DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[Docket No. FWS–R7–ES–2024–0147; FXES111607MRG01–256–FF07CAMM00]

Marine Mammals; Proposed Incidental Harassment Authorization for the Southern Beaufort Sea Stock of Polar Bears During Well Remediation Activities, North Slope of Alaska; Draft Environmental Assessment

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of receipt of application; proposed incidental harassment authorization; notice of availability of draft environmental assessment; request for comments.

SUMMARY: We, the U.S. Fish and Wildlife Service, in response to a request under the Marine Mammal Protection Act from the Bureau of Land Management, propose to authorize nonlethal incidental take by harassment of small numbers of Southern Beaufort Sea (SBS) polar bears (*Ursus maritimus*) for 1 year from the date of issuance of the incidental harassment authorization (IHA). The applicant requested this authorization for take by harassment that may result from activities associated with oil well plugging and reclamation, soil sampling, snow trail, pad, and airstrip construction, and summer cleanup activities in the North Slope Borough of Alaska between Wainwright and Oliktok. This proposed authorization, if finalized, will be for up to 12 takes of polar bears by Level B harassment. No Level A harassment or lethal take is requested, expected, or proposed to be authorized. We invite comments on the proposed IHA, the application package, draft environmental assessment, and related documents from the public and local, State, Tribal, and Federal agencies.

DATES: Comments must be received by **[INSERT DATE 30 DAYS AFTER THE DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].**

ADDRESSES: *Document availability:* You may view documents at *https://www.regulations.gov* under Docket No. FWS-R7-ES-2024-0147. Alternatively, you may request these documents

from the person listed under **FOR FURTHER INFORMATION CONTACT**.

Comment submission: You may submit comments on the proposed authorization by one of the following methods:

- *Electronic submission: https://www.regulations.gov*. Follow the instructions for submitting comments to Docket No. FWS-R7-ES-2024-0147.
- *U.S. mail:* Public Comments Processing, Attn: Docket No. FWS-R7-ES-2024-0147, U.S. Fish and Wildlife Service, MS: PRB (JAO/3W), 5275 Leesburg Pike, Falls Church, VA 22041–3803.

We will post all comments at *https://www.regulations.gov*. You may request that we withhold personal identifying information from public review; however, we cannot guarantee that we will be able to do so. See **Request for Public Comments** for more information.

FOR FURTHER INFORMATION CONTACT: Charles Hamilton, by email at *R7mmmregulatory@fws.gov*, by telephone at 907-786-3800, or by U.S. mail at U.S. Fish and Wildlife Service, MS 341, 1011 East Tudor Road, Anchorage, AK 99503. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:

Background

Section 101(a)(5)(D) of the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361, *et seq.*), authorizes the Secretary of the Interior (Secretary) to allow, upon request, the incidental, but not intentional, taking by harassment of small numbers of marine mammals in response to requests by U.S. citizens (as defined in title 50 of the Code of Federal Regulations (CFR) in part 18, at 50 CFR 18.27(c)) engaged in a specified activity (other than commercial fishing) in a specified geographic region during a period of not more than 1

year. The Secretary has delegated authority for implementation of the MMPA to the U.S. Fish and Wildlife Service (FWS or we). According to the MMPA, the FWS shall allow this incidental taking by harassment if we make findings that the total of such taking for the 1-year period:

(1) is of small numbers of marine mammals of a species or stock;

(2) will have a negligible impact on such species or stocks; and

(3) will not have an unmitigable adverse impact on the availability of the species or stock for taking for subsistence use by Alaska Natives.

If the requisite findings are made, we issue an authorization that sets forth the following, where applicable:

(a) permissible methods of taking;

(b) means of effecting the least practicable adverse impact on the species or stock and its habitat and the availability of the species or stock for subsistence uses; and

(c) requirements for monitoring and reporting of such taking by harassment, including, in certain circumstances, requirements for the independent peer review of proposed monitoring plans or other research proposals.

The term “take” means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill, any marine mammal. “Harassment” for activities other than military readiness activities or scientific research conducted by or on behalf of the Federal Government means any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (the MMPA defines this as “Level A harassment”), or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (the MMPA defines this as “Level B harassment”).

The terms “negligible impact” and “unmitigable adverse impact” are defined in 50 CFR 18.27 (i.e., regulations governing small takes of marine mammals incidental to specified activities) as follows: “Negligible impact” is an impact resulting from the specified activity that

cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival. "Unmitigable adverse impact" means an impact resulting from the specified activity: (1) that is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by (i) causing the marine mammals to abandon or avoid hunting areas, (ii) directly displacing subsistence users, or (iii) placing physical barriers between the marine mammals and the subsistence hunters; and (2) that cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

The term "small numbers" is also defined in 50 CFR 18.27. However, we do not rely on that definition here as it conflates "small numbers" with "negligible impacts." We recognize "small numbers" and "negligible impacts" as two separate and distinct requirements when reviewing requests for incidental harassment authorizations (IHA) under the MMPA (see *Natural Res. Def. Council, Inc.* v. *Evans*, 232 F. Supp. 2d 1003, 1025 (N.D. Cal. 2003)). Instead, for our small numbers determination, we estimate the likely number of marine mammals to be taken and evaluate if that number is small relative to the size of the species or stock.

The term "least practicable adverse impact" is not defined in the MMPA or its enacting regulations. For this IHA, we ensure the least practicable adverse impact by requiring mitigation measures that are effective in reducing the impact of specified activities, but not so restrictive as to make specified activities unduly burdensome or impossible to undertake and complete.

