



January 28, 2012

Secretary Ken Salazar
Department of the Interior
1849 C Street, N.W.
Washington DC 20240

SUBJ: NPR-A IAP Final Record of Decision

Dear Secretary Salazar:

As you prepare the Record of Decision (ROD) for the new Integrated Activity Plan (IAP) for the National Petroleum Reserve-Alaska (NPR-A), we want to highlight the importance of this effort and offer additional comment. At more than 22.5 million acres, the NPR-A is the largest public land management unit in the United States, accounting for a substantial portion of the entire North Slope. The new IAP is a significant part in the effort needed to ensure responsible and balanced resource management consistent with the Obama Administration's commitment to a more comprehensive approach to addressing Arctic resource issues.

Congress enacted the Naval Petroleum Reserves Production Act (NPRPA) in 1976 to create a unique dual mandate requiring a balance of oil/gas development and natural resource protection in the NPR-A which has long been recognized for its extraordinary ecological and subsistence values. The NPR-A supports the calving grounds of two caribou herds; millions of migratory birds including globally significant concentrations of waterfowl and shorebirds along with extraordinary densities of nesting raptors; various marine mammals including polar bear, beluga whale, walrus, and ice seals; and diverse predator populations including grizzly bears, wolves, arctic fox, and wolverine. More than forty Alaska Native communities in northern and western Alaska are vitally dependent upon the opportunity to harvest subsistence resources from the NPR-A.

We greatly appreciate your leadership in crafting the first-ever comprehensive IAP that reflects the NPRPA's balanced management mandate. We wish to especially focus your attention on the importance of reliably protecting the natural and subsistence resources of the expanded Teshekpuk Lake Special Area as proposed under the B-2 preferred alternative in the Final Environmental Impact Statement (FEIS).

Under the B-2 preferred alternative, the vast majority of the NPR-A's recoverable oil reserves (72%) will available for development while prospective offshore pipeline(s), if advanced, will not be precluded by the plan. The estimated NPR-A oil resource that would not be available as a result of the proposed conservation protections under the plan (i.e., areas not available for lease) is wholly insignificant in terms of national energy policy amounting to only about 11 days consumption for the

United States.¹ At the same time, the B-2 preferred alternative would be properly balanced, as provided for under NPRPA, by designation of no-lease areas and other protections for some of the most important areas in America's Arctic.

As further detailed in the attached comments, Teshekpuk Lake is the area most immediately threatened by expanding oil industry development and is also at significant risk from climate change impacts. To meet the express Congressional mandate that this area be given "maximum protection" under NPRPA, the ROD should reflect the strongest possible protections for the greater Teshekpuk Lake area. Most importantly, this should include the not available for lease provisions under the B-2 preferred alternative as well as prohibition of non-subsistence infrastructure in the area completely surrounding the lake and the industrial infrastructure prohibition should be further expanded on the east and west sides of the lake to reliably protect essential caribou migration corridors.

Finally, we wish to express our great appreciation for the hard work of you and your staff in crafting an appropriately balanced new management plan for the NPR-A.

Thank you for consideration of these comments.

Sincerely,



Eric F. Myers
Policy Director
Audubon Alaska



Andrew Hartsig
Director, Arctic Program
Ocean Conservancy

enclosures

¹ Total estimated discovered and undiscovered oil under Alternative B-2 is 549 MMBO and under Alternative D is 761 MMBO with a difference of 212 MMBO, equivalent to approximately 11 days consumption for the United States. Table 4-15, IAP/FEIS, Vol 2, p. 80.

I. NPRPA has a unique dual mandate to balance habitat protection and energy development.

When Congress enacted NPRPA in 1976, a new and unique dual mandate was created requiring the Secretary to protect significant surface values in the NPR-A. Teshekpuk Lake and the Utukok River areas were explicitly identified in statute by Congress as areas that should be given “maximum protection” and NPRPA further authorizes the Secretary to protect other lands with significant surface values.

