



CoastalPlain_EIS, BLM_AK <blm_ak_coastalplain_eis@blm.gov>

[EXTERNAL] SOA Coastal Plain EIS Scoping Comments2 messages

Martineau, Faith C (DNR) <faith.martineau@alaska.gov>

Tue, Jun 19, 2018 at 3:47 PM

To: BLM_AK CoastalPlain_EIS <blm_ak_coastalplain_eis@blm.gov>

Cc: Nicole Hayes <mnhayes@blm.gov>, "Mack, Andy T (DNR)" <andy.mack@alaska.gov>, "Cotten, Sam R (DFG)" <sam.cotten@alaska.gov>, "Hartig, Lawrence L (DEC)" <larry.hartig@alaska.gov>, "Foerster, Catherine P (DOA)" <cathy.foerster@alaska.gov>, "Martineau, Faith C (DNR)" <faith.martineau@alaska.gov>

Good afternoon,

You may please find attached the State of Alaska's scoping comments to the Bureau of Land Management on the Coastal Plain Oil and Gas Leasing Program EIS.

Please contact me directly for questions.

Thanks,

Faith Martineau

Executive Director

Alaska Department of Natural Resources

Office of Project Management and Permitting

Direct (907) 269-0949 | Cell (907) 538-8585

**SOA Coastal Plain EIS Scoping Comments 06-19-2018.pdf**
520K

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

Tue, Jun 19, 2018 at 3:49 PM

To: "Martineau, Faith C (DNR)" <faith.martineau@alaska.gov>

Cc: BLM_AK CoastalPlain_EIS <blm_ak_coastalplain_eis@blm.gov>, "Mack, Andy T (DNR)" <andy.mack@alaska.gov>, "Cotten, Sam R (DFG)" <sam.cotten@alaska.gov>, "Hartig, Lawrence L (DEC)" <larry.hartig@alaska.gov>, "Foerster, Catherine P (DOA)" <cathy.foerster@alaska.gov>

Thank you, Faith!
Nicole

Nicole Hayes

Project Coordinator

Bureau of Land Management

[222 W. 7th Avenue #13](#)

6/20/2018

DEPARTMENT OF THE INTERIOR Mail - [EXTERNAL] SOA Coastal Plain EIS Scoping Comments

[Anchorage, Alaska 99513](#)

Desk: (907) 271-4354

[Quoted text hidden]



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Natural Resources
OFFICE OF PROJECT MANAGEMENT & PERMITTING

550 W. 7th Avenue, Suite 1430
Anchorage, AK 99501
Main: 907.269.8690
Direct: 907.269.0949

June 19, 2018

Attn: Coastal Plain Oil and Gas Leasing Program EIS
Bureau of Land Management, Alaska State Office
222 West 7th Avenue, Stop #13
Anchorage, Alaska 99513

Dear Sir/Madam:

Thank you for the opportunity for the State of Alaska (State) to provide scoping comments on the Coastal Plain Oil and Gas Leasing Program Environmental Impact Statement (EIS). The State anticipates working with the Bureau of Land Management (BLM) throughout the EIS process, in our role as a Cooperating Agency, in determining how to implement an oil and gas leasing program that protects the natural and human environment and provides economic opportunities for Alaska's communities and people.

Enclosed are the State's recommendations, which include input from the Department of Natural Resources, Department of Fish and Game, and Alaska Oil and Gas Conservation Commission, to BLM. For ease of categorization, we have organized our comments under the following headers:

1. Resource Concerns and Best Management Practices
2. Existing Data and Potential References

Please contact me directly for questions.

Sincerely,

A handwritten signature in cursive script that reads "Faith Martineau".