If the requisite findings are made, we shall issue an IHA, which may set forth the following, where applicable: (i) permissible methods of taking; (ii) other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for subsistence uses by coastal-dwelling Alaska Natives (if applicable); and (iii) requirements for monitoring and reporting take by harassment.

Summary of Request

On June 17, 2024, the FWS received a request from the Department of the Interior's Bureau of Land Management (BLM) for authorization to take by nonlethal incidental harassment small numbers of Southern Beaufort Sea (SBS) polar bears (*Ursus maritimus*) during oil well plugging and reclamation; soil sampling; snow trail, pad, and airstrip construction; and summer cleanup activities in the North Slope Borough of Alaska between Wainwright and Oliktok for a period of 1 year from the date of issuance, and beginning during the winter of 2024-2025. Their request also included a proposed Polar Bear Awareness and Interaction Plan.

The FWS requested further information on June 20, 2024, and July 10, 2024. The BLM submitted clarifying information on July 10, 17, and 23, 2024. The FWS received a revised application on August 26, 2024. The FWS deemed the revised request dated August 2024 (received August 26, 2024; hereafter referred to as the "Request") adequate and complete on August 27, 2024.

Description of Specified Activities and Specified Geographic Region

The specified activities described in the Request consist of oil well plugging and reclamation; soil sampling; snow trail, pad, and airstrip construction; and summer cleanup activities associated with two legacy well sites in the North Slope Borough of Alaska between Wainwright and Oliktok (figure 1; BLM 2024).

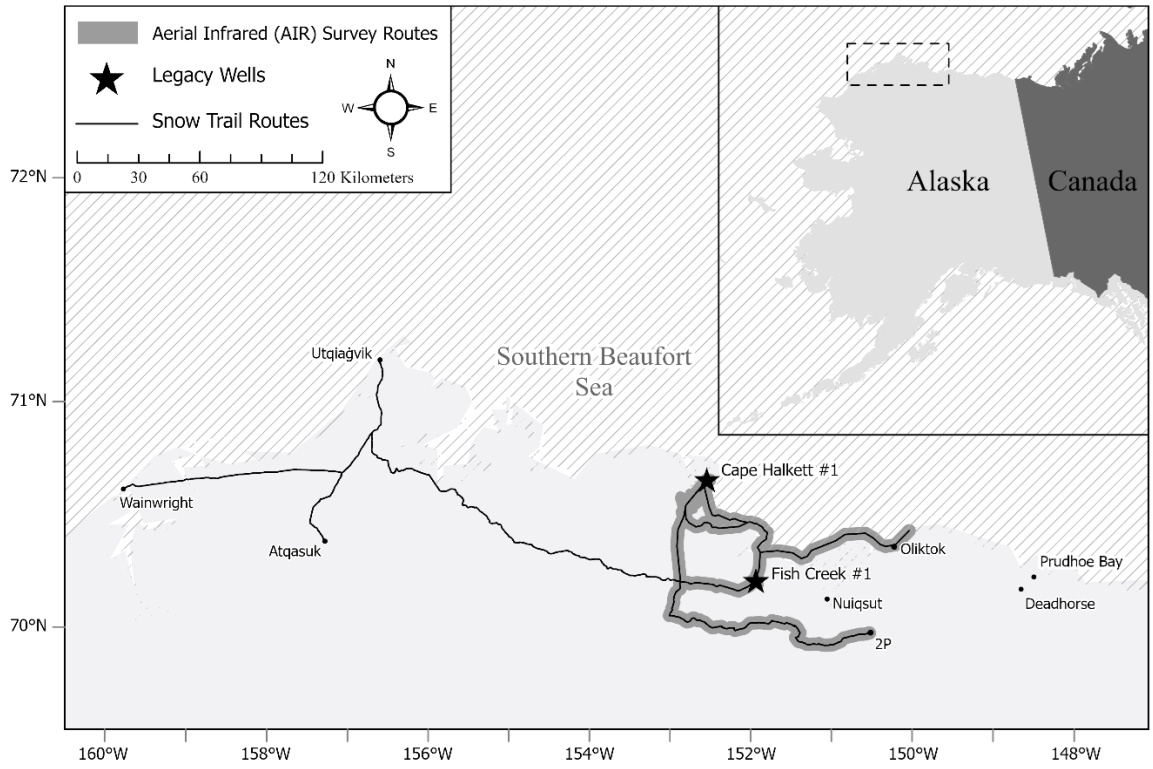

Figure 1—Specific geographic region of the proposed legacy well plugging and reclamation in the North Slope Borough of Alaska.

The BLM subsequently clarified that activities (e.g., resupply, backhaul of waste, demobilization of equipment) that could occur on pre-existing gravel roads to the east of the specified geographic region (i.e., between Oliktok and Prudhoe Bay) are not specified activities for which BLM requests incidental take authorization.

Fish Creek #1 Legacy Well Reclamation

The Fish Creek #1 Legacy Well (Fish Creek well), located in wetland tundra approximately 14.5 kilometers (km) (9 miles [mi]) inland from the coast and approximately 39 km (24 mi) northwest of Nuiqsut, was drilled in 1949 by the U.S. Navy (figure 1). A concrete pad was built on pilings for drilling operations, and the cellar was concrete reinforced with steel matting. No reserve or flare pits are associated with this well. The well was drilled to a total depth of 2,139 meters (m) (7,020 feet [ft]), then plugged back to 777 m (2,550 ft) and sidetracked to a new total depth of 920 m (3,018 ft) (BLM 2024).