- Congressional intent clearly calls for balanced management of the NPR-A, directing the Secretary to determine where it is appropriate to lease lands for oil and gas development while also requiring “maximum protection” for areas identified by the Secretary as having “significant subsistence, recreational, fish and wildlife, or historical or scenic value.” 42 USC § 6504.
- While requiring the Secretary to undertake an expeditious program of oil and gas leasing, NPRPA provides that the Secretary “shall include or provide for such conditions, restrictions, and prohibitions as the Secretary deems necessary or appropriate to mitigate reasonably foreseeable and significantly adverse effects on the surface resources” of the NPR-A. 42 USC § 6506a.
- As stated in the first IAP for the Northeast planning area, adopted in 1998, the purpose of an IAP “is to determine the appropriate multiple use management” of the Reserve; NPRPA “encourages oil and gas development in NPR-A while requiring protection of important surface values.”²

Under NPRPA, Congress has established that while energy development was an important reason for initial establishment of the Reserve in 1923, it is now a purpose that must be balanced with “conditions, restrictions, and prohibitions” to ensure protection of exceptional ecological values and subsistence resources.

II. The NPR-A supports ecological and subsistence resources of regional, national, and global significance.

The NPR-A supports an exceptional diversity and abundance of biological resources. The wetland complex of ponds, lakes, rivers, streams, lagoons, and barrier islands of the NPR-A provide nesting, feeding, and staging habitat for migratory bird populations of national and international significance.

The largest sedge-wetland complex in the circumpolar Arctic is found within the NPR-A, surrounding Teshekpuk Lake.³ Approximately 90 bird species including seabirds, loons, waterfowl, shorebirds, raptors and passerines occur annually in the NPR-A and adjacent ocean habitats.⁴ Birds that breed, forage, molt, and stage in the NPR-A use all four major North American flyways and disperse to virtually all states throughout the nation.⁵ Some birds from the NPR-A travel much further, flying to Central and South America, Russia, China, Japan, Africa, Australia, New Zealand, and even Antarctica. The NPR-A includes seven designated Important Bird Areas (IBAs), two of which are recognized as having global

² 1998 NE NPRPA Final IAP/EIS, Volume 1: Introduction - Purpose and Need, p. I-1.

³ CAVM Team. 2003. Circumpolar Arctic Vegetation Map [Scale 1:7,500,000]. Conservation of Arctic Flora and Fauna (CAFF) Map No. 1. Anchorage, Alaska: U.S. Fish and Wildlife Service. www.geobotany.uaf.edu/cavm.

⁴ IAP/FEIS Vol 1, p. 242.

⁵ Audubon Alaska. 2011. http://ak.audubon.org/sites/default/files/documents/banded_in_npra_byspecies_13dec2011.pdf. The Birds of NPRPA.

significance.⁶ At least 20 species of waterfowl (ducks, geese, and swans) breed within the NPR-A.⁷ The NPR-A provides vital habitat for numerous waterfowl species that are important to the region's subsistence users as well as valuable to sport hunters across the nation from coast to coast.

The area provides the concentrated calving grounds, insect relief areas, and migration corridors for the ~60,000 animal Teshekpuk Caribou Herd (TCH), which is vital for North Slope community subsistence, and the ~ 350,000 animal Western Arctic Caribou Herd (WAH), a vital subsistence resource for more than forty communities in northwestern Alaska. As stated in the IAP/FEIS, caribou "is the most important overall subsistence resource in terms of numbers of animals harvested and consumed, and the greatest frequency of hunting trips taken."⁸ It is estimated that up to 14,000 WAH caribou are harvested each year for subsistence and at least 43 rural communities rely upon the herd and for some communities it is their primary terrestrial meat source.⁹ Consequently, as stated in the IAP/FEIS, "any activity that threatens the viability of the herd has profound consequences for communities that live within or near its overall range."¹⁰ The TCH is unique when compared to the other three herds that calve along the North Slope as "the only herd in which over 50 percent of the population typically overwinters on the coastal plain."¹¹ The TCH is an especially critical subsistence resource for several North Slope communities (Barrow, Atkasuk, and Nuiqsut) that are almost exclusively dependent upon this herd.

With the explicit statutory mandate to provide the Teshekpuk Lake and Utukok River areas "maximum protection" and direction to the Secretary to identify and protect additional areas,¹² Congress has clearly provided that NPR-A leasing and development should be balanced with habitat protection. The IAP-FEIS B-2 preferred alternative appropriately reflects a reasoned balance with the vast majority of the Reserve's projected oil resource available for development along with provisions that would accommodate prospective oil transportation infrastructure from offshore areas subject to additional review in the future when specific proposals are advanced.

III. The greater Teshekpuk Lake area merits the strongest possible protections under NPRPA.

The exceptional ecological and subsistence values provided by the Teshekpuk Lake area are confronted by existing and expanding threats from industrial development as well as climate change. The IAP/FEIS recognizes that "the most serious threats to the viability of subsistence on the North Slope include the effective removal of harvest areas due to industrial development and the impacts of climate change."¹³

The B-2 preferred alternative provides vital protections for Teshekpuk Lake through expansion of the existing Special Area, identification of lands as not available for lease, and the prohibition of non-subsistence infrastructure in an area surrounding the lake, provisions that should, at a minimum, be retained and reflected in the ROD.