Faith Martineau
Executive Director

Enclosure: Coastal Plain Oil and Gas Leasing Program EIS,
State of Alaska Scoping Comments

Ecc: Andy Mack, Commissioner, DNR
Sam Cotten, Commissioner, DFG
Larry Hartig, Commissioner, DEC
Cathy Foerster, Commissioner, AOGCC

Coastal Plain Oil and Gas Leasing Program EIS
State of Alaska Scoping Comments

Affiliation	Resource/Topic	Scoping Comment
Comments Addressing Resource Concerns and Best Management Practices		
ADF&G	Bears, Polar and Grizzly	<p>Polar and grizzly bears both occur and den within the 1002 area. As a result, protection of den sites during exploration or development activities will need to occur similar to that occurring on state and federal lands to the west. A one mile buffer for occupied polar bear dens, and a one-half mile buffer for occupied grizzly bear dens should be used within the 1002 area.</p> <p>As identified above, solid waste management, particularly adequate handling, storage, and disposal of putrescible wastes that can be attractants to bears, will be an important issue to evaluate and to develop adequate mitigation measures and best management practices. Bear-proof fencing around certain facilities would be another measure to evaluate and implement.</p> <p>The potential for attraction of polar bears congregating at the Kaktovik bowhead whale bone disposal area to oilfield facilities needs to be evaluated, and measures developed to ensure safety of both humans and bears near oilfield facilities.</p> <p>If oil field development requires a solid waste disposal facility (landfill) be constructed within the 1002 area, issues that need to be addressed include facility siting to avoid known concentration areas of polar and grizzly bears, fencing of the site with both chain link and electrified fence, and design measures to facilitate efficient operation and maintenance of the site and surrounding fencing (e.g., repairs, snow removal).</p> <p>Lessees should be required to develop and implement a Human/Bear Interaction Plan designed to minimize interaction and conflicts between bears and humans. The plan shall include measures to:</p> <ul style="list-style-type: none">A. minimize attraction of bears to facility sites;B. organize layout of buildings and work areas to minimize interactions between humans and bears;C. warn personnel of bears near or on facilities and the proper actions to take;D. if authorized, deter bears from the drill site;E. provide contingencies in the event bears do not leave the site;F. discuss proper storage and disposal of materials that may be toxic to bears; andG. provide a systematic record of bears on the site and in the immediate area.

