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Attachment 1
U. S. Fish and Wildlife Service General Comments
Northeast National Petroleum Reserve-Alaska
Draft Amended Integrated Activity Plan/Environmental Impact Statement

1 Our General Comments are limited to a discussion of potential impacts to Department of the Interior Federal trusts resources including migratory birds, marine mammals, anadromous fish, subsistence resources and species listed under the Endangered Species Act. Specific Comments referenced to text in the Draft Amended Integrated Activity Plan/ Environmental Impact Statement (DEIS) will be provided under separate cover by the Fairbanks Field Office.

GENERAL COMMENTS

Special Areas

2 The Naval Petroleum Reserves Production Act of 1976 authorized the Secretary of the Interior to designate Special Areas within the NPR-A that contain significant surface resource values and to assure the maximum protection of these resources in conjunction with exploration of the reserve. Under 43 CFR 2361.1(e)(1), Federal regulations state that such values may be protected by limiting, restricting, or prohibiting the use of and access to appropriate lands. In 1977, as a result of the Act, the Secretary designated three Special Areas within the NPR-A; the Teshekpuk Lake Special Area (TLSA), the Colville River Special Area (CRSA), and the Utukok River Uplands Special Area (URUSA). The Northeast Planning Area encompasses most of the TLSA and about one-third of the CRSA, but none of the URUSA. The DEIS for the Northeast Planning Area recognizes the significance of the TLSA and the CRSA and proposes no changes in their boundaries.

Teshekpuk Lake Special Area

3 The value of the TLSA to molting geese, other waterbirds, caribou and subsistence has been well documented in the DEIS, Service documents, and in the literature. The numbers of Pacific brant and the total numbers of all geese that use this region exceed those of any known molting area in the North American and Siberian Arctic. Although recognized principally for its concentrations of molting geese, the TLSA also provides important nesting, brood-rearing and staging habitat for other waterfowl, including listed spectacled eiders, and for shorebirds. It also provides terrestrial denning habitat used by polar bears and important calving, migration, and insect-relief habitat for the Teshekpuk Lake Caribou Herd, the herd harvested most heavily by Alaskan North Slope subsistence communities.

4 The No Action Alternative of the DEIS represents the current management condition in the Northeast Planning Area, which is founded in the 1998 EIS Record of Decision (ROD). The 1998 decision was intended to protect geese, other waterbirds, caribou and subsistence activities to the maximum extent possible via no-lease and no-surface-occupancy measures to the south and north of Teshekpuk Lake, while allowing leasing and development in the remainder of the

TLSA. Perhaps the most significant decision to be made in the current planning process is whether, based on the best available information, leasing and development is appropriate in the current no-lease area, which includes most of Teshekpuk Lake and the area to its north and east. Important aspects of this analysis include an accounting of any changes in the resource values of this area, the likelihood of impacts to these resources, and our current level of understanding regarding the mitigation of potential impacts.

005 Birds

Resource data collected since 1998 indicate the continuing importance of the TLSA to fish and wildlife resources. With particular regard to molting geese and caribou, there is evidence this area may be more important than previously thought. Service aerial surveys recorded 36,817 molting Pacific brant north of Teshekpuk Lake in 2001; this represented nearly 30 percent of the entire population of Pacific brant (Mallek 2004). In addition, the Pacific brant population is now below the Pacific Flyway population objective (Pacific Flyway Council 2002) and has been in slow decline for decades (Conant and King 2003). Recruitment has been poor in recent years (Groves 2004), and the population appears poised to decline below an established management threshold that will require a major reduction in harvest throughout the range, beginning perhaps as soon as 2005. Despite their low numbers, Pacific brant are an important resource for subsistence waterfowl hunters on the North Slope and in northwest, western and southwest Alaska; in surveys conducted from 1992-2000, brant accounted for over 13 percent of the reported subsistence goose harvest in these areas (AK Mig. Bird Co-Mgmt. Council 2004). In addition to being a valued subsistence resource in Alaska, these birds also represent an important sport harvest species on the west coast of the U.S. and Mexico.

006 Caribou

The existing no-lease area, combined with the no-surface-occupancy area, also encompasses critical calving, migration and insect-relief habitats for the Teshekpuk Lake Caribou Herd (TLH). Recent telemetry data indicate that collared cows found within these areas during calving season have much higher calving success than those found outside the areas. In surveys conducted since 1990, 90 percent (147 out of 163) of collared TLH cows that calved successfully did so within these protected areas (Carroll 2003). During most years, over 75% of the herd uses the area around and north of the lake during the insect season. The TLH continues to be an important subsistence resource, providing most of the caribou harvested by the Native communities of Atqasuk, Barrow, Nuiqsut, and Wainwright. In recent years, 2,500 to 2,800 TLH caribou (about 6 percent of the herd) have been harvested annually (Carroll 2003).