In 2020 and 2021, the BLM began and completed soil sampling and debris removal at Fish Creek well. Sampling work showed areas around the wellhead with impacted soil and concrete, resulting in 3.1 cubic meters (m^3) (4 cubic yards [yd^3]) of material that were removed for disposal. The BLM's 2020-2021 cleanup efforts also generated approximately 29 m^3 (38 yd^3) of materials including recyclable scrap metal 8.4 m^3 (11 yd^3) and inert debris 21 m^3 (27 yd^3) for proper disposal. However, due to time constraints encountered during winter 2021 activities, the petroleum-contaminated soil identified during the sample efforts was not removed (estimated 3.8 m^3 [5 yd^3]). Further in-depth descriptions of previous remediation actions at the Fish Creek well are provided within the BLM's application (BLM 2024). The proposed project would permanently plug and close the Fish Creek well and remove all chemicals, fluids, drilling wastes, contaminated soil, and any remaining scattered surface debris found at the site. Specific methodology for well plugging and waste collection are described in the BLM's application (BLM 2024).

Cape Halkett #1 Legacy Well Reclamation

The Cape Halkett #1 well (Cape Halkett well), located about 6.4 km (4 mi) from the coast and approximately 82 km (51 mi) northwest of Nuiqsut, was drilled by the U.S. Navy in 1975 (figure 1). The well site contains extensive wooden pilings that supported an elevated platform above the water to conduct drilling operations. An open casing extends 0.6 m (2 ft) above ground level. It is located inside a steel framed and sheeted cellar that has been sheared on the east side and completely rusted at the base. The cellar contains minor amounts of metal debris inside and broken cement blocks outside. There is no reserve pit present. However, two low gravel-bermed areas were constructed, one around the fuel area and the other for discharge of drilling waste. The well was originally plugged in 1975 with four cement plugs set at 2,682 m (8,800 ft), 2,499 m (8,200 ft), and 2,387m (7,830 ft). The final plug was set with a mix of ArcticSet and Class G cement from 434 m (1,425 ft) to the surface of the well. Minor remediation efforts were undertaken in the late 1970s and early 1980; however, more is required. Sampling activities at

the Cape Halkett well were performed by the U.S. Geological Survey (USGS) in 1989. Results of the sampling efforts showed elevated levels of total petroleum hydrocarbons (TPH), oil and grease concentrations, benzene, toluene, ethylbenzene, xylenes, barium, and chromium. Observations from the USGS and BLM site visits note a pile of drilling mud and a pile of cuttings near the well. The total volume of soil removal is not fully known; however, it is not anticipated to be a substantial volume (BLM 2024).

This project would verify and ensure permanent closure of the Cape Halkett well and remove all chemicals, fluids, drilling wastes, contaminated soil, and any remaining scattered surface debris found at the site. Any pilings still exposed above ground would be cut at or slightly below the ground surface of the excavated areas. Any excavated areas would be backfilled. Specific methodology for well plugging and waste collection are described in the BLM's application (BLM 2024).

Snow Trail, Pad, and Airstrip Construction

There are no permanent roads available to directly access either of the two legacy wells included in this project; therefore, construction of temporary snow trails is required. Snow trail construction will begin in January or February 2025, starting with "prepacking" a minimum of 15 centimeters (6 inches) of base snow via all-terrain smooth-tracked vehicles approved for off-road tundra travel. Prepacking promotes lower tundra soil temperatures and accelerates freezing of soils prior to use, thereby helping to protect the tundra during snow trail and pad grooming, maintenance, and use. Snow will also be packed around stream crossings to protect stream banks and vegetation. Exact locations may vary up to 1.6 km (1 mi) on either side of the center lines of the snow trail routes depicted in figure 1 based on field conditions. This project will require the use of up to approximately 790 km (491 mi) of 9-m (30-ft) wide snow trails; however, some of the trails utilized will include annually constructed public-use trail systems such as the North Slope Borough Community Winter Access Trail (CWAT) (BLM 2024). The majority of public snow trail usage, including all trails west of approximately 153°W longitude, will occur only

during demobilization after April 15 when polar bear denning season has ended. Only snow trails that have been surveyed for maternal dens via aerial infrared (AIR) (see *Maternal Den Surveys*) will be used during the denning season (November to April 15; figure 1). All snow trail usage will cease with the spring thaw.

A 610-m (2,000-ft) long by 30-m (100-ft) wide snow airstrip will be constructed at both well sites to allow winter resupply via fixed-wing aircraft. No fuel will be stored at the airstrips. A 2.4-hectare (6-acre, 152-m-by-152 m, 500-ft-by-500-ft) snow pad will be constructed at both well sites to support testing, cleanup, plugging, and other associated activities. No water will be used for snow trail, pad, or airstrip construction.

Mobilization, Resupply, and Demobilization

Large equipment, including mobile camp trailers, drill rigs, and other support equipment and supplies, will be moved west to the Fish Creek and Cape Halkett well sites from routes originating at either the 2P gravel pad and/or existing pads at Oliktok (figure 1). The specific route will be determined, in part, by environmental conditions. However, to be conservative, our analyses assume all routes are used. Equipment will be hauled along snow trails by appropriate sized tractors or other similar equipment. In January or February 2025, four to six trips will be required to haul camp trailers, vehicles, and drill rig equipment to the well sites, followed by four to six trips to return equipment during demobilization in April 2025. During operations, up to 30 additional round trips will be required for resupply and/or backhaul waste at both well sites. Furthermore, up to 25 winter resupply flights via fixed-wing aircraft will be required at both well sites (up to 50 total flights).