**Coastal Plain Oil and Gas Leasing Program EIS
State of Alaska Scoping Comments**

Affiliation	Resource/Topic	Scoping Comment
ADF&G	Caribou	<p>The Porcupine Caribou Herd (PCH) is a major international resource, recognized by a United States - Canada agreement, and is vital to the subsistence economies of several communities in Alaska and Canada. The PCH often uses the 1002 area for calving and for rearing calves. Calving occurs over a wide area and can vary annually, including the northern Yukon, but in many years most cows calve in a smaller area of Alaska, the Jago Uplands, which overlaps part of the 1002 area. Non-parturient cows including young age class females, and bulls, will use the coastal plain, including the 1002 area, as summer habitat. The PCH also uses coastal areas of the 1002 area, the Jago Uplands, and snow fields for insect relief habitat during the summer period.</p> <p>The Central Arctic Herd (CAH) calves west of the 1002 area, adjacent to the Prudhoe Bay and Kuparuk oil fields, but in some years will travel east during the post calving period into the 1002 area to rear calves and seek insect relief.</p> <p>We recommend the BLM thoroughly evaluate the habitat use and requirements of the PCH and CAH, and develop measures to minimize adverse effects to these herds and ensure continued use of the 1002 area by caribou. A thorough review of the literature discussing the impacts of oil and gas exploration and development activities to the CAH should be evaluated and used to evaluate the potential effects of oil and gas exploration and development to the PCH.</p> <p>Measures that should be developed include facility and transportation corridors setback from the coastline to maintain caribou movements along the coastline as well as access to insect relief habitat; minimum pipeline ground clearances of 7 feet; and separation of roads and pipelines by at least 500 feet. Additional caribou protection measures for activities within the core calving area of the PCH should be evaluated.</p> <p>Only essential facilities should be located proximal to the coastline to minimize potential effects to caribou movements to and within insect relief habitat. All other facilities including transportation corridors for roads or pipelines should be set back from the coastline. Criteria will need to be developed to determine which facilities are considered essential within a specified distance of the coastline. A complete evaluation of facility siting will be an important aspect of this EIS to develop appropriate lease mitigation measures and best management practices.</p>
DNR DGGS	Climate and Meteorology	Recommend BLM consider climate scenarios when evaluating oil and gas exploration and development, and associated reclamation efforts
DNR DGGS	Climate and Meteorology	Recommend BLM consider potential changes in water resources, including precipitation and drainage changes, under climate scenarios through the end of this century.
ADF&G	Coastal Facilities	<p>Coastal facilities, including docks, causeways, seawater treatment plants for waterflood operations, and desalination plants may be required for the efficient operation of oilfield exploration and development activities. Extensive review of both marine and terrestrial structures and facilities will be required to evaluate potential effects to both biotic and abiotic resources. We recommend causeways and docks not be located in river mouths or deltas. We recommend approved causeways be designed, sited, and constructed to prevent significant changes to nearshore oceanographic circulation patterns and water quality characteristics (e.g., salinity, temperature, suspended sediments) that result in exceedances of water quality criteria, and must maintain free passage of marine and anadromous fish.</p> <p>Only essential facilities should be located proximal to the coastline to minimize potential effects to polar bears (movements along the coast or denning) and caribou (movements along insect relief habitat). All other facilities including transportation corridors for roads or pipelines should be set back from the coastline. Criteria will need to be developed to determine which facilities are considered essential within a specified distance of the coastline. A complete evaluation of facility siting will be an important aspect of this EIS to develop appropriate lease mitigation measures and best management practices.</p>
DNR DGGS	Coastal Hazards	Recommend using historical shoreline change rates, permafrost mapping, and permafrost thaw projections to determine vulnerability to coastal erosion and work with DGGS to develop protocols to minimize impacts under current and projected climate scenarios
DNR DGGS	Coastal Hazards	Recommend working with DGGS to seek out or determine coastal flood vulnerability of potential development regions in current and projected climate scenarios.
DNR DGGS	Coastal Hazards	Recommend BLM assesss sea ice distribution projections to determine potential hazards to infrastructure, changes to coastal morphology, and ncreased flooding onshore.