007 Basic

In our review of the DEIS and related documents, we found no new information relative to the potential impacts of oil and gas development on molting geese and caribou in the TLSA. In 1998, the Service analyzed the potential for conflicts between oil development and waterfowl in the Teshekpuk Lake region (Martin 1998). That analysis, which is still relevant, noted evidence of behavioral and physiological responses by molting brant to aircraft and other sources of disturbance that would likely accompany oil and gas development. Such disturbance could cause increased energy expenditures, decreased foraging time, and depleted lipid and protein reserves, which could increase the duration of the flightless period and susceptibility to predation. Birds could be displaced from optimal to sub-optimal habitats, resulting potentially in over-crowding

and ensuing decline in forage availability. Each of these responses, or any combination of them, could result in reduced survival of molting brant. This is likely also true for other molting geese.

8 We are also unaware of new evidence to suggest that molting geese, caribou, or other wildlife in the TLSA are less likely to be impacted by, or more likely to habituate to, the leasing and development scenarios proposed in Alternatives B or C in the DEIS. Due to the continuing importance of the TLSA to molting geese, other waterbirds, caribou and subsistence users, and the lack of any new information regarding the likelihood of impacts or the ability to mitigate them, the Service believes avoiding surface disturbance in this biologically sensitive area, as presented in the No Action Alternative, would provide the greatest level of protection (and least risk) to wildlife, and is our preferred management approach.

9 The Service recognizes, however, that this approach limits the opportunity to explore for and develop other resources, and that the BLM faces a difficult challenge in trying to balance protection of unique biological resources with efforts to provide increased access to areas with high oil potential. Therefore, in evaluating the DEIS, we have considered measures that we feel would be essential to reduce the risk to fish and wildlife should a decision be made to expand leasing within the TLSA. With that in mind, we have attempted to formulate an alternative management approach based on modifications to the draft Preferred Alternative. Our analysis and recommended approach are presented in the *Alternatives* section below.

Colville River Special Area

10 The northeastern third of the 2.3-million acre CRSA lies within the Northeast Planning Area and forms its southern and much of its eastern boundary. The upper Colville River has long been identified as one of the most important raptor nesting areas, in both density of nests and diversity of species, in North America (Kessel and Cade 1956, 1958; Cade 1960; White and Cade 1971). The river corridor and surrounding tundra provide a diverse suite of habitats, resulting in an abundance of prey (small birds and mammals) for raptors nesting along the cliffs and bluffs formed by the river. Arctic peregrine falcons, gyrfalcons, and rough-legged hawks are regular breeders along the Colville River and some of its tributaries (Swem 1996, Ritchie and Wildman 2000).

11 Because these species are considered Arctic and sub-Arctic breeders, it is probable that a significant proportion of the United States' population of these birds nest within the NPR-A, primarily along the Colville River. It is estimated that approximately one-fourth of Alaska's Arctic peregrine population nests along the Colville (Ritchie and Wildman 2000). Banded fledglings from peregrine nests on the Colville have been documented nesting in subsequent years along other North Slope waterways (USFWS unpubl. data). The Colville River may act as a population source for raptors regionally, important for establishing and maintaining populations in adjacent areas. Protecting the habitats within the CRSA, therefore, may not only be important for maintaining local populations of raptors, but for maintaining healthy populations over a broad area. In addition to its importance to nesting raptors, the CRSA

provides extensive and well-developed tall shrub habitats that are limited elsewhere on the North Slope and which support moose and the Slope's most diverse assemblage of nesting passerines.

012 Special Designation

Consistent with the recent Northwest NPR-A Final Integrated Activity Plan/EIS, the Service recommends that leasing of tracts in the Northeast Planning Area within the CRSA be deferred until this area has an approved management plan. When developing that plan, we recommend that the entire CRSA be considered for designation as the Colville River Bird Conservation Area, recognizing the area as supporting the most diverse land bird community in the Alaskan Arctic. Additional recommendations regarding management of the CRSA are addressed below in the *Stipulations and Required Operating Procedures* and *Alternatives* sections.

Threatened and Endangered Species

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Spectacled eiders and the Alaska breeding population of Steller's eiders were listed as threatened under the Endangered Species Act of 1973, as amended, in 1994 and 1997. Steller's eiders in Alaska historically nested discontinuously from the Aleutian Islands to the Seward Peninsula, from the vicinity of Point Lay to Point Barrow, and east of Point Barrow along the Arctic Coastal Plain (ACP) to the United States-Canada border (Kertell 1991). Within the Northeast Planning Area, breeding Steller's eiders were recorded north of Teshekpuk Lake, near Cape Halkett and Pitt Point, prior to 1970 (Quakenbush et al. 2002). Since 1970, the species has been recorded as present but not breeding in these areas and at several other locations north and east of Teshekpuk Lake. Results of surveys conducted over the past decade indicate that the nesting range of the Steller's eider has apparently been reduced to the vicinity of Barrow (Larned et al. 1999; Obritschkewitsch et al. 2001; Ritchie and King 2001, 2002; Quakenbush et al. 2002). Given the evidence of past occupancy, the Northeast Planning Area, particularly the area north of Teshekpuk Lake, could reasonably be expected to provide suitable nesting and brood-rearing habitat for Alaska-breeding Steller's eiders in the event of population recovery.