⁶ Currently designated IBAs within the NPR-A: Teshekpuk Lake/East Dease Inlet (global), Elson Lagoon, Cooper Island, Peard Bay, Kasegaluk Lagoon (global), and the Colville River.

⁷ IAP/FEIS Vol 1, p. 249.

⁸ IAP/FEIS Vol 1, p. 387-388.

⁹ IAP/FEIS Vol 1, p. 421.

¹⁰ IAP/FEIS Vol 1, p. 421.

¹¹ Person, et al., Distribution and Movement of the Teshekpuk Caribou Herd 1990-2005: Prior to Oil and Gas Development, *Arctic* Vol 60, No. 3 (September 2007).

¹² Teshekpuk Lake Special Area (initially designated in 1977 with an addition in 1998), Utukok River Uplands Special Area (1977), Colville River Special Area (initially designated in 1977 with an addition in 1998), and Kasegaluk Lagoon Special Area (2004).

¹³ IAP/FEIS Vol 1, p. 429.

Oil production from the NPR-A, soon to be initiated with construction of the CD-5 Alpine satellite project, combined with reasonably anticipated impacts of climate change, reinforces the need for a new IAP that adopts a conservative approach that effectively balances energy development with reliable provisions to ensure “maximum protection” of significant biological and subsistence resources.

Teshkepuk Lake Caribou Herd

Fundamental conflicts between caribou and oil/gas development are well documented, particularly impacts on the use of calving areas and herd productivity as well as interference with migratory movements.

“Individual and groups of caribou/reindeer: 1) move away from point sources of disturbance; 2) increase activity and energy expenditure near disturbance; 3) delay crossing or fail to cross linear structures; [and] shift away from areas of extensive and intensive development....”¹⁴

The need to reliably safeguard calving, insect relief, and migration corridors of the TCH (especially the critical movement corridors to the east and west of the lake) is heightened by the fact that a substantial portion of the highest-value calving habitat (approximately 17 percent) is already under active lease. Attachment A.

➤ **Caribou – infrastructure and impacts on herd productivity:** The 2003 National Research Council (NRC)¹⁵ report on the cumulative effects of North Slope oil and gas development, along with an abundance of other research, documents that oil development has altered the distribution of female caribou and that industry infrastructure has interfered with caribou movements to/from important seasonal habitats. Aerial survey data near Milne Point show the density of females decreased close to roads. Other observations within the Kuparuk Development Area (KDA) found few females and calves seen from the road system. The proportion of calving caribou in the densely developed western portion of the KDA declined significantly from 1979 through 1987.¹⁶ The IAP/FEIS acknowledges “seasonal avoidance of habitats within three miles of existing Prudhoe Bay facilities by cows and calves during calving and early post-calving periods.”¹⁷

The NRC found reproductive rates of caribou in regular contact with oil field infrastructure were lower than those of undisturbed female caribou. The NRC observed that expanded loss of preferred habitat and climate change resulting in increased insect harassment are likely to depress energy and nutrient status and, therefore, summer weight gain of lactating females. Possible consequences noted include reduced nutrient acquisition/retention throughout the calving and midsummer periods, poorer condition in autumn, and a lowered probability of producing a calf the following spring. The NRC concluded “as a result of conflicts with industrial activity during calving and an interaction of disturbance with the stress of summer insect harassment, reproductive success of Central Arctic Herd (CAH) female

¹⁴ Wolfe, et al. 2000: *Polar Research* 19(1), 63-13.

¹⁵ National Research Council, *Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope*, National Academies Press (2003)

¹⁶ National Research Council, *Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope*, National Academies Press (2003) p. 111.