Coastal Plain Oil and Gas Leasing Program EIS
State of Alaska Scoping Comments

Affiliation	Resource/Topic	Scoping Comment
ADF&G	Fish	All freshwater fish present in streams and rivers within the 1002 area are concentrated in deep pools in rivers or in spring-fed habitats during winter. Deep pools within selected portions of some of the major river systems provide overwintering habitat for fishes, while spring areas provide both spawning and overwintering habitat. Only two known spring areas (Fish Hole #1, Hula Hula River and Sadlerochit Springs) occur within the 1002 area, and pools of water under six feet of ice during the winter are rare. Overwintering habitats for fishes are considered to be extremely limited, very sensitive to disturbance and water withdrawals, and essential for their survival. Careful evaluation of the potential impacts of exploration and development to these limited habitats is essential. As the current policy on the North Slope is to generally prohibit winter water withdrawal from rivers and streams, continuation of this policy should be included for the 1002 area. Similar to that stipulated on state land, no facilities shall be sited within one-half mile of identified Dolly Varden overwintering and/or spawning areas.
DNR DGGS	Geologic Hazards	Recommend that BLM develop mitigation measures to reduce mass wasting of slopes resulting from development activities.
DNR DGGS	Geologic Hazards	Recommend that BLM develop mitigation measures to reduce river bank collapse resulting from development activities.
DNR DGGS	Geologic Hazards	Recommend that BLM develop mitigation measures for development activities in areas of potential riverine and coastal flooding/erosion, permafrost degradation, aufeis, ground failure, and ice push.
ADF&G	Gravel Mine Sites	Gravel will be necessary for any development activities that occur within the 1002 area. We recommend BLM evaluate the siting, development, operation, and reclamation of potential gravel mine sites to ensure overall impacts to water quality and fish and wildlife resources are mitigated. Conversion of former gravel mine sites to water reservoirs provides the opportunity to create a water supply for industrial use, and if located near a stream, may provide overwintering habitat for fish upon colonization. Given the general lack of available winter fresh water within the 1002 area, an emphasis on converting mine sites to flooded reservoirs will be paramount to reducing potential impacts to fish and aquatic resources.
DNR-DGGS	Hydrology	Recommend consider establish river discharge measurements and water balances to determine the amount of surface and groundwater available
DNR-DGGS	Hydrology	Recommend BLM consider obtaining airborne elecromagnetic geophysical data to determine taliks size and configuration for potential groundwater use in the area.
ADF&G	Hydrology	Water availability in the 1002 area is substantially less than that found in the Prudhoe Bay-Kuparuk and NPRA areas to the west. BLM needs to carefully evaluate potential water sources that may be considered for industrial use, particularly the winter water availability from the limited number of lakes within the 1002 area. Marine waters, in terms of desalinization to create water of a quality suitable to create ice roads and not damage tundra, should be evaluated as an alternative to the limited available fresh water. Potential impacts to tundra resources from the lack of sufficient snow or water to create sufficient snow or ice roads should be evaluated as well.
DNR DGGS	Mineral Resources	There is lode potential for "basalt-hosted copper" in the Proterozoic Katakturuk Dolomite unit, which is exposed at the surface just outside of the south-central edge of the 1002 area. USGS Alaska Resource Data File record number ML008 states native copper occurs in basalt at latitude 69.63 degrees north and longitude 144.75 degrees west. The extent of basalt, and copper within basalt, within the Kataktukuk Dolomite is not known due to lack of detailed mapping and geochemical sampling. The 1002 area of ANWR is largely covered in surficial materials. The Kataktukuk Dolomite may or may not extend into the 1002 area in the subsurface.
DNR DGGS	Mineral Resources	There is lode potential for "upwelling-type bedded phosphate" in the Triassic Shublik Formation, which is exposed at the surface just outside of the south-central edge of the 1002 area. USGS Alaska Resource Data File record number ML017 states a "sample from 10-foot-thick bed located 25 feet above base of Triassic Shublik Formation contains 20 percent P2O5 and 0.004 percent eU [equivalent uranium]." This site is located at latitude 69.63 degrees north and longitude 144.42 degrees west. The extent of phosphate, and elevated uranium, within the Shublik Formation is not known due to lack of detailed mapping and geochemical sampling. The 1002 area of ANWR is largely covered in surficial materials. The Shublik Formation may or may not extend into the 1002 area in the subsurface.
DNR DGGS	Mineral Resources	There is lode potential for "yttrium and ytterbium (a rare-earth element)" within the Jurassic to Cretaceous Kingak Shale, which is exposed at the surface just outside of the southeastern edge of the 1002 area. USGS Alaska Resource Data File record number DP003 states there are 300 parts per million (ppm) yttrium and 15 ppm ytterbium in a sample of efflorescent salt that is mainly aluminum sulfate. Efflorescent salts coat outcrops of Kingak Shale and accumulate along the margins of ephemeral pools at the foot of cut banks." This site is located at latitude 69.53 degrees north and longitude 143.15 degrees west. The extent of sulfosalts, and yttrium and ytterbium, within the Kingak Shale is not known due to lack of detailed mapping and geochemical sampling. The 1002 area of ANWR is largely covered in surficial materials. The Kingak Shale crops out along the southeastern margin of the 1002 area, and may or may not extend into the 1002 area in the subsurface.
DNR DGGS	Mineral Resources	Recommend that BLM clarify whether leasing will be limited to oil and gas leasing only .
DNR DGGS	Mineral Resources	Recommend that BLM consider impacts to potential mineral development from oil and gas exploration and production activities.