14

Spectacled eiders, which are more evenly distributed on the ACP, usually nest in wet meadows, basin wetland complexes, along the edges of shallow ponds and lakes, or on islands in larger lakes. Approximately 15 percent of the ACP breeding population of spectacled eiders occurs within the Northeast Planning Area, and Breeding Pair Surveys have identified several areas of high-density spectacled eider nesting within the Northeast Planning Area to the north and northeast of Teshekpuk Lake (Larned et. al. 2003).

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Given the uncertainty regarding future levels of development, how that development would be managed, and how spectacled eiders may be affected by development, it is difficult to evaluate potential impacts of any of the Alternatives on this species. If significant development occurs within areas of high concentrations of spectacled eiders, we believe the potential for population-level impacts exists. Clearly, the surest way to avoid such impacts, which could affect the species' ability to recover, is to exclude development from areas important to the species. The Service's Endangered Species Branch is coordinating with the BLM to complete the required Endangered Species Act Section 7 Consultation, which will evaluate whether the cumulative, direct and indirect effects will jeopardize the species' survival and recovery.

Marine Mammals

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Polar bears occur throughout much of the NPR-A, primarily along or within a few miles of the coast, although they may use habitats 25 miles or more inland. The Beaufort Sea coastline, as well as river drainages and bluffs along lakes within the NPR-A, provide important areas used by polar bears for resting, feeding, denning, and seasonal movements. In the Northeast Planning Area, polar bears are known to have denned at or near Cape Simpson, Smith Bay, Lonely, Pogik Bay, Cape Halkett, Eskimo Islands, Atigaru Point, and the Colville River Delta. In the last decade, the number of polar bears occurring along coastal areas of the Beaufort Sea has been increasing (Stirling and Andriashek 1992, Amstrup and Gardner 1994, and Amstrup 2000). The reason for this increase is unknown but may be related to ice conditions. The USFWS (Schliebe et. al. in prep.) recently compared the distance of the ice edge from shore (during fall months) with the numbers of polar bears observed on land. A significant correlation was found to exist: as distance to the ice edge increased, so did the numbers of bears observed on land. The potential for continued reduction in ice cover from global climate change could result in greater numbers of polar bears occurring along the coastline for protracted periods of time, thereby also increasing potential conflicts from human activity.

019 Marine Mammals

020 Marine Mammals

As the primary entity responsible for conservation of polar bears, the Service believes the No Action Alternative would be most consistent with mandates set forth in the Marine Mammal Protection Act of 1972 and the 1973 International Agreement on the Conservation of Polar Bears. This Alternative would preclude oil and gas development in the majority of the coastal and near-coast inland habitats within the Planning Area. These areas are most likely to be used by polar bears for denning, feeding, and seasonal movements. Continued and permanent protection of these areas from oil and gas leasing would be the most effective of the three Alternatives presented with respect to minimizing potential impacts on polar bears. If, however, additional leasing is to occur, as proposed in the draft Preferred Alternative and Alternative C, our primary concerns for polar bears are: 1) disturbance to denning bears; 2) disturbance to feeding/resting bears during the open water period; 3) large-scale oil spills; and 4) cumulative effects from ongoing and future oil and gas development that would result in loss of polar bear habitats or that would preclude continued use of preferred habitats.

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A number of proposed lease Stipulations and ROPs are intended to enhance protection for polar bears. For example, ROPs include measures to minimize bear attractants, prepare oil spill contingency plans, develop bear-human interaction plans, protect denning bears, and provide bear education and safety training. Stipulations developed for biologically sensitive areas, include setbacks for primary river drainages (Lease Stipulation K-1), deep-water lakes (Lease Stipulation K-2), and the coast (Lease Stipulation K-6). These Stipulations and ROPs, if they incorporate language recommended by the Service (see *Specific Comments*, under separate cover), are implemented consistently, monitored, and enforced, would likely reduce impacts to polar bears and their habitats.

Other Species of Concern

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Several other species that could be impacted by oil development in the Northeast Planning Area are of concern to the Service. We have recently been petitioned to consider listing yellow-billed loons under the Endangered Species Act. The Northeast Planning Area supports approximately 25 percent of Alaska's breeding population of yellow-billed loons, with notable concentrations to the west, southwest, and east of Teshukpuk Lake. These areas provide unusually high concentrations of deep-water lakes (over four meters deep) as compared to other areas on the ACP. Although aerial surveys over the last two decades do not suggest a change in the number of adult yellow-billed loons on Alaskan breeding grounds (Mallek et. al. 2004), the ability of surveys to detect a significant change is relatively low (i.e. relatively large population declines could occur before current survey methods would detect a significant declining trend).