¹⁷ IAP/FEIS Vol 2, p. 192.

caribou in contact with oil development from 1988 through 2001 was lower than for undisturbed females, contributing to an overall reduction in herd productivity.”¹⁸

The IAP/FEIS recognizes oil development in the Prudhoe Bay-Kuparuk River Unit area has caused displacement of caribou away from the oil fields.¹⁹ Data on body weights of CAH cow caribou (and their calves) that calve west of the Sagavanirktok River, compared with CAH cow caribou and calves from calving grounds east of the river, supports the concern that caribou displacement of may be compromising CAH productivity.²⁰ The IAP/FEIS notes: “The reduction in calving habitat use near oil development facilities could eventually limit the growth of Arctic caribou herds within their present ranges and prevent herds from reaching the maximum population size they could achieve without the presence of development.”²¹

The IAP/FEIS acknowledges that the development/disturbance effect may have already been expressed at a population-level as suggested by the higher growth rate of the TCH relative to the CAH.²²

➤ **Caribou - interference with movement and migration:** The impact of infrastructure on caribou migration movements has been documented by the Alaska Department of Fish and Game (ADFG).²³ During the 2003-2004 season satellite collar data shows that a portion of the TCH moved east during the fall. The Trans-Alaska Pipeline (TAP) and the Dalton Highway “caused them to divert” north. After several days delay, the herd eventually continued west. After wintering in the Arctic Refuge a portion of the herd began their westward migration back toward Teshekpuk Lake in mid-April. “[T]he satellite-collared caribou (along with thousands of other TCH animals) reached the TAP/Dalton Highway in different places on 19 April and both were stopped.” After moving north and south for ten days they finally crossed and moved west. Other TCH caribou that wintered in the Arctic Refuge began migrating back west in mid-May. The satellite data again indicates that the TAP/Dalton Highway interfered with the westward migration movement. The IAP/FEIS recognizes that, to take advantage of seasonally available forage, caribou must be able to migrate freely among summer and winter ranges. If movements are significantly constrained by development infrastructure, “caribou are more likely to overgraze their habitat, possibly leading to population decline.”²⁴

More recent investigation of satellite GPS collar data from the WAH further reinforces concern about migration interference from industrial infrastructure.²⁵ Preliminary results presented to the Western Arctic Caribou Herd Working Group (WACH Working Group) in December 2012 suggest that migration of WAH caribou was significantly impeded by the Red Dog Mine road. The WACH Working Group, which represents subsistence users from throughout northern and western Alaska, has a long-standing position on maintaining key caribou habitats (calving grounds, critical insect relief areas, and migratory

¹⁸ National Research Council, *Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope*, National Academies Press (2003), p. 116.

¹⁹ IAP/FEIS Vol 4, p. 147.

²⁰ IAP/FEIS Vol 4, p. 147.

²¹ IAP/FEIS Vol 4, p. 147.

²² IAP/FEIS Vol 4, p. 148.

²³ Alaska Department of Fish and Game, *Caribou Management Report* (July 2002-June 2004), Game Management Unit 26A, Herd: Teshekpuk, Geographic Description: Western North Slope.

²⁴ IAP/FEIS Vol 1, p. 283.

²⁵ “Movements of Satellite-Collared WAH Caribou In Proximity to the Red Dog Road” presentation to the Western Arctic Caribou Working Group (December 4-6, 2012)

corridors) in the NPR-A free of leasing or activities associated with oil/gas development to reliably safeguard this essential subsistence resource.²⁶

In fall of 2011 (Aug-Dec), 21 of 74 GPS-collared WAH caribou (28%), all cows, came within ~30 miles of the Red Dog Mine road. Eighteen of the 21 cows (86%) noticeably changed their speed and/or direction of travel in the vicinity of the road.²⁷ The median distance of initial reaction to road was 8 mi (range 1-36 miles) and the median number of days from first reaction to final crossing was 41 days (with a range of 16-84 days). After crossing the road, it is estimated that the rate of travel approximately doubled compared to periods before and after initial contact with road. Attachment B.

ADFG has drawn special attention to the fact that the TCH relies on narrow migration corridors on either side of Teshekpuk Lake to access insect relief areas and that most parturient TCH cows migrate through the narrow corridor between the east side of the lake and Kogru Inlet: "Development in this area could easily affect the most important segment of the population."²⁸ The IAP/FEIS reinforces concern about these particularly vulnerable areas:

"The most critical corridors for movement to the coastal insect-relief area are through the narrow areas between Teshekpuk Lake and the Kogru River to the east and between the lake and Smith Bay to the northwest. ... Caribou must pass through them to get to and from insect-relief areas. The area to the east of Teshekpuk Lake is a particular problem because nearly all of the parturient cows must pass through this area either shortly before or after calving. Any development that occurs on the limited amount of habitat that is used by caribou migrating through this corridor would likely affect caribou movements."²⁹

The IAP/FEIS recognizes the concern about industrial development impacts as a likely result of displacement and/or other impediments to herd migration:

