management Unit 26C
  - A Reasonable Foreseeable Development Scenario (RFD) to predict future oil and gas development in the I002 Area and support the EIS. Necessary components of the RFD related to recreation include:
    - General location and extent of any new access roads, including ice roads and snow trails
    - General location and extent of any new sea or river ports
- General location and extent of any new air strips and helipads

### **I.25 VISUAL RESOURCES**

#### **I.25.1 Literature and Databases Reviewed**

- Arctic National Wildlife Refuge Comprehensive Conservation Plan and Final Environmental Impact Statement: Does not contain a visual resources discussion. Contains several general references to the overall scenery.

- Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Final Environmental Impact Statement: Does not contain a visual resources discussion.
- Rapid Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program: Does not contain a visual resources discussion. Report states that the effects of highest concern on visitor opportunities and experiences include “reduced scenic opportunities due to changes to apparent naturalness by the addition of man-made structures.” Report recommends “viewscape baseline study (including visible pollution plume resulting from air quality affecting viewscape) to document visual resource conditions and potential future changes to existing undeveloped viewshed.”
- Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan Public Comments (May 2012)

#### I.25.2 Proposed Data Sources for EIS

- Level III ecoregions map: <https://www.epa.gov/eco-research/ecoregion-download-files-state-region-10#pane-01>
- LANDFIRE maps: <https://www.landfire.gov/>
- USGS maps: <https://www.usgs.gov/products/maps/map-topics/overview>

#### I.25.3 Data Needs

- Landscape descriptions for topography, vegetation cover, water sources, human-made modifications, soil conditions, and geologic formations
- Public sensitivity (type of users, amount of use, public interest, adjacent land uses, and special areas)
- Sources of artificial light
- Broad landscape photos of proposed area, including from developed or settled areas and areas receiving frequent use by public

### I.26 TRANSPORTATION

#### I.26.1 Literature and Databases Reviewed

- BLM. 2012. National Petroleum Reserve-Alaska. Final Integrated Activity Plan/Environmental Impact Statement. November 2012.
- BLM. 2014. Supplemental Environmental Impact Statement for the Alpine Satellite Development Plan for the Proposed Greater Mooses Tooth One Development Project. October 2014.

- Christensen, N. and Christensen, L. 2009. Arctic National Wildlife Refuge Visitor Study: The Characteristics, Experiences, and Preferences of Refuge Visitors. Arctic National Wildlife Refuge, Aldo Leopold Wilderness Research Institute. <http://arctic.fws.gov/pdf/visitorstudy.pdf>.
- USACE. 2012. Point Thomson Project EIS. Final Environmental Impact Statement. July 2012.
- USFWS. 2006. Refuge Management, Parts 603: National Wildlife Refuge System of Uses and Part 605: Wildlife-Dependent Recreation.
- USFWS. 2010. Public Use Summary Arctic National Wildlife Refuge. April 2010.
- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan. Appendix H Wilderness Review. Appendix I Wild and Scenic River Review.
- USFWS. 2015. Internet website: <https://www.fws.gov/refuge/arctic/ccpwrsumfindings.html>.
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.

#### **I.26.2 Proposed Data Sources for EIS**

- Christensen, N. and Christensen, L. 2009. Arctic National Wildlife Refuge Visitor Study: The Characteristics, Experiences, and Preferences of Refuge Visitors. Arctic National Wildlife Refuge, Aldo Leopold Wilderness Research Institute. <http://arctic.fws.gov/pdf/visitorstudy.pdf>.
- USFWS. 2006. Refuge Management, Parts 603: National Wildlife Refuge System of Uses and Part 605: Wildlife-Dependent Recreation.
- USFWS. 2010. Public Use Summary Arctic National Wildlife Refuge. April 2010.
- USFWS. 2015. Arctic National Wildlife Refuge Revised Comprehensive Conservation Plan. Appendix H Wilderness Review. Appendix I Wild and Scenic River Review.
- USFWS. 2015. Internet website: <https://www.fws.gov/refuge/arctic/ccpwrsumfindings.html>.
- USFWS. 2018. Rapid- Response Resource Assessments and select References for the 1002 Area of the Arctic National Wildlife Refuge

in anticipation of an Oil and Gas Exploration, Leasing and Development Program per the Tax Act of 2017 Title II Sec 2000I.

### I.26.3 Data Needs

- The following data are needed to support impact analysis on recreation opportunities:
  - A Reasonable Foreseeable Development Scenario (RFD) to predict future oil and gas development in the 1002 Area and support the EIS. Necessary components of the RFD related to transportation include:
    - General location and extent of any new access roads, including ice roads and snow trails
    - General location and extent of any new sea or river ports
    - General location and extent of any new air strips and helipads
  - Aircraft landings and takeoffs at nearby landing strips (lower priority)
  - Commercial watercraft (e.g., barge) landings annually at nearby locations (lower priority)

## I.27 ECONOMY

### I.27.1 Literature and Databases Reviewed

- Previous EISs, EAs, and other studies relating to oil and gas development in the Alaska North Slope
- Arctic National Wildlife Refuge Comprehensive Conservation Plan
- Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998, Including Economic Analysis
- NPR-A FINAL Integrated Activity Plan/ Environmental Impact Statement
- Greater Mooses Tooth I Final SEIS
- Greater Mooses Tooth II Modified NEPA Analysis Document

### I.27.2 Proposed Data Sources for EIS

- Data that describes the existing conditions of the local, regional, and state economy are available in the public domain:
  - i. *Employment and income data.* Alaska Department of Labor and Workforce Development (ADOLWD) employment data for North Slope communities, the North Slope Borough, Alaska (statewide);
  - ii. *Revenue data for the State of Alaska.* Revenue Sources Book published by the Alaska Department of Revenue.

- iii. *Local and regional economic data.* Alaska Local and Regional Information (ALARI) published by ADOLWD provides data on population, number of resident workers by industry, worker characteristics, and others. The 2015 North Slope Borough Economic Profile and Census Report also provides detailed socioeconomic and demographic data for all the communities in the NSB region.
- iv. *NPR-A Impact Mitigation grants to communities.* Data on funds/grants received by North Slope communities from the NPR-A Impact Mitigation Program which is funded by royalties received from oil and gas activities in federal lands in the NPR-A.
- v. *Community Information.* Alaska Department of Commerce and Community Development (ADCCED) community database provides data on local public infrastructure (facilities and amenities), incorporation type, history and culture, public organizations.
- vi. *Local Government Audited Financial Statements/Budget documents.* ADCCED publishes financial statements and budget documents from Alaska local and regional governments.
- vii. *Information on Alaska Native Organizations.* Published data on Alaska native/tribal organizations in the North Slope.
- Potential data sources for the environmental consequences section include previous EISs/EAs of oil and gas development in the North Slope, the MAG-PLAN Alaska model, the revenue model developed by the ADNDR Division of Oil and Gas, the ADNDR cash flow model that provides metrics for economic viability of oil and gas field development in the North Slope, and previous onshore and offshore petroleum development economic impact studies conducted by Northern Economics.