Following final well plugging, cleanup, inspections, and soil sampling, all equipment would be demobilized Wainwright, Utqiaġvik, or Atqasuk along routes shown in figure 1. The drill rig and wastes generated from the well plugging and closure would be transported along routes to 2P or Oliktok before final transportation for appropriate disposal. The majority of snow trail and camp cleanup, such as trash removal and stick-picking, will occur during

demobilization, but final inspections will occur during the summer via helicopter (see *Summer Cleanup and Inspections*). Full scope of waste material disposal procedures is available in the BLM's application (BLM 2024).

Camp Setup

Mobile camps will be required to provide crew lodging during well site activities. The camp set up at Fish Creek will consist of 20-25 trailers to provide housing, restrooms, kitchen, office space, shop spaces, and other required facilities for approximately 25 personnel. At Cape Halkett, 7-10 trailers will be required to provide the same amenities to 15 personnel. Camps will be established within 1 mile of the well site based on initial field scouting and environmental conditions. Generation of potable water from snow and disposal of grey water will follow Alaska Department of Environmental Conservation guidance and regulation. Project-generated waste such as household trash, rags, and other used disposable materials will be stored on location in approved containers to prevent wildlife access until being incinerated using appropriate equipment or disposed of at a permitted landfill.

Summer Cleanup and Inspections

The majority of snow trail and camp cleanup, such as trash removal and stick-picking, will occur during demobilization in spring 2025 (April-May). However, a helicopter will be used for approximately 8-10 days in July and/or August 2025 to inspect and remove any debris left on the snow trails, pads, airstrip, and well sites. The helicopter will fly at low elevation (under 50 ft) to conduct inspections. In addition, the helicopter will land at the well sites for soil sampling (with hand tools) and final inspections, and to remove surface debris that may have been missed during winter operations. Approximately 50 helicopter landings would be expected during summer cleanup, inspections, and sampling activities.

Maternal Den Surveys

The BLM will conduct two AIR maternal polar bear den surveys prior to beginning operations to identify any active dens in project areas that will be utilized during the denning

period. This compromises the north-south snow trail located approximately along 153°W longitude and all project components to the east of this trail, including the well sites, lakes, and other snow trails (figure 1). The surveyors will use AIR cameras on fixed-wing aircraft, with flights flown between 245–457 m (800–1,500 ft) above ground level at a speed of <185 kilometers per hour (<115 miles per hour). These surveys will be concentrated on areas within 1.6 km (1 mi) of project activities that would be suitable for polar bear denning activity, such as drainages, banks, bluffs, or other areas of topographic relief. The first survey will be conducted between December 1 and December 25, 2024, and the second survey will be conducted between December 15, 2024, and January 10, 2025, with a minimum of 24 hours between surveys. Sections of the project impact area that will not be used until after denning season (after April 15) will not be surveyed.

Description of Marine Mammals in the Specified Geographic Region

Polar bears are the only species of marine mammal managed by the FWS likely to be found within the specified geographic region. Information on range, stocks, biology, and climate change impacts on polar bears can be found in appendix A of the supplemental information (available as described above in **ADDRESSES**).

Potential Impacts of the Specified Activities on Marine Mammals

Surface-Level Impacts on Polar Bears

Disturbance impacts on polar bears will be influenced by the type, duration, intensity, timing, and location of the source of disturbance. Disturbance from the specified activities would originate primarily from aircraft overflights (helicopter and fixed wing), tundra travel, well site plugging and reclamation, well site soil sampling, mobilization and demobilization, and cleanup activities. The noises, sights, and smells produced by these activities could elicit variable responses from polar bears, ranging from avoidance to attraction. When disturbed by noise, animals may respond behaviorally by walking, running, or swimming away from a noise source, or physiologically via increased heart rates or hormonal stress responses (Harms et al. 1997;

Tempel and Gutierrez 2003). However, individual response to noise disturbance can be influenced by previous interactions, sex, age, and maternal status (Anderson and Aars 2008; Dyck and Baydack 2004). Noise and odors could also attract polar bears to work areas. Attracting polar bears to these locations could result in human-polar bear interactions, unintentional harassment, intentional hazing, or possible lethal take in defense of human life. This proposed IHA, if finalized, would authorize only the nonlethal, incidental, unintentional take of polar bears that may result from the specified activities and would require mitigation measures to manage attractants in work areas and reduce the risk of human–polar bear interactions.

Human-Polar Bear Interactions

A larger percentage of polar bears are spending more time on land during the open-water season, which may increase the risk for human-polar bear interactions (Atwood et al. 2016; Rode et al. 2022). Polar bear interaction plans, personnel training, attractants management, and polar bear monitoring are mitigation measures used to reduce human-polar bear interactions and minimize the risks to humans and polar bears when interactions occur. Polar bear interaction plans detail the policies and procedures that will be implemented by the BLM to avoid attracting and interacting with polar bears, as well as minimizing impacts to the polar bears. Interaction plans also detail how to respond to the presence of polar bears, the chain of command and communication, and required training for personnel. Efficient management of attractants (e.g., human food, garbage) can prevent polar bears from associating humans with food, which mitigates the risk of human-polar bear interactions (Atwood and Wilder 2021). Information gained from monitoring polar bears near industrial infrastructure can be useful for better understanding polar bear distribution, behavior, and interactions with humans. Technology that may be used to facilitate detection and monitoring of polar bears includes bear monitors, closed-circuit television, video cameras, thermal cameras, radar devices, and motion-detection systems. It is possible that human-polar bear interactions may occur during the specified activities, and

mitigation measures, as described in the applicant's Polar Bear Awareness and Interaction Plan, will be implemented by the BLM to minimize the risk of human–polar bear interactions during the specified activities.