"Studies done over the last decade have indicated that the Teshekpuk Caribou Herd caribou show high fidelity to the calving area near Teshekpuk Lake and that caribou that calve in the traditional calving area have much higher calving success than caribou found outside the area.... If the Teshekpuk Caribou Herd is partially displaced from its calving area, as the Central Arctic Herd has been, or if caribou are impeded from reaching the calving area, recent surveys indicate that calving success would likely be reduced.... [T]he most recent study of Central Arctic Herd productivity in the oil fields suggests that habitat quality in the calving area in one year may affect calf size at birth in the following year. Calf size at birth, in turn, influences calf size at the end of the first summer, which has consequences for survival through the following winter."³⁰

To ensure the continued productivity of the TCH consistent with the "maximum protection" mandate under NPRPA, the final ROD should reflect the "not available for lease" designations proposed under the B-2 preferred alternative. Additionally, the areas where non-subsistence infrastructure is

²⁶ Western Arctic Caribou Working Group to BLM Alaska State Office, "Caribou Working Group Scoping Comments on NPR-A IAP/FEIS," letter dated September 30, 2010.

²⁷ "Movements of Satellite-Collared WAH Caribou In Proximity to the Red Dog Road" presentation to the Western Arctic Caribou Working Group (December 4-6, 2012)

²⁸ Alaska Department of Fish and Game, *Caribou Management Report* (July 2002-June 2004), Game Management Unit 26A, Herd: Teshekpuk, Geographic Description: Western North Slope.

²⁹ IAP/FEIS Vol 2, p. 192.

³⁰ IAP/FEIS Vol 2, p. 193.

prohibited should be expanded on the east and west sides of Teshekpuk Lake to reliably protect these critical migration corridors.

➤ **Caribou – threats to subsistence:** The importance of the TCH as a subsistence food resource for the communities of Barrow, Nuiqsut and Atkasuk would be difficult to overstate. In recent years, the average per capita harvest by North Slope Villages within the TCH range is nearly one caribou per person with most caribou harvested from the TCH. The annual subsistence harvest of the TCH has grown substantially over time to as high as 4,800 animals³¹ in a single year for an estimated annual harvest of 5-10 percent of the herd.³²

It has been estimated that the TCH provides approximately 95 percent of the caribou harvested by the communities of Barrow and Atkasuk and approximately 85 percent of the caribou harvested by Nuiqsut.³³ The IAP/FEIS recognizes the dependence of Barrow on the TCH noting that 99 percent of the caribou harvested in Barrow during June through September (when 80 percent of the Barrow harvest occurs) comes from the TCH.³⁴

The high annual harvest level of the TCH—which is now near its all-time population high—and the critical role that TCH plays as an essential food source for North Slope communities, reinforces the importance of the IAP incorporating reliable not available for lease protections to ensure that development does not adversely impact the productivity of this herd.

Threats to subsistence from industrial development can take the form of *direct impacts to biological resources* (e.g., displacement from habitat, reduced productivity) as well as *loss of access* to subsistence harvest areas (“subsistence avoidance”). The IAP/FEIS cites numerous sources documenting the loss of subsistence use areas to oil development on the North Slope as industrialization has spread westward from Prudhoe Bay.³⁵ The long-term impact of any new (four-season) roads as well as other new industrial infrastructure in the NPR-A is of special concern.

Subsistence avoidance of developed areas has been well documented and the IAP/FEIS recognizes that oil development in the Teshekpuk Lake area would effectively eliminate large subsistence use areas. As early as 1990, the Department of the Interior (DOI) recognized: “Perhaps the most obvious effect of oil development in the Nuiqsut area has been that it has effectively removed certain areas from the Nuiqsut subsistence land use area.”³⁶ The IAP/FEIS reports “Nuiqsut subsistence use areas retreated from the east as development moved westward from Prudhoe Bay to Oliktok Point, particularly in the area of the Kuparuk River Unit field.... In 1993, development activity was encroaching on valued traditional use areas and onshore subsistence harvest and uses in industrial areas north and east of Nuiqsut declined to near zero.”³⁷ Four percent of the caribou were harvested within 5 miles of developed areas, 17 percent were harvested from 6 to 15 miles and 79 percent were harvested more than 16 miles from development.³⁸

³¹ IAP/FEIS Vol 1, p. 287.

³² Person, et al., Distribution and Movement of the Teshekpuk Caribou Herd 1990-2005: Prior to Oil and Gas Development, *Arctic* Vol 60, No. 3 (September 2007).