### I.27.3 Data Needs

The following data will be needed for determining potential economic impacts of oil and gas development:

- *Description of potential oil and gas activities and timeframes under each alternative.* This will include scenarios or assumptions regarding exploration, development, and production activities (i.e., road/ice road construction, on-shore pipelines, processing facilities, camps, etc.) This will be the basis for quantifying the magnitude and scale of economic impacts. [Information will be developed by the Project team based on geological prospects, examples of scenarios from previous EISs/EAs in the North Slope, and subject matter experts]

- *Production volumes by year.* This data will be used to calculate potential royalty payments and other State and the Federal government tax payments. [Information will be developed by the Project team]
- *Oil price forecasts.* This information will be used to quantify potential royalty payments and other fiscal effects of the proposed project. Oil price projections can be obtained from the Alaska Department of Revenue (ADOR Revenue Sources) and from the Energy Information Administration (EIA) Annual Outlook. Alternatively, a constant price scenario could be adopted by the Project team.
- *Construction costs (CAPEX) and construction schedule.* This information will be used to calculate indirect (or multiplier) effects of construction spending as well as potential government revenues including oil and gas property taxes and state corporate income taxes. This data can also be used to estimate direct employment requirements associated with the construction activities. The MAG-PLAN model and data from previous oil and gas development studies in the North Slope can be used to develop rough-order of magnitude cost estimates.
- *Annual operations and maintenance costs of the facilities.* This information will be used to calculate indirect (or multiplier) effects of O&M spending as well as potential government revenues including state corporate income taxes. This data can also be used to estimate direct employment requirements associated with the operations phase (if direct jobs data are not available). The MAG-PLAN model and data from previous oil and gas development studies in the North Slope can be used to develop rough-order of magnitude cost estimates.
- *Tariffs and transportation costs.* This information will be used to calculate netback prices which are the bases for calculating royalty payments. Data on existing tariffs and transportation costs are published by the Alaska Department of Revenue (Revenue Sources Book).
- *Land ownership.* This will be used to determine potential royalty and right-of-way payments that would accrue to the landowners.
- *Gravel sources and quantities.* The data will be used to determine potential revenues to local/regional entities that would benefit from construction/development activities associated with the proposed project. If data are not available, gravel royalties/sales will be identified as a potential revenue source but will not be quantified.



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USFWS

**From:** [cmccaa@blm.gov](mailto:cmccaa@blm.gov) on behalf of [FDO CYFO GeneralDelivery, BLM AK](#)  
**Subject:** BLM Alaska Newsletter about Streamlining NEPA and Planning  
**Date:** Tuesday, June 19, 2018 1:47:28 PM  
**Attachments:** [BLM AK Planning Newsletter June 2018.pdf](#)

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Greetings Central Yukon Resource Management Plan email list!

Attached is a Bureau of Land Management Alaska newsletter explaining how we are streamlining our National Environmental Policy Act (NEPA) and Planning processes.

As always, thank you for your continued interest in the Central Yukon RMP!

[Central Yukon RMP web page](#)

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U.S. Department of the Interior
Bureau of Land Management

Alaska NEPA News

June 2018

Pump Station 4 of the Trans-Alaska Pipeline

As you may be aware, the Bureau of Land Management (BLM) is streamlining to reform our planning and National Environmental Policy Act (NEPA) processes. For many years, we've heard our processes need to be faster, less expensive, and result in easier to understand documents. The streamlining initiative aims to meet these goals using wide-ranging methods, such as improving internal business practices; engaging more effectively with stakeholders; and, modernizing our data and technology practices.

In *Secretarial Order 3355*, the Secretary of the Interior directed the BLM to complete a report describing high-level ideas for streamlining our NEPA processes. In August 2017, Deputy Secretary David Bernhardt issued a response to that report request, setting page and time limits for environmental impact statements (EISs) and directing the BLM to propose time and page limits for environmental assessments (EAs). Bernhardt's response and the BLM's report released on Nov. 2, 2017.

Nationally, the BLM manages more than 10 percent of the land surface and 30 percent of the mineral resources in the United States. Land use plans manage activities and uses taking place on BLM-managed public lands. The BLM completes about 5,000 NEPA documents each year, analyzing the impacts of activities on the nation's public lands. In Alaska, BLM manages 70+ million acres, about the same size as Arizona.

Over the coming months, BLM Alaska is prioritizing its NEPA projects to meet Alaska's public lands' needs. We are developing project timelines to meet the Secretary's goals. Once we have our project priorities, we will provide continuing outreach via BLM Alaska's quarterly publication *frontiers* and on our BLM Alaska website (www.blm.gov/alaska) under Planning Efforts.

Streamlining the NEPA Process

The BLM's report to the Secretary includes more than 100 streamlining recommendations, such as:

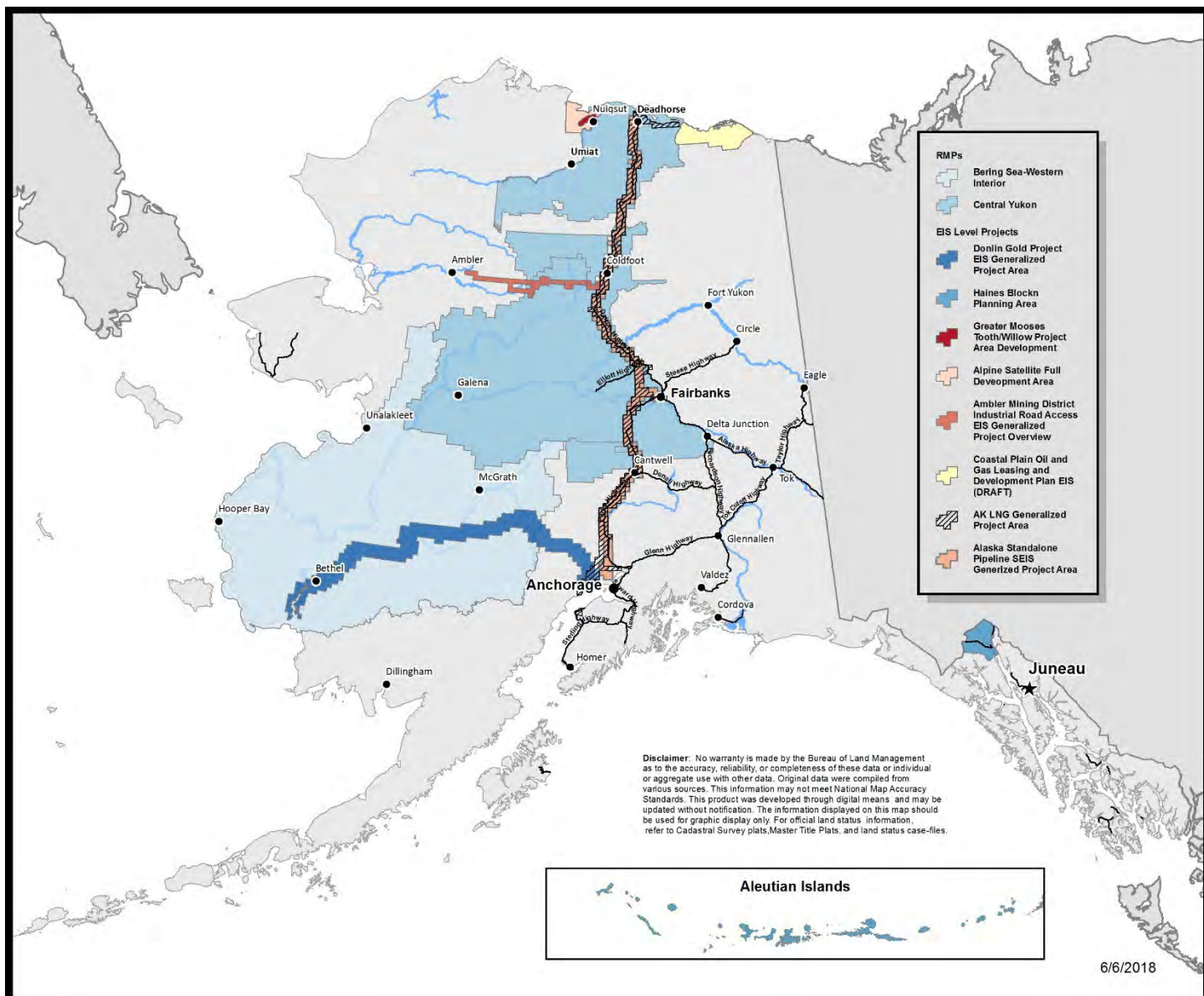
- Reduce duplicative and disproportionate analyses;
- Foster greater transparency in NEPA processes; and,
- Integrate the needs of state and local governments, tribal partners, and other stakeholders.