From mid-July to mid-November, SBS stock polar bears can be found in large numbers and high densities on barrier islands, along the coastline, and in the nearshore waters of the Beaufort Sea, particularly on and around Barter and Cross Islands (Wilson et al. 2017). This distribution leads to a significantly higher number of human-polar bear interactions on land and at offshore structures during the open-water season than other times of the year. Polar bears that remain on the multi-year pack ice are not typically present in the ice-free areas where vessel traffic occurs, as barges and vessels associated with industrial activities travel in open water and avoid large ice floes.

On land, most polar bear observations occur within 2 km (1.2 mi) of the coastline based on polar bear monitoring reports. Facilities within the offshore and coastal areas are more likely to be approached by polar bears, and they may act as physical barriers to polar bear movements. As polar bears encounter these facilities, the chances for human-polar bear interactions increase. However, polar bears have frequently been observed crossing existing roads and causeways, and they appear to traverse the human-developed areas as easily as the undeveloped areas based on monitoring reports.

Effects of Aircraft Overflights on Polar Bears

Polar bears experience increased noise and visual stimuli when fixed-wing aircraft or helicopters fly above them, which may elicit a biologically significant behavioral response. Sound frequencies produced by aircraft will likely fall within the hearing range of polar bears (Nachtigall et al. 2007) and will be audible to polar bears during flyovers or when operating in proximity to polar bears. Polar bears likely have acute hearing, with previous sensitivities demonstrated between 1.4 and 22.5 kilohertz (kHz) (tests were limited to 22.5 kHz (Nachtigall et al. 2007)). When exposed to high-energy sound, this hearing range may become impaired

temporarily (called temporary threshold shift, or TTS) or permanently (called permanent threshold shift, or PTS). Species-specific TTS and PTS thresholds have not been established for polar bears at this time, but TTS and PTS thresholds have been established for the general group "other marine carnivores," which includes polar bears (Southall et al. 2019). Through a series of systematic modeling procedures and extrapolations, Southall et al. (2019) generated modified noise exposure thresholds for both in-air and underwater sound (table 1).

Table 1—Temporary threshold shift (TTS) and permanent threshold shift (PTS) thresholds established by Southall et al. (2019) through modeling and extrapolation for "other marine carnivores," which includes polar bears

	TTS			PTS		
	Non-impulsive	Impulsive		Non-impulsive	Impulsive	
	SEL_{CUM}	SEL_{CUM}	Peak SPL	SEL_{CUM}	SEL_{CUM}	Peak SPL
Air	157	146	170	177	161	176
Water	199	188	226	219	203	232

NOTE: Values are weighted for other marine carnivores' hearing thresholds and given in cumulative sound exposure level (SELCUM dB re 20µPa in air and SELCUM dB re 1 µPa in water) for impulsive and nonimpulsive sounds, and unweighted peak sound pressure level in air (dB re 20µPa) and water (dB 1µPa) (impulsive sounds only).

During a Federal Aviation Administration test, test aircraft produced sound at all frequencies measured (50 Hz to 10 kHz) (Healy 1974). At frequencies centered at 5 kHz, jets flying at 300 m (984 ft) produced 1/3 octave band noise levels of 84 to 124 dB, propeller-driven aircraft produced 75 to 90 dB, and helicopters produced 60 to 70 dB (Richardson et al. 1995). Thus, the frequency and level of airborne sounds typically produced by aircraft are unlikely to cause TTS or PTS unless polar bears are very close to the sound source.

Although neither TTS nor PTS is anticipated during the specified activities, impacts from aircraft overflights have the potential to elicit biologically significant behavioral responses from polar bears. Exposure to aircraft overflights is expected to result in short-term behavior changes, such as ceasing to rest, walking, or running, and, therefore, has the potential to be energetically costly. Polar bears observed during intentional aircraft overflights conducted to study impacts of aircraft on polar bear responses, with an average flight altitude of 143 m (469 ft), exhibited biologically meaningful behavioral responses during 66.6 percent of aircraft overflights. These behavioral responses were significantly correlated with the aircraft's altitude, the bear's location

(e.g., coastline, barrier island), and the bear's activity (Quigley 2022; Quigley et al. 2024). Polar bears associated with dens exhibited various responses when exposed to low-flying aircraft, ranging from increased head movement and observation of the disturbance to the initiation of rapid movement and/or den abandonment (Larson et al. 2020). Aircraft activities can impact polar bears across all seasons; however, aircraft have a greater potential to disturb both individuals and groups of polar bears on land during the summer and fall. These onshore polar bears are primarily fasting or seeking alternative terrestrial foods (Cherry et al. 2009; Griffen et al. 2022), and polar bear responses to aircraft overflights may result in metabolic costs to limited energy reserves. To reduce potential disturbance of polar bears during aircraft activities, mitigation measures, such as minimum flight altitudes over polar bears and their frequently used areas and flight restrictions around known polar bear aggregations, will be conducted when safe to perform these operations during aircraft activities.