³³ Lincoln Parrett, Alaska Department of Fish and Game, 2010, personal communication.

³⁴ IAP/FEIS Vol 1, p. 287.

³⁵ IAP/FEIS Vol 1, p. 423.

³⁶ IAP/FEIS Vol. 1, p. 423.

³⁷ IAP/FEIS Vol 1, p. 423.

³⁸ IAP/FEIS Vol 1, p. 423.

Concern about the loss of subsistence from oil development (subsistence avoidance) was extensively documented in comments submitted to the U.S. Army Corps of Engineers by the Kuukpik Corporation during review of the CD-5 project: “there is essentially no hunting in a 10-mile swath on either side of linear infrastructure or in a 5 mile radius all around a point structure.”³⁹

“CD-5 and its road and pipeline would effectively remove, or substantially impair, potentially huge swaths of land from the available subsistence range, probably on the order of hundreds of square miles.... Between CD-5 and the next three projects, two of which have substantially longer roads and pipelines than CD-5, the affected acreage is dramatically large.”⁴⁰

Prospective subsistence loss impacts are illustrated in Attachment C based on the projected development of the CD-5, CD-6, and CD-7 projects from the Alpine Satellite Development Plan Final EIS. Any further oil/gas leasing and development in the vicinity of Teshekpuk Lake will only exacerbate the already substantial loss of subsistence use areas.

➤ **Caribou – climate change.** Climate change will result in landscape-scale impacts to Arctic ecosystems and can be expected to have significant impacts on the abundance and availability of subsistence resources: “The impacts of global climate change are more acute in the western Arctic than in most regions of the world, and changes to the environment and habitats of the North Slope resulting from climate change are affecting subsistence resources and subsistence users.”⁴¹ The US Fish and Wildlife Service (USFWS) has observed: “Climate change presents an unprecedented challenge to managers of arctic natural resources.”⁴²

To ensure that significant ecological and subsistence values are afforded “maximum protection” as called for by NPRPA, the new IAP should be appropriately conservative in the face of reasonably anticipated, even if not yet well defined, climate change impacts in the NPR-A and its biological resources.

USFWS reports that climate change effects already being “observed in the arctic terrestrial landscapes include rapidly eroding shorelines, melting ground ice, and increased shrub growth at high latitudes” and that the Arctic “will likely experience early and disproportionately large impacts” from climate change.⁴³ One factor that may be contributing to the recent decline of the WAH is an increase in rain-on-snow events in the Arctic due to more moisture and associated icing that inhibits grazing and/or causes such an expenditure of energy that caribou suffer nutritionally.

Other possible climate changes include altered hydrology, water budgets, and tundra vegetation that could alter the distribution and/or quality of caribou forage with uncertain implications. In the face of possible climate impacts to caribou productivity it is especially appropriate that the new IAP take a precautionary approach to oil and gas leasing and development commitments that could independently or cumulatively harm caribou productivity and associated subsistence harvests.

³⁹ Kuukpik Corporation to the U.S. Army Corps of Engineers, letter dated July 21, 2009.

⁴⁰ Kuukpik Corporation to the U.S. Army Corps of Engineers, letter dated July 21, 2009.

⁴¹ IAP/FEIS Vol 1, p. 424-425.

⁴² USFWS, *Wildlife Response to Environmental Arctic Change: Predicting Future Habitats of Arctic Alaska*, WildREACH Workshop Report (November 2008)

⁴³ USFWS, *Wildlife Response to Environmental Arctic Change: Predicting Future Habitats of Arctic Alaska*, WildREACH Workshop Report (November 2008)

Teshekpuk Lake and Migratory Birds

When the preferred alternative for the new IAP was first announced, the Department of the Interior appropriately recognized the greater Teshekpuk Lake area as one of the most ecologically important wetlands in the entire Arctic.⁴⁴ The wetlands surrounding Teshekpuk Lake and extending to Dease Inlet has been designated as an Important Bird Area of global significance.⁴⁵ Overall nest density of breeding birds in the Teshekpuk Lake area is significantly higher than at other sites on the Arctic Alaskan Coastal Plain.⁴⁶