For example, the BLM proposes to:

- Modify existing and establish new categorical exclusions (CX);

- Establish data sharing agreements to ensure seamless access to critical data sets for planning decisions; and,
- Develop national-level Memoranda of Understanding (MOUs) between the BLM and state and local government associations to formalize regular coordination outside individual planning or project-specific NEPA processes.

The BLM engaged with stakeholders including state and local governments and tribal partners, and solicited public input to develop the report on improving planning and NEPA processes. We will continue this engagement as streamline our processes.



Alaska NEPA Projects

The following are current BLM Alaska NEPA projects:

- Alpine Satellite Development Plan for Proposed Greater Mooses Tooth 2 Development Project Supplemental EIS
- Bering Sea-Western Interior RMP
- Central Yukon RMP
- Coastal Plain Oil and Gas Leasing and Development Plan EIS
- Ring of Fire RMP Haines Amendment
- Road to Ambler/Ambler Mining District Industrial Road Access EIS
- Willow Oil and Gas Master Development Plan EIS

BLM Alaska is not the lead for these ongoing projects, but as a cooperating agency, these projects use our staff time and resources:

- Alaska LNG Pipeline EIS
- Alaska Standalone Pipeline SEIS
- Donlin Gold Project EIS

These projects should provide a clear picture of our current workload and why we need to adjust to meet the Secretary's intent.



June 18, 2018

Bureau of Land Management, Alaska State Office
Attention: Coastal Plain EIS
222 West 7th Avenue, #13
Anchorage, AK 99513-7599

This is a submission from the Government of Canada (Canada) in response to the "Notice of Intent to Prepare an Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, Alaska" published in the U.S. Federal Register on 20 April 2018.

Canada is concerned about the potential transboundary impacts of oil and gas exploration and development planned for the Arctic National Wildlife Refuge (ANWR) Coastal Plain, including impacts on shared species that migrate between our countries, as well as impacts on our Indigenous peoples, including their customary and traditional use of Porcupine Caribou. Canada is particularly concerned that oil and gas exploration and development (including pre- and post-lease activities such as seismic and drilling exploration and transportation of oil and gas from the Coastal Plain) will negatively affect the long-term reproductive success of the Porcupine Caribou herd. This may occur by direct effects such as behavioral changes and physiological stress, and by affecting the habitat that the herd relies on for calving, post-calving, migration and insect relief.

Canada and the United States have a long and successful history of cooperation and coordination for activities that can have transboundary impacts. We have four agreements relating to migratory species that are directly relevant to this issue:

- Porcupine Caribou - the 1987 *Agreement Between the Government of Canada and the Government of the United States of America on the Conservation of the Porcupine Caribou Herd* (Porcupine Caribou Agreement);
- Polar bears - the 2008 *Memorandum of Understanding between Environment and Climate Change Canada and the United States Department of the Interior for the Conservation and Management of Shared Polar Bear Populations* and the multilateral 1973 *Agreement on the Conservation of Polar Bears*; and
- Migratory birds - the 1916 *Convention for the Protection of Migratory Birds in the United States and Canada*.

In terms of the Porcupine Caribou herd, our countries have recognized under the Porcupine Caribou Agreement the importance of cooperation and coordination for the long-term conservation of the herd and its habitat, a shared natural resource. Article 3(c) of the agreement provides that activities requiring a Party's approval having a potential impact on the conservation of the herd or its habitat be subject to impact assessment and review consistent with domestic laws, regulations and processes. With regard to any impact assessment of oil and gas exploration and development, Canada notes that Section 1005 of the *Alaska National Interest Lands Conservation Act* requires the U.S. Secretary of the Interior to consult with the appropriate agencies of the Government of Canada, particularly with respect to the Porcupine Caribou herd.

Given these provisions, and the importance that Canada and the United States mutually ascribe in taking appropriate actions to conserve migratory species and their habitat, Canada would therefore request that it be notified and engaged throughout the Environmental Impact Statement (EIS) process. Canada would also like to request that public information sessions be held in Canada during the EIS process. There has already been significant, demonstrated interest of Canadian stakeholders in this process.

While Canada welcomes the opportunity to contribute to the EIS process, it nevertheless views the process as distinct and separate from the treaty-based mechanisms for cooperation and consultation that Canada and the United States have concluded to protect migratory species. Canada has separately sent a diplomatic note to the U.S. Department of State outlining our interest in and expectation of working with the United States to further convey our views through collaborative consultation and cooperation.

Scoping Input

Consistent with established *National Environmental Policy Act* practice, we trust that the EIS process will incorporate a detailed consideration of transboundary impacts, with particular consideration for impacts on the Porcupine Caribou herd and other shared migratory species.

Below, please find our recommendations for issues that should be included within the scope of the EIS.

General Topics

Within the EIS, Canada recommends that the following broad topics be fully described:

- The Coastal Plain environment and valued ecosystem components;
- Potential impacts to key species of the proposed leasing, as well as impacts of pre- and post-lease activities such as seismic and drilling exploration, development, and transportation of oil and gas in and from the Coastal Plain and additional induced development (i.e. development that becomes likely and economically feasible when infrastructure established as part of the current leasing options). This would include describing the impacts of malfunctions, such as spills;

- Clear statements on the significance of those potential impacts;
- Project (i.e. the leasing) alternatives or alternative means for the project;
- Critical thresholds or limits to development, and the legislative framework to support them;
- Additive, multiplicative, and synergistic cumulative effects of this proposed leasing and induced development on key species (in relation to existing natural and anthropogenic stressors); and
- The requirements for effectiveness monitoring (of any proposed mitigations relevant to this phase of the process) including listing accountable agencies for any monitoring.