Effects to Denning Polar Bears

Known polar bear dens around the oil fields and other areas of the North Slope are monitored by the FWS. These dens may be discovered opportunistically or during planned surveys for tracking marked polar bears and detecting polar bear dens. However, these sites are only a small percentage of the total active polar bear dens for the SBS stock in any given year. Each year, many entities conducting operations on the North Slope coordinate with the FWS to conduct surveys to determine the location of any polar bear dens that may be located in close proximity to any of the operator's planned activities for that denning season. Under past IHAs and ITRs (Incidental Take Regulations), operators have been required to avoid known polar bear dens by 1.6 km (1 mi). However, an unknown polar bear den may be encountered during the BLM's activities. In instances when a previously unknown den was discovered near human activity, the FWS has implemented mitigation measures such as a 1.6-km (1-mi) activity exclusion zone around the den and 24-hour monitoring of the den site.

The responses of denning polar bears to disturbance and the consequences of these

responses can vary throughout the denning process. We divide the denning period into four stages when considering impacts of disturbance: den establishment, early denning, late denning, and post-emergence; definitions and descriptions are provided by Woodruff et al. (2022) and are also located in the 2021–2026 Beaufort Sea ITR (86 FR 42982, August 5, 2021). The stage at which harassment occurs defines the level of disturbance response (Level B harassment, Level A harassment, or Lethal) attributed to either the sow or cub(s), along with the probability of the specific response occurring (see *Denning Analysis*).

Impacts of the Specified Activities on Polar Bear Prey Species

Information on the potential impacts of the specified activities on polar bear prey species can be found in the supplemental information to this document (available as described in **ADDRESSES**).

Estimated Take

Definitions of Incidental Take Under the Marine Mammal Protection Act

Below we provide definitions of three types of take of polar bears. The FWS does not anticipate and is not authorizing either Level A harassment or lethal take as a part of this proposed IHA; however, the definitions of these take types are provided for context and background.

Lethal Take

Human activity may result in biologically significant impacts to polar bears. In the most serious interactions (e.g., vehicle collision, running over an unknown den causing its collapse), human actions can result in the mortality of polar bears. We also note that, while not considered incidental, in situations where there is an imminent threat to human life, polar bears may be killed. Additionally, though not considered incidental, polar bears have been accidentally killed during efforts to deter polar bears from a work area for safety and from direct chemical exposure (81 FR 52276, August 5, 2016). Unintentional disturbance of a female polar bear by human activity during the denning season may cause the female either to abandon her den prematurely

with cubs or abandon her cubs in the den before the cubs can survive on their own. Either scenario may result in the incidental lethal take of the cubs.

Level A Harassment

Human activity may result in the injury of polar bears. Level A harassment, for nonmilitary readiness activities, is defined as any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild.

Numerous actions can cause take by Level A harassment of polar bear cubs during the denning period, such as creating a disturbance that separates mothers from dependent cubs (Amstrup 2003), inducing early den emergence during the late denning period (Amstrup and Gardner 1994; Rode et al. 2018), instigating early departure from the den site during the post-emergence period (Andersen et al. 2024), or repeatedly interrupting the nursing or resting of cubs to the extent that it impacts the cubs' body condition.

Level B Harassment

Level B harassment for nonmilitary readiness activities means any act of pursuit, torment, or annoyance that has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, feeding, or sheltering. Changes in behavior that disrupt biologically significant behaviors or activities for the affected animal are indicative of take by Level B harassment under the MMPA. Such reactions include, but are not limited to, the following:

- Fleeing (running or swimming away from a human or a human activity);
- Displaying a stress-related behavior such as jaw or lip-popping, front leg stomping, vocalizations, circling, intense staring, or salivating;
- Abandoning or avoiding preferred movement corridors such as ice floes, leads, polynyas, a segment of coastline, or barrier islands;
- Using a longer or more difficult route of travel instead of the intended path;
- Interrupting breeding, sheltering, or feeding;

- Moving away at a fast pace (adult) and cubs struggling to keep up;
- Temporary, short-term cessation of nursing or resting (cubs);
- Ceasing to rest repeatedly or for a prolonged period (adults);
- Loss of hunting opportunity due to disturbance of prey; or
- Any interruption in normal denning behavior that does not cause injury, den abandonment, or early departure of the female with cubs from the den site.

This list is not meant to encompass all possible behaviors; other behavioral responses may be indicative of take by Level B harassment. Relatively minor changes in behavior such as the animal raising its head or temporarily changing its direction of travel are not likely to disrupt biologically important behavioral patterns, and the FWS does not view such minor changes in behavior as indicative of a take by Level B harassment. It is also important to note that eliciting behavioral responses that equate to take by Level B harassment repeatedly may result in Level A harassment.

Surface Interactions

We analyzed take by Level B harassment for polar bears that may potentially be encountered and impacted during the BLM's oil well plugging and reclamation, soil sampling, snow trail, pad, and airstrip construction, and summer cleanup activities within the specified geographic region.