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Yellow-billed loons in the Northeast Planning Area could be impacted by activities that reduce productivity, including direct or functional loss of preferred breeding habitats, reduction in prey populations and increases in nest predators. Disturbance, pollution, and hydrologic changes associated with oil development are mechanisms that may make breeding habitats temporarily or permanently unsuitable, and suitable alternative breeding sites may not be available. Increased opportunity for predation resulting from human-caused disturbance may decrease the already low annual productivity of yellow-billed loons, especially when combined with potential increases in predator numbers associated with industrial development. The Service and BLM have begun a collaborative effort to develop a Conservation Agreement for yellow-billed loons in the NPR-A. Additionally, the Service recognizes BLM's intent to protect yellow-billed loons by proposing Special Conditions associated with their habitats; however, we believe the language in Special Condition (b) should be strengthened to clearly prohibit development within defined buffers.

024 Stips & ROPs

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The king eider, another species for which the Service has management concerns, is found in significant numbers in the north-central portion of the Northeast Planning Area. A large area immediately north and west of Fish Creek supports the largest high-density nesting area for king eiders on the North Slope of Alaska (Larned et. al. 2003). King eiders surveyed as they migrate past Barrow have declined by approximately 50 percent since the mid-1970s (Suydam et. al. 2000). Additional measures to minimize disturbance and prevent increase in predators may be appropriate in high-density nesting areas.

026 Brds

In general, the DEIS needs further information on the importance of the Planning Area to shorebirds, and the potential impacts of oil and gas development on shorebirds. The DEIS concludes that oil leasing and development would likely have only minor impacts on shorebirds. Although such statements may be true when developments are viewed independently, the cumulative effects from many developments may have more than minor negative effects on a given species. This may be particularly true for species that use the drier habitats within the NPR-A. Such areas, frequently selected as sites for pads, pipelines and roads as managers attempt to avoid wetland sites, may be relatively limited and locally more important to some species compared to adjacent wetland areas. In the Northeast Planning Area, these drier areas

are selected by buff-breasted sandpipers, a Species of High Conservation Concern (Brown et. al. 2001). Other species of Conservation Concern that occur in the NPR-A include American golden plovers, ruddy turnstones, sanderlings, red knots, bar-tailed godwits, and whimbrels.

027 Birds

Many species of shorebirds are highly site faithful, and loss or alteration of traditional breeding sites may prevent these birds from breeding successfully. Thus, displaced birds may become part of the nonbreeding portion of the population, resulting in reduced productivity and lower recruitment rates. Cumulative effects from many developments over a large area could have a negative impact on less common species, especially if facilities and roads are built in their preferred habitats. Most shorebirds occur in lower-than-expected densities adjacent to oil field roads (Troy 1993, 2000), and snow drifts and impoundments adjacent to oil field facilities during nest initiation can displace shorebirds from formerly suitable nesting. If additional leasing results in development of new oil fields, impacts to shorebirds will increase. Shorebird breeding densities in NPR-A tend to exhibit a coastal gradient, with higher densities nearer the coast compared to inland areas (Andres 2004), and concentrations of staging shorebirds are most notable at coastal locations, particularly north and east of Teshekpuk Lake. Development within the TLSA will have disproportionately greater effect than development further inland. Concerns are greatest for those species that are declining and are found in greater than average abundance in the TLSA, including dunlin, red phalarope, and ruddy turnstone (Andres 2004).

Stipulations and Required Operating Procedures

28

A major component of Alternatives B and C in the DEIS is the proposal to replace existing Stipulations with performance-based Stipulations and ROPs consistent with those authorized recently by the Northwest Planning Area ROD. The performance-based measures are objective-driven and include Requirements/Standards that are intended to impart greater flexibility to the lessee or operator in meeting objectives. These measures include five General Lease Stipulations, each with a single Requirement/Standard; 29 General Lease ROPs, some with multiple Requirements/Standards; and eight Stipulations that apply in Biologically Sensitive Areas. The No Action Alternative would retain the 79 existing Stipulations authorized by the 1998 ROD.

029 Stips & ROPs

The Service has concerns with several aspects of the proposed Stipulations and ROPs. Throughout the DEIS it is stated that these measures will provide protection for a variety of resources and will mitigate adverse impacts associated with oil leasing and development. This statement is based on the assumptions that 1) Stipulations and ROPs will be implemented and enforced consistently, and 2) they will be effective in achieving mitigation objectives; neither is assured. Many of the Requirements/ Standards contain language suggesting implementation will be subjective and, therefore, inconsistent (e.g. pg. 2-15 "All feasible precautions shall be taken…," pg. 2-17 "…may be authorized," "…prohibited unless authorized," pg. 2-18 "…may be required"). Additionally, lessees may be granted exemptions from Stipulations and ROPs if they are able to demonstrate that the impacts of their activities would be minimal, or that implementing the measure is technically not feasible or economically prohibitive. However, the criteria that would be used to determine minimal impact, technical and economic feasibility, and

thresholds for granting exemptions are not clearly defined. Even if implemented and enforced, the effectiveness of the proposed mitigation measures remains unknown. These uncertainties should be clearly articulated in the final EIS.