Content Common to all Key Species

For Porcupine Caribou, polar bear, and migratory birds, Canada requests the EIS examine at least the following facets:

- A complete description of the use and importance of the Coastal Plain in ANWR to movements of each species (and each life stage), during each season of the year, and across multiple years (including decades – such as on the scale of time as major climate forcing cycles such as the Pacific Decadal Oscillation). Descriptions should include scientifically defensible methods of delineation and rating of areas for importance;
- The likely effects of development on space use and movement by each of the key species should be examined, including abandonment or stranding of specific seasonal habitats;
- In addition to those spatial and temporal use analyses, an examination of how that use may change in the future with changes to spring snow melt and plant phenology, changes in precipitation, temperature, permafrost, and offshore ice conditions and extent (as it influences on-shore use by the species);
- An examination of scenarios of potential development / leasing and how that may affect each species within the spatial and temporal bounds and environmental changes listed above. This analysis should be comprehensive, including energy balance changes and impacts to reproduction, predator-prey dynamics, contaminants (including dust), increased mortality, and other direct and indirect effects on the key species and issues;
- An analysis of how any of the potential, predicted changes from development may impact subsistence harvesting of the above-mentioned species. This analysis should not be limited to only the harvesters that may access those species during the time they are in the Coastal Plain (i.e. transboundary effects on subsistence harvesting should be fully analyzed); and
- A comprehensive, up-to-date review of the potential impacts of oil and gas development in an arctic environment, including suggested mitigations and documentation of their effectiveness, including from grey literature.

Species-specific Content

Within the general umbrella of topics covered above, species-specific analyses should include:

Porcupine Caribou

- A description of the reproductive biology and ecology of the Porcupine Caribou herd including comparisons to other migratory herds (specifically including the central arctic caribou herd), to point out similarities and differences, and the importance of calving grounds to migratory tundra caribou populations;
- Consideration of a full-development scenario for the Coastal Plain and how it would affect the Porcupine Caribou herd demographics rates, including recruitment, adult female survival, and the growth rate of the population (λ) and an examination of the likely mechanisms of change. As part of this consideration, the following questions should be addressed:
 - How will recruitment metrics such as gestation, age at first parturition, and calf survival change?
 - How will metrics for adult cows, such as body condition, reproductive status, and survival be altered as a direct result of impacts?
 - Can any lag effects on cow or calf vital rates be anticipated (e.g. will there be carry-over effects from exposure to development on the calving grounds that affect vital rates in other parts of the seasonal cycle)?
 - Can a change in age structure within the herd be anticipated?
 - How might these parameters vary in the context of climate variability and change, including changes to forage quality? Could other seasons buffer the impacts caused by development?
 - At what herd size and trend would might the herd to be limited by the interaction between the development and the herd's inability to increase quickly (i.e., recruitment sink)?
 - How much would likely effects on the herd vary depending on herd size (large, medium, small) and trend (increasing, stable, decreasing)?
- A description and explanation of the strategy by Porcupine Caribou to choose specific, but varying calving areas each year, how that contributes to overall reproductive success, and what the effects of development may do to this strategy and herd success.

Polar Bears

- A description of the potential for human-bear interactions and incidental take of polar bears during exploration, development and production. Specifically, given an increased presence of humans on the landscape, coupled with polar bears spending increased time on land in association with sea ice loss caused by climate change, the potential for human-bear interactions is likely to increase. Unless steps are taken to reduce the frequency of conflicts, both human life and polar bear life will be put at risk. From a conservation perspective, additional human-caused polar bear mortality is a conservation threat in subpopulation that is predicted to decline due to deteriorating ice conditions; and

- A description of the potential loss of maternity denning habitat or direct reproductive success that may result from disturbance (including during seismic exploration), as well as describing the potential effects of disturbing denning females, particularly within the 32 km coastline buffer identified as critical habitat. An increasing proportion of polar bears in the Southern Beaufort Sea subpopulation are believed to den on land in association with sea ice loss.

Migratory Birds

- An examination of the impacts on shared populations, such as Snow Geese, with particular consideration of shared populations using the Coastal Plain that may have conservation concerns, including such species as Buff-breasted Sandpiper, Whimbrel, Ruddy Turnstone, Stilt Sandpiper, Pectoral Sandpiper, American Golden Plover, and Yellow-billed Loon.

Additional Considerations

Canada also requests that the following information be included in the EIS:

- A description of any mitigations or practices that will be required of any development in ANWR, understanding that project-specific mitigations will be determined in a separate regulatory process. For instance, road bed construction guidelines, ice-road requirements, predator management plans, traffic management plans, pipeline heights, well pad spacing seasonal restrictions or “stop work” situations, areas off limits to development within the Coastal Plain; and
- A thorough analysis of the likely components of projects that will fall outside the ‘2000 acre limit’ that is described in H.R. 1 (Public Law 115-97), Section 20001(c)(3). Specifically, how roads, gravel mines (borrow pits), exploration or delineation wells, water reservoir pits, or other features might be limited or accounted for in the footprint of induced development. Though gravel piers for pipelines are included, the footprint of the pipeline itself, how it fragments habitat or impedes movement should be included. The zone of influence of development, rather than just the physical structures, should be a part of the “footprint”.
- This analysis should specify how much of the Coastal Plain could be developed within a ‘2000 acre limit’ as variously defined.

To help ensure the EIS contains the best analyses, Canada is pleased to provide data relevant to the EIS process and welcomes requests for such data from the United States.

Canada would also like to note that the International Porcupine Caribou Board, formed under the Porcupine Caribou Agreement, is a key bilateral mechanism to advise the Governments of Canada and the United States on the impact of proposed development in the Coastal Plain and to share information and consider actions for the protection of the herd and its habitat. Canada thanks the United States for its work supporting the Board and welcomed the recent news that the two remaining vacancies for U.S. members may be filled by late June and that the board could meet before the end of September. Canada welcomes this and looks forward to the opportunity to discuss this issue with the United States.

Canada appreciates the opportunity to provide input into the scoping process for the EIS for the Coastal Plain Oil and Gas Leasing Program and thanks the Bureau of Land Management for considering these aspects throughout the process. We look forward to collaboration and consultation throughout the EIS process.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kevin Thompson', with a stylized flourish extending to the right.