Impact Area

To assess the area of potential impact from the project activities, we calculate the area affected by project activities where harassment is possible. We refer to this area as an impact area. Behavioral response rates of polar bears to disturbances are highly variable, and data to support the relationship between distance to polar bears and disturbance are limited. Dyck and Baydack (2004) found sex-based differences in the frequencies of vigilance bouts, which involves an animal raising its head to visually scan its surroundings, by polar bears in the presence of vehicles on the tundra. However, in their summary of polar bear behavioral response

to ice-breaking vessels in the Chukchi Sea, Smultea et al. (2016) found no difference between reactions of males, females with cubs, or females without cubs. During the FWS's coastal aerial surveys, 99 percent of polar bears that responded in a way that indicated possible Level B harassment (polar bears that were running when detected or began to run or swim in response to the aircraft) did so within 1.6 km (1 mi), as measured from the ninetieth percentile horizontal detection distance from the flight line. Similarly, Andersen and Aars (2008) found that female polar bears with cubs (the most conservative group observed) began to walk or run away from approaching snowmobiles at a mean distance of 1,534 m (0.95 mi). Thus, while future research into the reaction of polar bears to anthropogenic disturbance may indicate a different zone of potential impact is appropriate, the current literature suggests that the 1.6-km (1.0-mi) impact area will encompass most surface polar bear harassment events.

Estimated Harassment

We estimated Level B harassment using the spatio-temporally specific encounter rates and temporally specific harassment rates derived in the 2021–2026 Beaufort Sea ITR (86 FR 42982, August 5, 2021) in conjunction with the specified project activity information. Some portion of SBS bears may occur within the Chukchi Sea at a given time. However, the ITR rates do not explicitly account for this possibility, and the project area for this proposed IHA occurs only within the geographical boundary of the SBS subpopulation. Therefore, our analyses account only for SBS bears located within the SBS subpopulation boundary. Distribution patterns of polar bears along the coast of the SBS were estimated in Wilson et al. (2017) by dividing the North Slope Coastline into 10 equally sized grids and applying a Bayesian hierarchical model based on 14 years of aerial surveys in late summer and early fall. Wilson et al. (2017) estimated 140 polar bears per week along the coastline (a measurement that included barrier islands); however, not with uniform distributions. The study found that disproportionately high densities of bears occur in grids 6 and 9, which contain known large congregating areas such as Kaktovik and Cross Island; thus, the study has required polar bear density correction of

factors in previously issued incidental take authorizations (ITAs). The vast majority of the coastline within the project area in this proposed IHA falls within grids 1–4 (although a small portion of the project area is located outside of Wilson et al.'s (2017) study area near the City of Wainwright). The Wilson et al. (2017) values for grids 1–4 are similar to those in the North Slope area where the 2021–2026 Beaufort Sea ITR (86 FR 42982, August 5, 2021) encounter rates were developed; therefore, we believe those values are applicable to the project area in this proposed IHA and do not require any correction factor for polar bear densities in our analyses.

Table 2—Definitions of variables used in harassment estimates of polar bears on the coast of the North Slope of Alaska

Variable	Definition
B_{es}	Bears encountered in an impact area for the entire season
a_c	Coastal exposure area
a_i	Inland exposure area
r_o	Occupancy rate
e_{co}	Coastal open-water season bear-encounter rate in bears/season
e_{ci}	Coastal ice season bear-encounter rate in bears/season
e_{io}	Inland open-water season bear-encounter rate in bears/season
e_{ii}	Inland ice season bear-encounter rate in bears/season
t_i	Ice season harassment rate
t_o	Open-water season harassment rate
B_t	Number of estimated Level B harassment events

Table 2 provides the definition for each variable used in the formulas to calculate the number of potential harassment events. The variables defined in table 2 were used in a series of formulas to ultimately estimate the total harassment from surface-level interactions. Encounter rates were originally calculated as polar bears encountered per square km per season. As a part of their Request, the BLM provided the FWS with digital geospatial files that included the maximum expected human occupancy (i.e., rate of occupancy [r_o] for each individual structure (e.g., snow trails, snow pads) of their specified activities for each season of the IHA period. Using the buffer tool in ArcGIS, we created a spatial file of a 3.2-km (2-mi) buffer around all snow trails (3.2 km on either side of the proposed snow trail center line, *i.e.*, 6.4 km [4 mi] total

diameter) to account for up to 1.6-km (1-mi) deviations from the proposed center line of the routes, and around both well sites to account for the presently undetermined camp locations (within 1.6 km [1 mi] of well head). Additionally, we placed a 1.6-km (1-mi) buffer around all lakes that may be potentially utilized during operations. We binned the structures according to their seasonal occupancy rates by rounding them up into tenths (10 percent, 20 percent, etc.). We determined the impact area of each bin by first calculating the area within the buffers of 100-percent occupancy locations. We then removed the area of the 100-percent occupancy buffers from the project impact area and calculated the area within the 90-percent occupancy buffers. This iterative process continued until we calculated the area within all buffers. The areas of impact were then clipped by coastal and inland zone geospatial files to determine the coastal areas of impact (a_c) and inland areas of impact (a_i) for each occupancy bin. This process was repeated for both seasons (ice season and open-water [ice-free] season).

Impact areas were multiplied by the appropriate encounter rate to obtain the number of polar bears expected to be encountered in the impact area per season (B_{es}). Equation 1 provides an example of the calculation of polar bears encountered in the ice season for an impact area in the coastal zone.

$$B_{es} = a_c * e_{ci}$$

Equation 1

To generate the number of estimated Level B harassments for each area of interest, we multiplied the number of polar bears in the area of interest per season by the proportion of the season the area is occupied, the rate of occupancy, and the harassment rate (equation 2).

$$B_t = B_{es} * S_p * r_o * t_i$$

Equation 2

Aircraft Impacts on Polar Bears

Polar bears in the project area will likely be exposed to the visual and auditory stimulation associated with the applicant's fixed-wing and helicopter activities; however, these impacts are likely to be minimal and short-term. Aircraft activities may cause disruptions in the normal behavioral patterns of polar bears as either an auditory or visual stimulus, thereby resulting in incidental Level B harassment. To reduce the likelihood that polar bears are disturbed by aircraft, mitigation measures, such as minimum flight altitudes over polar bears and restrictions on sudden changes to aircraft movements and direction, will be required if this authorization is finalized. Once mitigated, such disturbances are expected to have no more than short-term, temporary, and minor impacts on individual polar bears.