030 Roadless

The DEIS presents in several places that Stipulations and ROPs proposed under Alternatives B and C will impart resource protection similar to or greater than those currently in place in the Planning Area. Yet, major components of the existing Stipulations would be eliminated under these Alternatives. For example, much of the impact analysis conducted for the 1998 IAP/EIS was predicated upon a "roadless" development scenario that, while permitting in-field roads, prohibited a road connection to existing infrastructure outside the Planning Area. This requirement, which recognizes the potential for significant impacts of increased access in biologically sensitive areas, was incorporated into the 1998 ROD but is not a component of Alternatives B and C in the DEIS. Similarly, existing Stipulations prohibit exploratory drilling in lake beds and construction of permanent or gravel facilities, including roads, during exploration. These prohibitions are not included under Alternatives B and C, which, despite terrestrial and aquatic buffers, could allow drilling, pipelines, causeways and production pads in some lakes, including Teshekpuk Lake and large goose molting lakes, and which could allow construction of gravel roads and pads for exploration activities. It seems clear that the potential exists for greater impacts under proposed Stipulations and ROPs than under the existing management regime.

031 Stips & ROPs

032 Stips & ROPs

Criteria that would be used to determine if objectives of specific Stipulations and ROPs are met are not defined. For instance, the objective of ROP A-2 is to avoid human-caused changes in predator populations, which implies the need for sound pre-activity baseline data on predator populations; yet collecting baseline data is not a requirement. Requirement/Standard (a) of this ROP states: "All feasible precautions shall be taken to avoid attracting wildlife to food and garbage," yet it does not indicate what course of action would be taken if predator numbers increase in association with leasing or development activities despite feasible precautions. That is, it does not describe an adaptive management approach that would be used to correct such a situation. Although North Slope operators have, with the encouragement of resource agencies, implemented measures to reduce the availability of artificial nesting or denning structures and anthropogenic food sources, these measures have not been completely effective, as evidenced by the continued nesting of ravens on permanent and temporary structures and the persistence of unusually large concentrations of gulls associated with human activities.

033 Stips & ROPs

Impacts to molting geese north of Tehsekpuk Lake continue to be a major concern with respect to potential oil development. Although Requirements/Standards (h) and (i) of proposed Lease Stipulation K-4 state that "[n]onessential" helicopter overflights "may be" suspended and restrictions on fixed-wing aircraft "may include" limits on the number of flights and flight corridors, there are no unequivocal restrictions on these activities, which are known to impact molting geese. It is unclear what constitutes a "nonessential" helicopter flight and under what conditions or upon what criteria restrictions on helicopter and fixed-wing aircraft travel would be implemented. Given the importance of this area to molting geese, the Service believes that clearly defined restrictions governing air traffic in the vicinity of the goose molting area are

needed for the Final EIS.

034 Stips & ROPs

In addition to the Stipulations and ROPs proposed in the DEIS for the Colville River Special Area, the Service recommends permanent facility setbacks of *at least* 2 miles from the northern and western bluffs of the river due to the unusual concentration of nesting raptors in these areas and the uncertainty regarding how these birds would react to disturbance within this corridor. The larger buffer also would enhance the protection of adjacent habitats used as foraging areas by raptors. We also recommend that roads, if necessary, be minimized to a single consolidated crossing of the Colville River and CRSA, and that aircraft be restricted to altitudes of at least 1,500 feet AGL within 1/2 mile of cliffs identified as raptor nesting areas from March 15 - August 5.

Alternatives

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The No Action Alternative represents the current management condition in the Northeast Planning Area, as approved by the 1998 EIS ROD, and it forms the basis of the DEIS analysis. The DEIS evaluates two alternatives for increasing the area available for oil leasing and development. Specifically, it analyzes the potential impacts to biological and cultural resources of allowing leasing and development in most (Alternative B) or all (Alternative C) of the current 589,000-acre no-lease area in the TLSA. Other major decisions considered in the DEIS include: 1) replacing existing Stipulations with performance-based Stipulations and ROPs consistent with those authorized by the January 2004 ROD for the Northwest Planning Area of the NPR-A, and 2) removing the surface occupancy restriction that governs a 269,000-acre band of lease tracts west and south of the current no-lease area.

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As recognized by BLM in the DEIS, making some areas unavailable for oil leasing and development is one means of providing protection to important biological resources. Of the Alternatives considered in the DEIS, the No Action Alternative would extend the greatest protection to molting geese including Pacific brant, other migratory waterfowl and shorebirds, polar bears, and subsistence resources, particularly the Teshekpuk Lake Caribou Herd, and thus, is our preferred management approach. We recognize, however, that this approach limits opportunities to develop other resources, and that BLM faces a difficult challenge in trying to balance protection of unique biological resources with efforts to provide increased access to areas with high oil potential. Therefore, we have attempted to formulate an alternative management approach based on modifications to the draft Preferred Alternative that we believe would be essential to reduce the risk to fish and wildlife should a decision be made to expand leasing within the TLSA.