Kevin Thompson
Director General, North America Strategy Bureau

From: [Chad Ricklefs](#)
To: [Amy Lewis](#); [Amy Cordle](#); [liz.sears@srbak.com](#); [Angie Adams](#); [jake.anders@srbak.com](#); [larsan@dowl.com](#); [sbishop@abrinc.com](#); [srb@srbak.com](#); [patrick.burden@norecon.com](#); [bburgess@abrinc.com](#); [Lindsay Chipman](#); [leah.cuyano@norecon.com](#); [mike.downs@norecon.com](#); [Kevin Doyle](#); [michael.fisher@norecon.com](#); [jifrost@abrinc.com](#); [Zoe Ghali](#); [Hayes, Miriam \(Nicole\)](#); [Peter Gower](#); [Derek Holmgren](#); [paul.lawrence@srbak.com](#); [ed.liebsch@hdrinc.com](#); [amorill@dowl.com](#); [Dan Morta](#); [Katie Patterson](#); [ppribyl@dowl.com](#); [aprichard@abrinc.com](#); [Kevin Rice](#); [don.schug@norecon.com](#); [jseigle@abrinc.com](#); [sean.teeter@hdrinc.com](#); [patricia.terhaar@hdrinc.com](#); [Meredith Zaccherio](#); [jon.zufelt@hdrinc.com](#); [wendy_loya@fws.gov](#); [steve.masterman@alaska.gov](#); [paul.decker@alaska.gov](#); [rbrumbau@blm.gov](#); [jchmielowski@blm.gov](#); [jgalluzz@blm.gov](#); [sguyer@blm.gov](#); [kpeck@blm.gov](#); [remnitz@blm.gov](#); [r2king@blm.gov](#); [jkeeney@blm.gov](#); [tstclair@blm.gov](#); [memiller@nps.gov](#); [mwhitman@blm.gov](#); [ctburns@blm.gov](#); [craig.perham@boem.gov](#); [david.rogers@alaska.gov](#); [ejulianus@blm.gov](#); [sdallen@blm.gov](#); [dwixon@blm.gov](#); [rgoodwin@blm.gov](#); [tbicka@blm.gov](#); [slongan@blm.gov](#); [mmccrum@blm.gov](#); [kdebenham@blm.gov](#); [chillis@blm.gov](#); [chamfler@blm.gov](#); [patrick_odell@fws.gov](#); [joshua_rose@fws.gov](#); [paul_leonard@fws.gov](#); [edward_decleva@fws.gov](#); [peter_butteri@fws.gov](#); [tim_allen@fws.gov](#); [catherine_collins@fws.gov](#); [randy_j_brown@fws.gov](#); [christopher_latty@fws.gov](#); [eric_taylor@fws.gov](#); [ryan_r_wilson@fws.gov](#); [stephen_arthur@fws.gov](#); [hollis_twitchell@fws.gov](#); [carl_johnson@fws.gov](#); [joshua_ream@fws.gov](#); [susan_lakomski@fws.gov](#); [jennifer_reed@fws.gov](#); [angela_matz@fws.gov](#); [roger_kaye@fws.gov](#); [john_brewer@fws.gov](#); [john_w_martin@fws.gov](#)
Cc: [Marcia Rickey](#); [Kohl, Anna J.](#)
Subject: [EXTERNAL] Coastal Plain Oil and Gas Leasing Program EIS: Affected Environment Kick-off
Date: Tuesday, June 19, 2018 9:12:05 PM
Attachments: [Coastal-EIS_contact_list_20180619.pdf](#)

A contact list cross walking BLM IDT specialists and EMPSi ID team specialists is attached. Please review for accuracy and send any comments to Amy Lewis (amy.lewis@empsi.com). We will discuss communication between ID team specialists on tomorrow's call.

Chad Ricklefs, AICP

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direct: 303-495-5129 main: 303-447-7160 fax: 866-625-0707

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EIS Role or Section	BLM Lead	BLM Contact Information	EMPSi Team (*primary author)	EMPSi Team Contact Information
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GIS	Cathy Hillis	907-271-3273 chillis@blm.gov	Marcia Rickey, GISP	303-447-7160 marcia.rickey@empai.com
	Cindy Hamfler	907-474-2213 chamfler@blm.gov	Jenna Jonker	303-447-7160 jenna.jonker@empai.com
			Francis Craig	303-447-7160 francis.craig@empai.com
Human Environment Lead			Angie Adams	303-447-7160 angie.adams@empai.com
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Socioeconomics Lead			Zoe Ghali	303-447-7160 zoe.ghali@empai.com
Non-Renewable Resources Lead			Katie Patterson, JD	303-447-7160 katie.patterson@empai.com
EMPSi Supplemental Core Team				
CARA / Comment Analysis Lead			Sean Cottle	775-323-1433 sean.cottle@empai.com
Decision File/ Administrative Record Lead			Sarah Crump	303-447-7160 sarah.crump@empai.com
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Section 810 Hearings Lead			Elizabeth Sears	907-276-8222 liz.sears@srbak.com

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			Amy Cordle	202-567-6790 amy.cordle@empai.com
Air Quality	Alan Peck	907-271-4411 kpeck@blm.gov	Amy Cordle	202-567-6790 amy.cordle@empai.com
Physiography	Steve Masterman (DNR)	907-451-5007 steve.masterman@alaska.gov	Patricia Terhaar, PG	763-591-6618 patricia.terhaar@hdrinc.com
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	Dave Rogers (ADFG)	907-465-6436 david.rogers@alaska.gov	Kevin Rice	303-447-7160 kevin.rice@empai.com
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			Kevin Rice	303-447-7160 kevin.rice@empai.com
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From: [Julianus, Erin](#)
To: [Paul Lawrence](#)
Cc: [Amy Lewis](#); [Hollis Twitchell](#); [Hayes, Miriam \(Nicole\)](#); [Stephen Braund](#); [Liz Sears](#); [Joseph Keeney](#); [Chad Ricklefs](#)
Subject: Re: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep
Date: Friday, June 22, 2018 11:09:02 AM

Hi Paul,

I will be out of the office on the 26th but am available all day on Monday the 25th. Does 11am work?

Let me know if I need to prepare anything specific. It would be good to bring Hollis in to the discussion as well. Hollis, are you available?

Thanks,

Erin

Erin Julianus
Wildlife Biologist
BLM Central Yukon Field Office
(907) 474-2358

On Thu, Jun 21, 2018 at 11:18 AM, Paul Lawrence <Paul.Lawrence@srbak.com> wrote:

Hi Erin,

We would like to move forward in setting up a time to discuss your 810 analysis exercise below and general approaches for the subsistence and sociocultural sections. What is your availability next Monday or Tuesday? Our schedule is open except for a 3pm meeting on 6/25 and an 11am meeting on 6/26.

Also, as an FYI, Stephen Braund, Liz Sears, and myself will all be responsible for writing the subsistence and sociocultural sections of the EIS as well as assisting you in the preparation of the 810 analysis. Please address all subsistence and sociocultural related emails to myself and cc Stephen and Liz. It is our understanding that Nicole Hayes, Chad Ricklefs, and Amy Lewis also want to be ccd on communication between BLM and EMPSi/SRB&A.

We look forward to working with you on this project.

Thanks,

Paul Lawrence

Senior Research Associate
Stephen R. Braund & Associates
P.O. Box 10-1480
Anchorage, Alaska 99510-1480
907-276-8222 (office)
907-786-8409 (direct)
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<http://www.srbak.com/>

From: Chad Ricklefs <chad.ricklefs@empsi.com>
Sent: Tuesday, June 19, 2018 8:15 AM
To: Julianus, Erin <ejulianus@blm.gov>
Cc: Amy Lewis <amy.lewis@empsi.com>; Hayes, Miriam (Nicole) <mnhayes@blm.gov>;
Stephen Braund <Stephen.Braund@srbak.com>; Paul Lawrence
<Paul.Lawrence@srbak.com>; Liz Sears <liz.sears@srbak.com>; Joseph Keeney
<jkeeney@blm.gov>
Subject: RE: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis
prep

Erin,

Thank you for completing this exercise. As we kickoff Chapter 3 this week, please work with Stephen, Paul and Liz during your one-on-one teleconference calls to determine which communities to carry forward for detailed analysis.