➤ **Shorebirds:** Breeding densities of shorebirds in the Teshekpuk Lake area are the highest in the circumpolar Arctic.⁴⁷ It has been estimated that as many as 6 million shorebirds breed in the NPR-A,⁴⁸ with 600,000 in the Teshekpuk Lake area alone.⁴⁹ The Teshekpuk Lake area supports very significant percentages of populations of three species of shorebird: Dunlin (*Calidris alpina arctica* subspecies.) 19%; Black-bellied Plover 10%; and Semipalmated Sandpiper (western population) 10%.⁵⁰ The Alaska Shorebird Group⁵¹ has identified several sites within the greater Teshekpuk Lake area as candidates for inclusion in the Western Hemisphere Shorebird Reserve Network (WHSRN), including:⁵²

- The “Teshekpuk Lake-Dease Inlet” area as a candidate WHSRN site of possible international significance. The area is significant for Pectoral Sandpiper, Black-bellied Plover, American Golden-Plover, Long-billed Dowitcher, Dunlin, and Semipalmated Sandpiper.
- “Ikpikpuk River,” important for American Golden-Plover, Black-bellied Plover, Bar-tailed Godwit, Semi-palmated Sandpiper, Dunlin, and Red Phalarope;
- “Ikpikpuk River Delta,” important for Black-bellied Plover, Ruddy Turnstone, Semipalmated Sandpiper, Pectoral Sandpiper, Dunlin, and Red Phalarope; and
- “Kogru River Delta,” important for Pectoral Sandpiper, Dunlin, and Red Phalarope.

➤ **Waterfowl:** The greater Teshekpuk Lake area provides especially important habitat for numerous species of waterfowl important to subsistence users in Alaska as well as sport hunters across the Lower

⁴⁴ [Department of the Interior, News Release: Obama Administration Announces Major Steps toward Science-Based Energy Exploration in the Arctic, February 17, 2012.](#)

⁴⁵ National Audubon Society. Important Bird Area Site Description – Teshekpuk Lake-E. Dease Inlet. See <http://iba.audubon.org/iba/viewSiteProfile.do?siteId=2781&navSite=state>

⁴⁶ Liebezeit et al. 2011. Breeding ecology of birds at Teshekpuk Lake: a key habitat site on the Arctic Coastal Plain of Alaska. *Arctic* 64 (1): 32-44.

⁴⁷ Andres, B.A., J.A. Johnson, S.C. Brown, R.B. Lanctot. *In Press*. Shorebirds breeding in unusually high densities in the Teshekpuk Lake Special Area, Alaska. Accepted for publication in *Arctic* April 2012.

⁴⁸ King, R. 1979. Results of aerial survey of migratory birds on NPRA in 1977 and 1978. In Lent, PC technical ed. Studies of selected wildlife and fish and their use of habitats on and adjacent to NPRA 1978-1979, Volume 1 National Petroleum Reserve – Alaska, 105© Land Use Study. Anchorage: U.S. Department of the Interior. 187-226.

⁴⁹ Andres et al. *In Press*. Shorebirds breed in unusually high densities in the Teshekpuk Lake Special Area. Accepted by *Arctic*.

⁵⁰ Andres, B.A., J.A. Johnson, S.C. Brown, R.B. Lanctot. *In Press*. Shorebirds breeding in unusually high densities in the Teshekpuk Lake Special Area, Alaska. Accepted for publication in *Arctic* April 2012.

⁵¹ Alaska Shorebird Group. 2008. Alaska Shorebird Conservation Plan – Version II. Alaska Shorebird Group, Anchorage, Alaska

⁵² Recognizing that the loss of critical habitat can have hemispheric ramifications, the Western Hemisphere Shorebird Reserve Network was initiated in 1985 to identify key shorebird areas. A number of the areas identified as IBAs include or overlap with areas identified as candidate WHSRN sites.

48 states. Up to 100,000 Pacific Brant, Canada Geese, Snow Geese, and White-fronted Geese molt their flight feathers in the vicinity of Teshekpuk Lake each summer.⁵³ This area is unique and there are no other known areas that support large numbers of four species of molting geese across the circumpolar Arctic.⁵⁴ Recent surveys have documented substantial numbers of additional molting geese north and west of Teshekpuk Lake outside of the historically-recognized “core” molting area, including an additional 23,200 geese (adult and young) with roughly half identified as Pacific Brant (12,100). In particular, Cape Simpson (northeastern shore of Dease Inlet) and the Piasuk River Delta (southwestern shore of Smith Bay) were found to host significant numbers of Pacific Brant accounting for the vast majority (88 percent) of the “incremental” Pacific Brant documented outside of the core molting area.⁵⁵

- Up to 30 percent of the Pacific flyway population of Pacific Brant may use the Teshekpuk Lake area for breeding and molting. Pacific Brant congregate at the Teshekpuk Lake area to molt and fatten for migration, arriving from other areas of the North Slope, the Yukon-Kuskokwim Delta, the western Canadian Arctic, and Siberia. “The origin of this molt-migrant population from such distant nesting areas emphasizes the international importance of the Teshekpuk Lake area to molting brant as well as other goose species.”⁵⁶ Pacific Brant are valued by subsistence hunters in northern and western Alaska as well as sport hunters all along the west coast into Mexico.