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We initially focused our effort on Pacific brant because of their small and declining population, their potential vulnerability to development-related disturbances, their importance to subsistence, and the substantial segment of the population that annually molts in the area north of Teshekpuk Lake. Although our analysis is focused on brant, our recommendations are intended to protect other trust resources as well, including other geese. Reducing risks to molting geese would also benefit other species of concern including spectacled eiders and other waterfowl, loons,

shorebirds, polar bears, and caribou. Of particular concern, the response of molting geese to oil field development cannot be predicted with confidence, and because the area is unique, there is a risk of irreversible population-level impacts. The distribution of molting geese varies annually, thus we adopted a management goal of protecting the area used by at least 90 percent of molting brant in any year. We propose to protect the identified area by retaining its no-lease status. We point out, however, that by focusing on brant, our recommended no-lease area would not include all critical caribou habitats, particularly the important migration corridor east of Teshekpuk Lake. Although not our management responsibility, we recommend BLM address the issue of protecting important caribou habitats, including migration corridors.

039 Alternatives

We re-analyzed waterfowl survey data, with an emphasis on brant, to guide determination of an appropriate no-lease area. Preliminary results indicate that the draft Preferred Alternative would, on average, protect 56% of molting brant under a no-lease designation. The remaining brant use lakes that: 1) occur on the boundary between the no-lease area and the area available to leasing, 2) occur entirely within the area available for leasing, 3) occur on private land (Cape Halkett) or 4) occur on the boundary between public and private lands. Our analysis also indicates that by enlarging the no-lease zone presented in the draft Preferred Alternative from 213,000 to approximately 296,000 acres, the goal of protecting 90 percent of molting brant is nearly achieved. Although our proposed revision to the boundary of the no-lease area (Figure 1) falls just short of the 90% goal, due largely to the importance of lakes on private lands in the Cape Halkett area to molting geese, it does encompass molting lakes that support, on average, 89 percent of molting brant (Table 1). Our proposal also would protect larger portions of molting greater white-fronted, Canada, and snow geese (Figure 2). The modified boundaries would increase protection of habitats important to spectacled eiders, brood-rearing waterfowl, seaducks, shorebirds, and denning polar bears. Finally, the modified no-lease area would increase protection of calving, migration, and insect-relief habitat used by the Teshekpuk Lake Caribou Herd.

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Outside the modified no-lease area, a rigorous adaptive management approach to monitoring and assessment could provide a better understanding of the risks entailed in exposing large flocks of molting geese to the disturbances that accompany oil development, should it occur, and information gained could be applied to future management decisions. That information gained, however, comes at the cost of diminished protection for wildlife in the portion of the Teshekpuk Lake area opened to development. Areas closed to leasing would function as a control with which to evaluate the effects of human activity. This approach controls risk to molting geese by limiting the proportion of their populations subject to disturbance while providing for a structured approach to reducing uncertainty.