Chad

Chad Ricklefs, AICP
EMPSi Environmental Management and Planning Solutions, Inc.
[3005 Center Green Drive, Suite 205](#)
Boulder, CO 80301
direct: 303-495-5129 main: 303-447-7160 fax: 866-625-0707

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From: Julianus, Erin [<mailto:ejulianus@blm.gov>]
Sent: Friday, June 15, 2018 2:52 PM
To: Chad Ricklefs <chad.ricklefs@emp.si.com>
Cc: Amy Lewis <amy.lewis@emp.si.com>; Hayes, Miriam (Nicole) <mnhayes@blm.gov>; Stephen Braund <Stephen.Braund@srba.com>; Paul Lawrence <Paul.Lawrence@srba.com>; Liz Sears <liz.sears@srba.com>; Joseph Keeney <jkeeney@blm.gov>
Subject: Re: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep

Okay here we go. Attached are the following:

- 1) List of communities with positive customary and traditional use determinations for the Central Arctic Herd (CAH)
- 2) List of communities with positive customary and traditional use determinations for the Porcupine Caribou Herd (PCH)
- 3) Map highlighting C&T communities, relevant game management units, and the range of the CAH
- 4) Map highlight C&T communities, relevant game management units, and the range of the PCH
- 5) A brief description of the rationale used to create these lists of communities (for the admin record)

My sense is that changes to resource "availability" and "access" would be limited to those communities whose subsistence use areas overlap the Project Area (Kaktovik, Arctic

Village). I do think that, if the impact analysis demonstrates that development on the calving grounds would impact herd health and long term size, then changes in caribou "abundance" would affect, potentially significantly, those communities far from the project area (specifically the Gwich'in communities along the Yukon). That's what I want to make sure we capture.

Steve, Paul, and Liz - thank you so much for being willing to take on this extra work. I think covering our bases in the EIS will simplify the 810 Evaluation quite a bit. I really appreciate it. I think a lot of these communities can be quickly eliminated from further review simply by looking at the community's subsistence use area and making sure it does not overlap with the PCH or CAH ranges, or reviewing harvest data and finding that very few caribou are harvested.

I'll be around all next week. Let me know how I can help.

Erin

Erin Julianus

Wildlife Biologist

BLM Central Yukon Field Office

(907) 474-2358

On Fri, Jun 15, 2018 at 9:21 AM, Julianus, Erin <ejulianus@blm.gov> wrote:

Hi Chad, I almost finished yesterday but didn't quite make it. Will send a map and list of communities this morning.

Erin

Erin Julianus

Wildlife Biologist

BLM Central Yukon Field Office

(907) 474-2358

On Fri, Jun 15, 2018 at 9:19 AM, Chad Ricklefs <chad.ricklefs@empsi.com> wrote:

Hi Erin,

Stephen Braund & Associates will be starting their affected environments next week and will need to know the list of communities they need to include in their analysis to ensure they cover areas you will need for the 810 analysis. Do you have an idea when you will be complete with this mapping exercise?

Cheers,

Chad

Chad Ricklefs, AICP

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From: Julianus, Erin [mailto:ejulianus@blm.gov]

Sent: Wednesday, June 6, 2018 10:57 AM

0000011201

To: Chad Ricklefs <chad.ricklefs@empai.com>
Cc: Amy Lewis <amy.lewis@empai.com>; Hayes, Miriam (Nicole) <mnhayes@blm.gov>; Stephen Braund <Stephen.Braund@srbak.com>; Paul Lawrence <Paul.Lawrence@srbak.com>; Liz Sears <liz.sears@srbak.com>; Joseph Keeney <jkeeney@blm.gov>
Subject: Re: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep

Hi all,

Thanks for the meeting and our good discussion yesterday. I meant to briefly touch on this while we were together on the phone. The 810's evaluation space is limited to three aspects as stated in ANILCA:

1) impacts to abundance of harvestable resources - "will there be less of resource x as a result of the proposed action and alternatives?"

2) impacts to resource availability - "will distribution of resource x be affected by the proposed action and alternatives?"

and 3) impacts on access to harvestable resources - "will legal or physical barriers be created as a result of the proposed action which will inhibit or prevent subsistence users from accessing resources?"

I know the EIS will cover more topics than these, particularly in the sociocultural and subsistence sections, but content related to abundance, availability and access is what I'll be drawing on to write the 810.

Most of you are probably aware of this but I figured it was worth a follow-up. I'm grateful you're all on board! Will get those C&T maps out as fast as I can.

Erin

Erin Julianus

Wildlife Biologist

BLM Central Yukon Field Office

(907) 474-2358

On Tue, Jun 5, 2018 at 7:20 AM, Chad Ricklefs <chad.ricklefs@empsi.com> wrote:

Agenda for today's call.

- Clarification of SRB&A's role in preparation of the Section 810
- Clarification of the schedule for Section 810 preparation
- Does BLM have a prior 810 analysis or example to use as a guide?
- What study communities are to be included in the Section 810 analysis?
- Discussion of SRB&A's role in the significance determination
- Other Section 810 guidance from BLM?

Chad Ricklefs, AICP

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-----Original Appointment-----

From: Amy Lewis

Sent: Friday, June 1, 2018 3:00 PM

To: Amy Lewis; Chad Ricklefs; Hayes, Miriam (Nicole); Stephen Braund; Paul

0000011203

Lawrence; Liz Sears; erin.julianus@blm.gov

Cc: ejulianus@blm.gov

Subject: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep

When: Tuesday, June 5, 2018 2:00 PM-3:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where: (b) (5) CIP; Passcode: (b) (5) CIP

Purpose: Coastal Plain Leasing EIS; Section 810 analysis coordination

Access Number: (b) (5) CIP

Passcode: (b) (5) CIP

Any additional materials or agenda items will be sent separately prior to the call.

Please forward this invite to anyone that I might have missed in the distribution list.

Thanks,

Amy

From: [Paul Lawrence](#)
To: [Julianus, Erin](#); [Hollis Twitchell](#)
Cc: [Amy Lewis](#); [Hayes, Miriam \(Nicole\)](#); [Stephen Braund](#); [Liz Sears](#); [Joseph Keeney](#); [Chad Ricklefs](#); [Zoe Ghali](#)
Subject: RE: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep
Date: Friday, June 22, 2018 12:41:22 PM

Hi Erin,

Yes, 11am on 6/25 will work for us. I'll send out a teleconference invite shortly.

We can also discuss the sociocultural section approach; I see you are our BLM counterpart for that section too.

Hollis, if you can't attend the teleconference, we can give you a separate call. We think your input would be valuable. Just let us know.

Thanks,
Paul

From: Julianus, Erin <ejulianus@blm.gov>
Sent: Friday, June 22, 2018 9:08 AM
To: Paul Lawrence <Paul.Lawrence@srbak.com>
Cc: Amy Lewis <amy.lewis@emp.si.com>; Hollis Twitchell <hollis_twitchell@fws.gov>; Hayes, Miriam (Nicole) <mnhayes@blm.gov>; Stephen Braund <Stephen.Braund@srbak.com>; Liz Sears <liz.sears@srbak.com>; Joseph Keeney <jkeeney@blm.gov>; Chad Ricklefs <chad.ricklefs@emp.si.com>
Subject: Re: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep

Hi Paul,

I will be out of the office on the 26th but am available all day on Monday the 25th. Does 11am work?

Let me know if I need to prepare anything specific. It would be good to bring Hollis in to the discussion as well. Hollis, are you available?