The greater Teshekpuk Lake area may be even more important for molting Brant than generally recognized because some birds use this area only once in their lifetime, others occasionally, and still others many times. “Therefore, the number or proportion of the population of brant that use this area in a specific year or averaged over multiple years is probably a biased indicator (biased low) of the use of this area by the Pacific flyway population.”⁵⁷

- The Teshekpuk Lake area supports tens of thousands of Greater White-fronted Geese, a population that has grown substantially in recent times. Greater White-fronted geese from the Arctic coastal plain migrate south to overwinter in large numbers along the coasts of Texas, Louisiana, and Mexico, providing a valuable resource to subsistence users as well as sport hunters.
- There are several small and one rapidly growing colony of Lesser Snow Geese along the coastline and river deltas of the NPR-A, with the largest concentration in the Ikpikpuk River delta. A growing number of molting Snow Geese have been documented in the vicinity of Teshekpuk Lake.
- Northern Pintail is the most abundant duck species in the NPR-A with population numbers that can fluctuate substantially from year to year (i.e., a difference of up to 62 percent between “high” and “low” population years). The population variability is believed to be in part a result of “northward displacement from southern nesting areas during drought years.”⁵⁸ The significance

⁵³ Derksen. et al. United States Geological Survey (USGS) - Alaska Science Center. “Avian Population Response to Ecological Change Along the Arctic Coastal Plain” USGS DOI Landscape Initiative Progress Report (January 2005).

⁵⁴ Flint, et al. “Changes in abundance and spatial distribution of geese molting near Teshekpuk Lake, Alaska: interspecific competition or ecological change?” *Polar Biology* (October 2007)

⁵⁵ US Fish and Wildlife Service, Waterfowl Management (Fairbanks). Teshekpuk Lake Area Molting Goose Survey -2010. (March 2010)

⁵⁶ IAP/FEIS Vol 1, p. 251.

⁵⁷ US Fish and Wildlife Service, Waterfowl Management (Fairbanks). Teshekpuk Lake Area Molting Goose Survey -2010. (March 2010)

⁵⁸ IAP/FEIS Vol 1, 256.

of NPR-A lands as a breeding refugium for Northern Pintails in drier/low-water years is unclear. The highest-density breeding areas for Northern Pintail are north and east of Teshekpuk Lake and in the vicinity of Dease Inlet and Nelson Lagoon.

- The largest, contiguous and high-concentration nesting area for Yellow-billed Loon (designated as a candidate species under the Endangered Species Act) is in the greater Teshekpuk Lake area along the western edge of the proposed expanded Teshekpuk Lake Special Area between the Meade and Ikpikpuk Rivers south of Dease Inlet. Attachment D.
- Within the NPR-A, the largest concentration of King Eiders lies south and east of Teshekpuk Lake. Based on migration counts at Point Barrow, the Common Eider population has also declined by approximately half.⁵⁹

When the DOI first announced its initiative to undertake a more comprehensive approach to long-term, landscape-scale planning in the Arctic and to develop an ecosystem-based management framework for the region, the “unique avian and terrestrial resources in the greater Teshekpuk Lake area” was appropriately cited as the example of a place in the NPR-A deserving of protection.⁶⁰

To ensure that the migratory bird resources and associated subsistence values of the greater Teshekpuk Lake area are afforded “maximum protection” as called for under NPRPA, we urge that the ROD fully reflect the most protective provisions of the B-2 preferred alternative.

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Attachment A – Highest-Value Teshekpuk Lake Caribou Habitat and Current Oil/Gas Leases

Attachment B – Movement of Western Arctic Caribou Herd Cows and Red Dog Mine Road

Attachment C – Loss of Subsistence Use from Oil Industry Infrastructure

Attachment D – Yellow-billed Loon Breeding Habitat in the Teshekpuk Lake Area

⁵⁹ IAP/FEIS Vol 1, p. 258.

⁶⁰ Department of the Interior, News Release: Obama Administration Announces Major Steps toward Science-Based Energy Exploration in the Arctic, February 17, 2012.