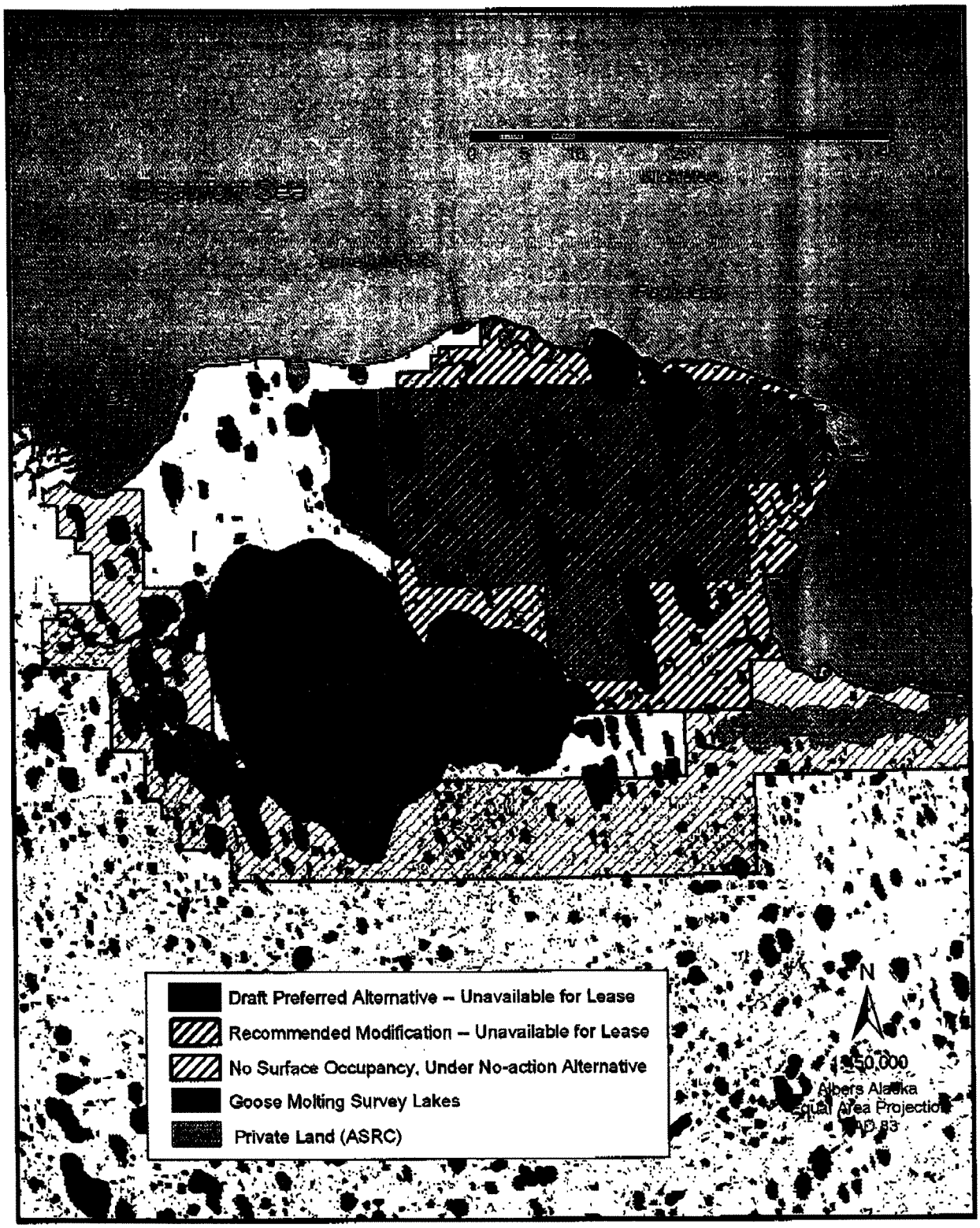

Figure 1. Proposed modification to Draft Preferred Alternative, No-lease Zone.