Thanks,

Erin

Erin Julianus
Wildlife Biologist
BLM Central Yukon Field Office
(907) 474-2358

On Thu, Jun 21, 2018 at 11:18 AM, Paul Lawrence <Paul.Lawrence@srbak.com> wrote:

0000011205

Hi Erin,

We would like to move forward in setting up a time to discuss your 810 analysis exercise below and general approaches for the subsistence and sociocultural sections. What is your availability next Monday or Tuesday? Our schedule is open except for a 3pm meeting on 6/25 and an 11am meeting on 6/26.

Also, as an FYI, Stephen Braund, Liz Sears, and myself will all be responsible for writing the subsistence and sociocultural sections of the EIS as well as assisting you in the preparation of the 810 analysis. Please address all subsistence and sociocultural related emails to myself and cc Stephen and Liz. It is our understanding that Nicole Hayes, Chad Ricklefs, and Amy Lewis also want to be ccd on communication between BLM and EMPSi/SRB&A.

We look forward to working with you on this project.

Thanks,
Paul Lawrence
Senior Research Associate
Stephen R. Braund & Associates
P.O. Box 10-1480
Anchorage, Alaska 99510-1480
907-276-8222 (office)
907-786-8409 (direct)
paul.lawrence@srbak.com
<http://www.srbak.com/>

From: Chad Ricklefs <chad.ricklefs@empai.com>

Sent: Tuesday, June 19, 2018 8:15 AM

To: Julianus, Erin <ejulianus@blm.gov>

Cc: Amy Lewis <amy.lewis@empai.com>; Hayes, Miriam (Nicole) <mnhayes@blm.gov>; Stephen Braund <Stephen.Braund@srbak.com>; Paul Lawrence <Paul.Lawrence@srbak.com>; Liz Sears <liz.sears@srbak.com>; Joseph Keeney <jkeeney@blm.gov>

Subject: RE: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep

Erin,

Thank you for completing this exercise. As we kickoff Chapter 3 this week, please work with Stephen, Paul and Liz during your one-on-one teleconference calls to determine which communities to carry forward for detailed analysis.

Chad

Chad Ricklefs, AICP

EMPSi Environmental Management and Planning Solutions, Inc.

[3005 Center Green Drive, Suite 205](#)

Boulder, CO 80301

direct: 303-495-5129 main: 303-447-7160 fax: 866-625-0707

www.EMPSi.com Twitter: EMPSInc Facebook: EMPSi

0000011206

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From: Julianus, Erin [<mailto:ejulianus@blm.gov>]

Sent: Friday, June 15, 2018 2:52 PM

To: Chad Ricklefs <chad.ricklefs@empai.com>

Cc: Amy Lewis <amy.lewis@empai.com>; Hayes, Miriam (Nicole) <mnhayes@blm.gov>; Stephen Braund <Stephen.Braund@srbak.com>; Paul Lawrence <Paul.Lawrence@srbak.com>; Liz Sears <liz.sears@srbak.com>; Joseph Keeney <jkeeney@blm.gov>

Subject: Re: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep

Okay here we go. Attached are the following:

- 1) List of communities with positive customary and traditional use determinations for the Central Arctic Herd (CAH)
- 2) List of communities with positive customary and traditional use determinations for the Porcupine Caribou Herd (PCH)
- 3) Map highlighting C&T communities, relevant game management units, and the range of the CAH
- 4) Map highlight C&T communities, relevant game management units, and the range of the PCH
- 5) A brief description of the rationale used to create these lists of communities (for the admin record)

My sense is that changes to resource "availability" and "access" would be limited to those communities whose subsistence use areas overlap the Project Area (Kaktovik, Arctic Village). I do think that, if the impact analysis demonstrates that development on the calving grounds would impact herd health and long term size, then changes in caribou "abundance" would affect, potentially significantly, those communities far from the project area (specifically the Gwich'in communities along the Yukon). That's what I want to make sure we capture.

Steve, Paul, and Liz - thank you so much for being willing to take on this extra work. I think covering our bases in the EIS will simplify the 810 Evaluation quite a bit. I really appreciate it. I think a lot of these communities can be quickly eliminated from further review simply by looking at the community's subsistence use area and making sure it does not overlap with the PCH or CAH ranges, or reviewing harvest data and finding that very few caribou are harvested.

I'll be around all next week. Let me know how I can help.

Erin

Erin Julianus
Wildlife Biologist
BLM Central Yukon Field Office
(907) 474-2358

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Erin Julianus
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Cheers,
Chad

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From: Julianus, Erin [mailto:ejulianus@blm.gov]

0000011208

Sent: Wednesday, June 6, 2018 10:57 AM

To: Chad Ricklefs <chad.ricklefs@empfi.com>

Cc: Amy Lewis <amy.lewis@empfi.com>; Hayes, Miriam (Nicole) <mnhayes@blm.gov>; Stephen Braund <Stephen.Braund@srba.com>; Paul Lawrence <Paul.Lawrence@srba.com>; Liz Sears <liz.sears@srba.com>; Joseph Keeney <jkeeney@blm.gov>

Subject: Re: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep

Hi all,

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Most of you are probably aware of this but I figured it was worth a follow-up. I'm grateful you're all on board! Will get those C&T maps out as fast as I can.

Erin

Erin Julianus
Wildlife Biologist
BLM Central Yukon Field Office
(907) 474-2358

On Tue, Jun 5, 2018 at 7:20 AM, Chad Ricklefs <chad.ricklefs@empfi.com> wrote:

Agenda for today's call.

- Clarification of SRB&A's role in preparation of the Section 810

Clarification of the schedule for Section 810 preparation

- Does BLM have a prior 810 analysis or example to use as a guide?
- What study communities are to be included in the Section 810 analysis?
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- Other Section 810 guidance from BLM?

Chad Ricklefs, AICP

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-----Original Appointment-----

From: Amy Lewis

Sent: Friday, June 1, 2018 3:00 PM

To: Amy Lewis; Chad Ricklefs; Hayes, Miriam (Nicole); Stephen Braund; Paul Lawrence; Liz Sears; erin.julianus@blm.gov

Cc: ejulianus@blm.gov

Subject: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep

When: Tuesday, June 5, 2018 2:00 PM-3:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where: (b) (5) CIP ; Passcode: (b) (5) CIP

Purpose: Coastal Plain Leasing EIS; Section 810 analysis coordination

Access Number: (b) (5) CIP

Passcode: (b) (5) CIP

Any additional materials or agenda items will be sent separately prior to the call.

Please forward this invite to anyone that I might have missed in the distribution list.

Thanks,
Amy

0000011210

From: [Paul Lawrence](#)
To: [Julianus, Erin](#); [Hollis Twitchell](#); [Zoe Ghali](#); [Chad Ricklefs](#); [Amy Lewis](#); [Hayes, Miriam \(Nicole\)](#); [Stephen Braund](#); [Liz Sears](#)
Subject: [EXTERNAL] Coastal Plain EIS - Subsistence and Sociocultural Kick-off

Dial-in number (US): (b) (5) CIP
Access code (b) (5) CIP
International dial-in numbers: (b) (5) CIP
For 24/7 Customer Care, call (844) 844-1322

From: [Julianus, Erin](#)
To: [Chad Ricklefs](#); [Amy Lewis](#); [Miriam \(Nicole\) Hayes](#); [Stephen Braund](#); [Paul Lawrence](#); [Liz Sears](#); [Joseph Keeney](#); [Hollis Twitchell](#)
Cc: [Hamfler, Cindy](#); marcia.rickey@empai.com; coastalplainAR@empai.com
Subject: Fwd: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep
Date: Monday, June 25, 2018 4:20:30 PM
Attachments: [CAH C&T community list.docx](#)
[PCH C&T community list.docx](#)
[BLM review of C&T communities.docx](#)

Thanks Cindy. EMPSi, please distribute the C&T community shapefile to SRB&A.