Coastal Plain Oil and Gas Leasing Program EIS
State of Alaska Scoping Comments

Affiliation	Resource/Topic	Scoping Comment
DNR DGGS	Mineral Resources	In the 1002 area, the mineral-resource potential for beach-sand-type placer gold or heavy minerals is unknown, as there is no publically available, geochemical sampling data available for near-shore or off-shore sediments.
DNR DGGS	Paleontological Resources	Recommend that BLM develop mitigation measures to reduce damage or loss to paleontological resources resulting from development activities. Activities associated with development, such as construction of roads or wellpads, could unearth or disturb paleontological resources. Marine and terrestrial mammal fossils are likely to be present in unconsolidated deposits of the coastal plain. Trasnported fossils are likely to be found in Cretaceous and Tertiary deposits along major rivers.
DNR-DGGS	Permafrost	Recommend BLM a high resolution ground ice map in the transportation corridors (on the scale of meters).
DNR-DGGS	Permafrost	Recommend consider road and pad design alternatives to mitigate thermal impacts to permafrost stability.
DNR-DGGS	Physiography	Recommend that BLM consider the impact of geology and physiography on landscape disturbance.
DNR-DGGS	Physiography	Recommend BLM consider how geologic units and processes in different physiographic provinces impact disturbances.
ADF&G	Riparian Areas	<p>Major river systems and their associated riparian habitat are unique and used by a variety of wildlife species, including fishery resources. Riparian habitats are used by a majority of the key species of wildlife in the 1002 area. Muskoxen use riparian and adjacent upland habitats for movements, calving, and feeding. Caribou from the PCH use riparian habitats for calving, feeding, and as migration corridors during their movements to and from coastal insect relief habitat. Polar bear den sites are most commonly found in snow drifts along cut banks of these river systems. Selected portions of the major rivers also are used by Arctic grayling, Dolly Varden and other fish species for migration, spawning, rearing, and overwintering.</p> <p>While muskoxen are no longer abundant within the 1002 area, we recommend the BLM evaluate riparian habitats and develop mitigation measures that allow for maintenance of these habitats in the event muskoxen expand into formerly occupied habitats. These measures will also maintain these habitats for other species that use them, as well as subsistence users that may harvest animals and fish in these areas.</p>
DNR-DGGS	Sand and Gravel Resources	Recommend that BLM develop mitigation measures for sand and gravel extraction and work with DNR MLW and DGGS to develop protocols to minimize disturbance. As part of this there needs to be an evaluation of the potential volume of sand and gravel needed in development.
DNR-DGGS	Sand and Gravel Resources	Recommend BLM consider include offshore development of sand and gravel resources as a possible mitigation measure to reduce onshore disturbance and impact to other resources from sand and gravel mining
DNR-DGGS	Sand and Gravel Resources	Recommend that BLM consider use of onshore sand and gravel extraction sites as fresh water reservoirs for ice road and pad construction.
DNR DGGS	Soil Resources	Recommend that BLM develop mitigation measures to reduce loss of vegetative cover, removal of topsoil, melting of permafrost, erosion, rutting, and ponding resulting from development activities.
ADF&G	Solid Waste Management	Solid waste management, particularly adequate handling, storage, and disposal (incineration) of putrescible wastes that can be attractants to bears, foxes, and scavenging birds, will be an important issue to evaluate and develop adequate mitigation measures and best management practices.
ADF&G	Subsistence Concerns	Impacts of oil and gas activity in the 1002 area on fish and wildlife resources can adversely affect human uses of these resources. This is true both in Kaktovik in the 1002 area and in other Canadian and Alaskan communities that rely on wildlife which use the 1002 area, most notably the Porcupine Caribou Herd and anadromous overwintering populations of Dolly Varden. A comprehensive discussion of subsistence uses by communities that use these subsistence resources is required to better assess the future impacts of development in the coastal plain.
ADF&G	Support Facilities	We recommend the BLM include evaluation of the potential effects of an oilfield supply complex (essentially a "Deadhorse East") somewhere within the 1002 area that would support exploration, drilling, and operational activities should leasing lead to development. Operations likely included in this complex would be drilling contractors, equipment rental contractors, well testing, fuel storage, equipment maintenance facilities, camp facilities, and others that are essential to successfully operating an oilfield. This complex may or may not be located on active leases if it is developed, so resource protection measures must be developed for both on- and off-lease development scenarios. Food storage and handling, and solid waste management, particularly putrescible waste and attraction of bears and foxes to these wastes, are important issues to be evaluated.
ADF&G	Wildlife Oil Spill Response	The need for a wildlife oil spill response facility within the 1002 area for initial capture, stabilization, and cleaning of oiled wildlife (e.g., polar bears) before sending them on to a more permanent treatment facility should be evaluated.
ADF&G	Wildlife-related Recreation	The potential effects of oil and gas exploration and development activities on wildlife-related recreation (e.g., polar bear viewing at Kaktovik) need to be evaluated. Issues including access to wildlife-related recreational areas, and the effects on the quality of recreational use also should be addressed.

