

Conversation Contents

USGS Briefing Paper on upcoming Open-File Report -- Summary of wildlife-related research in the 1002 Area of ANWR, 2002-2017

Attachments:

/55. USGS Briefing Paper on upcoming Open-File Report -- Summary of wildlife-related research in the 1002 Area of ANWR, 2002-2017/1.1 USGS Briefing Paper OFR Summary of Wildlife Research 1002 Area.1.17.2018.DOCX

/55. USGS Briefing Paper on upcoming Open-File Report -- Summary of wildlife-related research in the 1002 Area of ANWR, 2002-2017/3.1 Brief Update of USGS 2002 Report on Wildlife of 1002 Area.docx

"Taylor, Joanne" <jctaylor@usgs.gov>

From: "Taylor, Joanne" <jctaylor@usgs.gov>
Sent: Wed Jan 17 2018 11:12:44 GMT-0700 (MST)
To: William Lukas <wlukas@usgs.gov>
Judy Nowakowski <jnowakowski@usgs.gov>, "Kinsinger, Anne" <akinsinger@usgs.gov>, Geoffrey Plumlee <gplumlee@usgs.gov>, Paul Laustsen <plaustsen@usgs.gov>, Christian Zimmerman <czimmerman@usgs.gov>, Dee Williams <dmwilliams@usgs.gov>
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Subject: USGS Briefing Paper on upcoming Open-File Report -- Summary of wildlife-related research in the 1002 Area of ANWR, 2002-2017
Attachments: USGS Briefing Paper OFR Summary of Wildlife Research 1002 Area.1.17.2018.DOCX

Bill Lukas -- Please share the attached briefing paper with Water and Science. The subject Open-File Report (OFR) has received bureau approval. We hope to release it later this week. Please note:

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* We plan to share the report with our partners (FWS, BLM, BOEM) later this week. We expect it will be strongly leveraged by FWS and BLM as they identify science needs in ANWR to support the management plan soon to be developed for the 1002.

* The OFR does not yet have a number.

Please let us know if there are any questions or interest in a briefing. -- Thanks, Joanne

Joanne C. Taylor, USGS
Deputy Chief of Staff, Reston, VA
703-648-6837; jctaylor@usgs.gov

"Lukas, William" <wlukas@usgs.gov>

From: "Lukas, William" <wlukas@usgs.gov>
Sent: Wed Jan 17 2018 11:46:24 GMT-0700 (MST)
To: "Taylor, Joanne" <jctaylor@usgs.gov>
Judy Nowakowski <jnowakowski@usgs.gov>, "Kinsinger, Anne" <akinsinger@usgs.gov>, Geoffrey Plumlee <gplumlee@usgs.gov>, Paul Laustsen <plaustsen@usgs.gov>, Christian Zimmerman <czimmerman@usgs.gov>, Dee Williams <dmwilliams@usgs.gov>,
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Subject: Re: USGS Briefing Paper on upcoming Open-File Report -- Summary of wildlife-related research in the 1002 Area of ANWR, 2002-2017

Thanks. Will do.

Can someone point me to the briefing paper we shared in June? Thanks!

* * * * *

Bill Lukas | 202-208-4457
USGS Liaison to Water & Science
asws_liaison@usgs.gov

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Subject: RE: USGS Briefing Paper on upcoming Open-File Report -- Summary of wildlife-related research in the 1002 Area of ANWR, 2002-2017

Attachments: Brief Update of USGS 2002 Report on Wildlife of 1002 Area.docx

Hi Bill,

Attached is the briefing paper we submitted back in June on this report. Thanks, and let me know if you need anything else! ~Durelle

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CC:
Subject: RE: USGS Briefing Paper on upcoming Open-File Report -- Summary of wildlife-related research in the 1002 Area of ANWR, 2002-2017

Hi Bill,

Below is the updated citation – we just received the OFR number for the report. The report should be online in the next day or two. Thanks, Durelle

RE: Pearce, J.M., Flint, P.L., Atwood, T.C., Douglas, D.C., Adams, L.G., Johnson, H.E., Arthur, S.M., and Latty, C.J., 2018, Summary of wildlife-related research on the coastal plain of the Arctic National Wildlife Refuge, Alaska, 2002-17: U.S. Geological Survey Open-File Report 2018-1003, x p., <https://doi.org/10.3133/ofr20181003>.

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Joanne C. Taylor, USGS

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INFORMATION/BRIEFING MEMORANDUM

DATE: January 17, 2018
FROM: William H. Werkheiser, Deputy Director, Exercising the Authority of the
Director, U.S. Geological Survey
SUBJECT: New USGS Open-File Report (OFR) Summarizing Wildlife-related Research in
the 1002 Area from 2002-2017

This memorandum informs the Office of the Assistant Secretary for Water and Science about an upcoming USGS OFR that summarizes wildlife-related science conducted in the 1002 Area of the Arctic National Wildlife Refuge (ANWR) from 2002-2017.

KEY TAKEAWAYS

- The 1002 Area of the Arctic Refuge was opened for oil and gas exploration by the U.S. Congress on December 20, 2017. The legislation requires two lease sales, the first must take place within four years.
- The USGS recently completed a summary of all publicly available scientific literature regarding wildlife-related research conducted in the 1002 Area from 2002-2017.
- The USGS has a strong research program in the Arctic to address information needs of Department of the Interior (DOI) agencies.