Note that one of the columns in the attribute table is titled "C_T_WAH." You can disregard this column, as it is not relevant to the Coastal Plain EIS.

Thanks everyone,

Erin

Erin Julianus
Wildlife Biologist
BLM Central Yukon Field Office
(907) 474-2358

----- Forwarded message -----

From: **Cindy Hamfler** <chamfler@blm.gov>
Date: Mon, Jun 25, 2018 at 1:57 PM
Subject: Fwd: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep
To: Marcia Rickey <marcia.rickey@empai.com>, Erin Julianus <erjulianus@blm.gov>, coastalplainAR@empai.com

Marcia,

Shapefile to accompany this email thread is in:
\\blm\dfs\ak\gis\GIS_Projects\Alaska_SO\Coastal_Plain_
Leasing_EIS\2_DEIS\Data\Data_Acquired\Customary_
traditional_use_communities.shp

The last three columns "C_T_WAH, C_T_PCH, C_T_CAH" have a 'yes' value if the community is allowed to hunt that herd according to fed subsistence regulations.
Cindy

BLM AK - GIS Specialist
222 University Ave. Fairbanks AK 99709
(907) 474-2213

----- Forwarded message -----

From: **Julianus, Erin** <erjulianus@blm.gov>

Date: Fri, Jun 15, 2018 at 12:52 PM

Subject: Re: [EXTERNAL] RE: 140L6318F0003 Coastal Plain EIS - Section 810 analysis prep

To: Chad Ricklefs <chad.ricklefs@empsi.com>

Cc: Amy Lewis <amy.lewis@empsi.com>, "Hayes, Miriam (Nicole)" <mnhayes@blm.gov>, Stephen Braund <Stephen.Braund@srbak.com>, Paul Lawrence <Paul.Lawrence@srbak.com>, Liz Sears <liz.sears@srbak.com>, Joseph Keeney <jkeeney@blm.gov>

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Wildlife Biologist
BLM Central Yukon Field Office

0000011213

(907) 474-2358

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0000011214

From: Julianus, Erin [mailto:ejulianus@blm.gov]
Sent: Wednesday, June 6, 2018 10:57 AM
To: Chad Ricklefs <chad.ricklefs@empfi.com>
Cc: Amy Lewis <amy.lewis@empfi.com>; Hayes, Miriam (Nicole) <mnhayes@blm.gov>; Stephen Braund <Stephen.Braund@srbak.com>; Paul Lawrence <Paul.Lawrence@srbak.com>; Liz Sears <liz.sears@srbak.com>; Joseph Keeney <jkeeney@blm.gov>
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0000011216

-----Original Appointment-----

From: Amy Lewis

Sent: Friday, June 1, 2018 3:00 PM

To: Amy Lewis; Chad Ricklefs; Hayes, Miriam (Nicole); Stephen Braund; Paul Lawrence; Liz Sears; erin.julianus@blm.gov

Cc: ejulianus@blm.gov

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When: Tuesday, June 5, 2018 2:00 PM-3:00 PM (UTC-08:00) Pacific Time (US & Canada).

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Purpose: Coastal Plain Leasing EIS; Section 810 analysis coordination

Access Number: (b) (5) CIP

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Thanks,

Amy

**Communities with positive Customary and Traditional Use Determination for the Central Arctic
Caribou Herd (Game Management Units 26A, 26B, 26C, 25A, 24A, and 24B)**

Alatna	Utqiagvik
Allakaket	Venetie
Anaktuvuk Pass	Wainwright
Arctic Village	Wiseman
Atqasuk	
Beaver	
Bettles	
Birch Creek	
Central	
Chalkyitsik	
Circle	
Coldfoot	
Evansville	
Fort Yukon	
Galena	
Hughes	
Huslia	
Kaktovik	
Kobuk	
Koyukuk	
Nuiqsut	
Point Hope	
Point Lay	
Stevens Village	
Tanana	

**Communities with positive Customary and Traditional Use Determination for the Porcupine
Caribou Herd (Game Management Units 26B, 26C, 25A, 25B, and 25D)**

Alcan Border	Rampart
Anaktuvuk Pass	Stevens Village
Arctic Village	Tanana
Atqasuk	Tananacross
Beaver	Tetlin
Big Delta	Tok
Birch Creek	Utqiagvik
Central	Venetie
Chalkyitsik	Wainwright
Chicken	Wiseman
Circle	
Coldfoot	
Delta Junction	
Dot Lake	
Dry Creek	
Eagle	
Fort Yukon	
Healy Lake	
Kaktovik	
Manley Hot Springs	
Northway	
Northway Junction	
Nuiqsut	
Point Hope	
Point Lay	

BLM review of communities with positive customary and traditional use of the Porcupine Caribou Herd and Central Arctic Herd

The Federal Subsistence Board is required to make customary and traditional (C&T) use determinations for fish and wildlife populations traditionally used for subsistence. The determination process is outlined in 36 CFR 242.16 (pg. 2).

The Federal Subsistence Hunting Regulations are structured such that, for each game management unit (GMU), the C&T use determination for each species is listed, followed by the harvest limits and season dates. The specificity in the hunting regulations varies. Usually the C&T determination is very broad (e.g. “Residents of GMU 24”), but frequently it is specific (e.g. individual communities are listed).

Residents of those communities with a positive C&T determination are legally permitted to hunt under Federal regulations in the specified GMUs.

In order to determine what communities have this legal authority to hunt Porcupine Caribou Herd (PCH) and Central Arctic Herd (CAH) animals, I did the following:

- 1) Listed the GMU subunits across which the PCH and CAH range
- 2) Reviewed the regulations relevant to those subunits and listed the communities with a positive C&T determination for each GMU or subunit.
- 3) I listed determinations for the PCH and CAH separately, as the impacts of the proposed action on the two herds will likely differ, thereby affecting communities to differing degrees.

36 CFR 242.16 – Customary and traditional use determination process

(a) The Board shall determine which fish stocks and wildlife populations have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the National Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.

(b) A community or area shall generally exhibit the following factors, which exemplify customary and traditional use. The Board shall make customary and traditional use determinations based on application of the following factors:

(1) A long-term consistent pattern of use, excluding interruptions beyond the control of the community or area;

(2) A pattern of use recurring in specific seasons for many years;

(3) A pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics;

(4) The consistent harvest and use of fish or wildlife as related to past methods and means of taking; near, or reasonably accessible from, the community or area;

(5) A means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate;

(6) A pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation;

(7) A pattern of use in which the harvest is shared or distributed within a definable community of persons; and

(8) A pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to the community or area.

(c) The Board shall take into consideration the reports and recommendations of any appropriate Regional Council regarding customary and traditional uses of subsistence resources.