Coastal Plain Oil and Gas Leasing Program EIS
State of Alaska Scoping Comments

Affiliation	Resource/Topic	Scoping Comment
Comments Identifying Existing Data and Potential References		
DNR DGGS	Existing Data, Mineral Resources	The USGS Geochemical Atlas of Alaska (Lee and others, 2016) shows the location of elemental anomalies in sediments within the 1002 area; the main elemental anomaly is gold. In the USGS Alaska Geochemical database, twenty samples have gold values greater than 0.10 parts per million (ppm) in sediments scattered throughout the 1002 area. Seven samples have greater than 0.50 ppm gold, with a high value of 2.23 ppm gold. Some of the high-gold values are located near the northern edge of the 1002 area, near the northernmost extension of the coastline. There may be alluvial-, bench-, or beach-type placer gold potential in this area.
ADF&G	Potential References, Recent North Slope Environmental Impact Statement (EIS) documents	Recommend the BLM examine some of the more recent North Slope EIS documents for resource information, impact assessment information, mitigation measures, lease stipulations, and best management practices that may be used directly or modified for use within the Coastal Plain EIS. Two of the most applicable documents include the 2013 BLM National Petroleum Reserve-Alaska (NPRA) Integrated Activity Plan and the 2012 ExxonMobil Point Thomson Project EIS.
DNR-DGGS	Special Expertise, Soil resources	Recommend that BLM work with Department of Natural Resources Division of Geological and Geophysical Surveys and Division of Mining, Land and Water to evaluate the potential impacts soil disturbance to the landscape. For example what soils are more stable and what soils are more susceptible to erosion. What soils are most susceptible/least susceptible to permafrost degratation
DNR-DGGS	Special Expertise, Soil resources	Recommend BLM work with other agencies such as Department of Natural Resources Division of Geological and Geophysical Surveys and Division of Mining, Land and Water to consider the quality of soils for potential use and to develop protocols for soil use.
DNR DGGS	Special Expertise, Coastal Hazards	Recommend working with NOAA Office of Coast Survey to determine navigability of potential development sites.
DNR DGGS	Special Expertise, Coastal Hazards	Recommend working with DNR Division of Geological and Geophysical Surveys to seek out or determine coastal flood vulnerability of potential development regions in current and projected climate scenarios.
AOGCC	Special Expertise, Underground Injection	Utilize Alaska Oil and Gas Conservation Commission to assure compliance with the highest environmental standards of underground injection of waste.
AOGCC	Special Expertise, Various	Utilize capability/experience of the Department of Environmental Conservation to understand how the State of Alaska ensures high environmental standards while efficiently developing a resource.
AOGCC	Special Expertise, Wildlife management	Utilize Department of Fish and Game to understand potential impacts and mitigation measures for ice infrastructure that crosses fish-bearing streams.
AOGCC	Special Expertise, Winter Tundra Travel	Utilize Department of Natural Resouces to provide guidance on environmentally friendly methods for winter tundra travel.