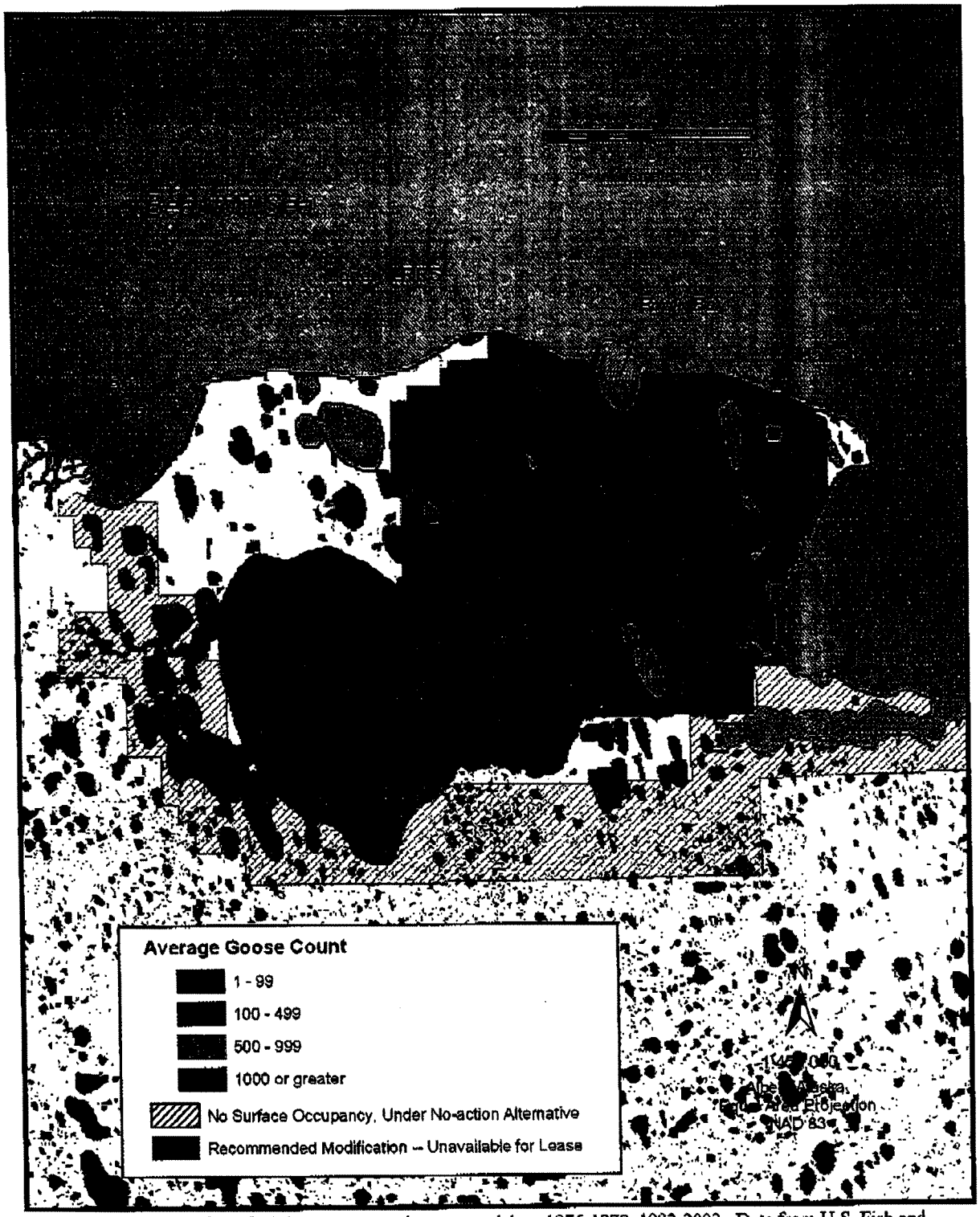

Figure 2. Average number of adult geese counted on survey lakes, 1976-1978, 1982-2003. Data from U.S. Fish and Wildlife Service, Migratory Bird Management, Anchorage.

Table 1. Proportion (%) of annual numbers of molting geese using lakes located in different land-use categories in the Northeast Planning Area of the NPR-A. Mean is the average proportion of geese using lakes in each category, calculated for all years of available survey data (1976-1978, 1982-2003); minimum and maximum show the range in proportions among years. "Not Available for Lease" represents molting lakes entirely protected within the boundary of the proposed no-lease zones; all other categories represent lakes that are partially or wholly outside the no-lease zones, or that occur on private land at Cape Halkett, and for which there is uncertainty with regard to protection of molting geese.

	Draft Preferred Alternative No-lease Zone					Modified No-lease Zone				
Species	Available for Lease	Private	Private Borderline	NPR-A Borderline	Not Available for Lease	Available for Lease	Private	Private Borderline	NPR-A Borderline	Not Available for Lease
Brant										
Mean	6	5	4	30	56	1	5	4	1	89
Minimum	1	0	0	18	41	0	0	0	0	81
Maximum	16	10	10	43	70	7	10	10	5	97
Greater White-fronted Goose										
Mean	22	0	0	28	49	18	0	0	4	77
Minimum	6	0	0	16	27	1	0	0	0	63
Maximum	41	1	2	53	74	28	1	2	26	95
Canada Goose										
Mean	9	2	1	36	51	8	2	1	2	87
Minimum	1	0	0	23	30	3	0	0	0	76
Maximum	23	12	5	54	67	15	12	5	13	96
Snow Goose										
Mean	35	0	0	21	44	16	0	0	1	82
Minimum	0	0	0	1	7	0	0	0	0	52
Maximum	77	6	10	54	97	47	6	10	10	100

Recommendations and Conclusion

41

Recognizing the irreplaceable nature of the fish and wildlife resources in the Northeast Planning Area, particularly within the TLSA, the Service prefers the protective measures provided in the No Action Alternative. However, if BLM decides a portion of the current no-lease area is to be made available for leasing, the Service believes such activity should proceed only under a management plan that prioritizes protection of molting geese and other trust resources while allowing phased development guided by a rigorous adaptive management approach. Therefore, should leasing be expanded in the TLSA, we recommend the following modifications to the draft Preferred Alternative to reduce risks to trust resources in the Northeast Planning Area:

042 Alternatives

1. The no-lease area proposed under the draft Preferred Alternative would be increased from 213,000 to approximately 296,000 acres to protect molting brant and other trust resources (see Figure 1).

043 Alternatives

2. Teshekpuk Lake and other fish-bearing lakes would be off-limits to surface development. A minimum ¼-mile undisturbed buffer around these lakes would be applied to prevent oil and other hazardous material spills from reaching these largely confined systems.

044 Alternatives

3. Other than approved surveys, non-emergency helicopter or fixed-wing transits over the no-lease zone would be prohibited from June 15 – August 20.

045 Alternatives

4. The no-surface-occupancy requirements for lease tracts west and south of the current no-lease area would be maintained to protect core calving habitat for the Teshekpuk Lake Caribou Herd.

046 Alternatives

5. To avoid the potential impacts of increased access in biologically sensitive areas, a roadless design would be required for any development proposed within the existing no-lease and no-surface-occupancy areas of the TLSA. Within the CRSA, roads will be minimized to a single consolidated crossing of the Colville River and CRSA, if necessary.

047 Alternatives

6. Leasing of tracts within the Colville River Special Area would be deferred until this area has an approved management plan. This is consistent with the recent Northwest NPR-A Final Integrated Activity Plan/EIS, and would protect nesting raptors and passerines.

048 Alternatives

7. The no-permanent-facilities buffer adjacent to the Colville River would be expanded from one to two miles to encompass important raptor foraging habitats.

049 Alternatives

8. Until an approved management plan is completed for the CRSA, aircraft would be restricted to altitudes of at least 1,500 feet AGL within 1/2 mile of cliffs identified as raptor nesting areas from March 15 - August 5.

050 Alternatives

9. Construction of permanent facilities for exploration would be prohibited.

Attachment 2
U. S. Fish and Wildlife Service References
Northeast National Petroleum Reserve-Alaska
Draft Amended Integrated Activity Plan/Environmental Impact Statement

References for General Comments

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