BACKGROUND

In 2002, the USGS published a summary of terrestrial wildlife research that was conducted from the 1980s to 2001 in the 1002 Area of ANWR. That report focused primarily on wildlife within the coastal plain of the 1002 Area, but it also included information from adjacent areas of the Arctic Coastal Plain where oil development took place during the preceding 30 years. The current USGS publication provides an update of the 2002 report by summarizing scientific literature from studies conducted within the 1002 Area from 2002-2017, as well as terrestrial and coastal ecosystems elsewhere on the Arctic Coastal Plain that are relevant to the 1002 Area.

DISCUSSION

The new OFR summarizes the results of numerous studies, conducted by the USGS and others, in and adjacent to the 1002 Area of ANWR, which vary in details and conclusions. The report provides an update on earlier research summaries on caribou, forage quality and quantity, polar bears, muskoxen, and snow geese. The report also provides information on new research related to climate, migratory birds, permafrost, coastal erosion, coastal lagoons, fish, water resources, and potential effects of industrial disturbance on wildlife. From this literature review, the authors noted evidence for change in status of some wildlife and their habitats, and lack of change for others. For example, in the 1002 Area, muskox numbers have decreased and the Porcupine caribou herd has exhibited variation in use of the area during the calving season. Polar bears are now more common onshore in summer and fall because of declines in sea ice in the Beaufort Sea. In a study spanning 25 years, there were no significant changes in vegetation quality and quantity, soil conditions, or permafrost thaw in the coastal plain of the 1002 Area.

Based on studies from the central Arctic Coastal Plain, there are persistent and emerging uncertainties about the long-term effects of energy development for caribou. In contrast, recent studies that examined direct and indirect effects of industrial activities and infrastructure on birds in the central Arctic Coastal Plain found little effect for the species and disturbances examined, except for the possibility of increased predator activity near human developments.

POSITION OF INTERESTED PARTIES

- DOI partners continue to request science information from the USGS relative to wildlife-related issues in the Arctic.
- Ongoing USGS wildlife-related studies in the Arctic are focused on coastal erosion, wildlife distribution and abundance, wildlife pathogens, habitat change, and response and habituation of wildlife to oil and gas infrastructure.
- The work in the USGS Arctic research portfolio is at the request of DOI partner agencies (USFWS, BLM, and BOEM), the State of Alaska, and Alaska Native governments, communities, and co-management councils.
- Work is underway to determine the science needs for ANWR in coordination with USFWS, BLM, and BOEM.

Citation:

Pearce, J.M., Flint, P.L., Atwood, T.C., Douglas, D.C., Adams, L.G., Johnson, H.E., Arthur, S.M., and Latty, C.J., 2018. Summary of Wildlife-Related Research Coastal Plain of the Arctic National Wildlife Refuge, 2002-2017. U.S. Geological Survey Open File Report 2018-xxxx.

INFORMATION/BRIEFING MEMORANDUM

DATE: June 12, 2017
FROM: Aimee Devaris, Alaska Regional Director, U.S. Geological Survey
SUBJECT: USGS report on updated wildlife information for the 1002 Area of the Arctic National Wildlife Refuge

This briefing alerts the Director to a recent report by the USGS-Alaska Science Center that updates a 2002 report on the status of terrestrial wildlife (caribou, muskoxen, polar bears) and their habitats within the 1002 Area of the Arctic National Wildlife Refuge in northern Alaska.

KEY TAKEAWAYS

- USGS has produced a 16-page report to update the USGS-led 2002 publication entitled, “Arctic Refuge Coastal Plain Terrestrial Wildlife Research Summaries”
- The report has been reviewed by three experts within USGS and approved following USGS Fundamental Science Practices
- The report is under review by staff of the U.S. Fish and Wildlife Service Arctic Refuge
- The updated summary suggests evidence of change and lack of change in the status and trends of terrestrial wildlife and their habitats in the 1002 Area of the Arctic Refuge

BACKGROUND

In 2002, USGS and others provided a summary of wildlife research conducted between the early 1980s and 2001 in the 1002 Area of the Arctic National Wildlife Refuge (<https://pubs.er.usgs.gov/publication/bsr20020001>). Since 2002, substantial research has taken place in the Alaskan Arctic to understand and quantify processes driving changes in animal abundance and distribution, but most research has focused on the National Petroleum Reserve – Alaska (NPR-A), due to ongoing oil and gas exploration activities focused there. Until now there has been no update to the 2002 report for the 1002 Area. In March 2017, the USGS provided a briefing to the Congressional Research Service (CRS) on USGS research in the NPR-A. The CRS asked what changes have occurred in wildlife abundance and distribution for the 1002 Area. Therefore, we compiled this report to summarize any changes in terrestrial wildlife since 2002 based on information from the published literature and other public sources. The update suggests there is evidence of both change and lack of change in the status and trends of some wildlife species and their habitats in the 1002 Area. There has been a decrease in the number of muskox and the frequency that the Porcupine caribou herd uses the 1002 Area for calving. Polar bears are now more common on shore due to declines in sea ice in the Southern Beaufort Sea. A retrospective study found no significant changes in vegetation quality and quantity, soil conditions or permafrost thaw in the 1002 Area. There have been no new studies of land cover, predator abundance and distribution, or snow goose numbers since 2002.

DISCUSSION

The report is currently under review by staff of the U.S. Fish and Wildlife Service Arctic Refuge. In time, we plan to incorporate their comments and publish the expanded document as a USGS series report.

CONTACT: John Pearce, Supervisory Wildlife Biologist, jpearce@usgs.gov, 907-786-7094