Estimating Harassment Rates of Aircraft Activities

Harassment rates during aircraft activities were estimated using results from studies of fixed-wing aircraft and helicopter overflights (Quigley 2022; Quigley et al. 2024). In these studies, aerial searches along the northern coast of Alaska between Point Barrow and the western Canadian border were flown and polar bears were approached at different altitudes. Polar bears that did not exhibit behavioral changes consistent with harassment were then re-approached at progressively lower altitudes, reaching as low as 38 m (100 ft). Researchers recorded behavioral changes during these approaches and evaluated if and when Level B harassment occurred. Covariates examined were polar bear location ("barrier island" or "mainland"), initial behavior ("active" or "inactive"), group size, whether the polar bear belonged to a family group, and the number of previous overflights (i.e., how many times the group was re-approached to elicit a behavioral change). A Bayesian imputation approach accounted for polar bears that exhibited a behavioral change consistent with harassment on their first approach, thus lacking an identified altitude at which no harassment occurred due to a lack of a "non-harassment" observation. Their final model included location, activity level, and the number of previous overflights as predictors of the altitude at which a polar bear was harassed. For our aircraft impacts analysis, we used harassment rates estimated for active polar bears observed on barrier islands, as they had the

highest rates of harassment. We further assumed that no previous overflights were conducted.

We provide harassment rates for the following five categories of flights: take-offs, landings, low-altitude flights (defined as those between 122 m [400 ft] and 305 m [1,000 ft] altitude), mid-altitude flights (defined as those between 305 m [1,000 ft] and 457 m [1,500 ft] altitude), and high-altitude flights (defined as those between 457 m [1,500 ft] and 610 m [2,000 ft] altitude). Harassment rates were assigned to each of these flight categories using the harassment rate for the lowest altitude in the category (e.g., for low-altitude flights, the harassment rate estimated for 122 m [400 ft] was used). This binning method of using the lowest altitude harassment rate in the bin allowed our estimates to be inclusive of possible changes in altitude due to variable flight conditions (table 3).

Table 3—Harassment rates for the five categories of flights for fixed-wing aircraft and helicopter overflights

Flight Category	**Fixed-Wing**	**Helicopter**
Take-offs	0.99	>0.99
Landings	0.99	>0.99
Low-Altitude Flights (122–305 m)	0.86	>0.99
Mid-Altitude Flights (305–457 m)	0.03	0.82
High-Altitude Flights (457–610 m)	<0.01	0.05
NOTE: The rate in this table are based on Quigley et al. (2024). We used the harassment rate associated with 30 m (100 ft) for take-offs and landings.		

Estimating Area of Impact for Aircraft Activities

For each category of the flight path (i.e., take-off, low-altitude travel, mid-altitude travel, high-altitude travel, and landing), we calculated an impact area and duration of impact using flight hours or flight path information provided in the Request. We used flights logs available through FlightAware (*https://www.flightaware.com/*), a website that maintains flight logs in the public domain, to estimate impact areas and flight hours for take-offs and landings. We estimated a take-off distance of 2.41 km (1.5 mi) that would be impacted for 10 minutes. We estimated a landing distance of 4.83 km (3 mi) per 305 m (1,000 ft) of altitude that would be impacted for 10 minutes per landing. To estimate the impact area of traveling segments, we subtracted the take-

off and landing areas from the total area of the flight path. The duration of impact for traveling flights was either provided in the Request or calculated using the length of the flight and a conservative flight speed of 129 km per hour (80 mi per hour), which was approximately 1.5 minutes per 3.22 km (2 mi) of the flight path.

All take-offs, landings, and traveling segments were then spatially referenced to determine whether they were within the coastal or inland zones. The coastal zone is defined as the offshore and onshore areas within 2 km (1.2 mi) of the coastline, and the inland zone is defined as the onshore area greater than 2 km (1.2 mi) from the coastline. If no location or flight hour information was provided, flight paths were approximated based on the information provided in the Request. Of the flight paths that were described clearly or were addressed through assumptions, we marked the approximate flight path take-off and landing locations using ArcGIS Pro, and the flight paths were drawn. Once spatially referenced, all flight paths were buffered by 1.6 km (1 mi), which is consistent with aircraft surveys conducted by the FWS and USGS between August and October during most years from 2000 to 2014 (Schliebe et al. 2008; Atwood et al. 2015; Wilson et al. 2017). In these surveys, 99 percent of groups of polar bears that exhibited behavioral responses consistent with Level B harassment were observed within 1.6 km (1 mi) of the aircraft.

Table 4—Seasonal polar bear encounter rates by zone

Coastal Zone Seasonal Encounter Rate
Ice Season (July 19 – November 11) ……. 0.05 bears / km^2
Open-water Season (November 12 – July 18) ……1.48 bears / km^2
Inland Zone Seasonal Encounter Rate
Ice Season (July 19 – November 11) ……..0.004 bears / km^2
Open-water Season (November 12 – July 18) ……0.005 bears / km^2

NOTE: This table is adapted from the 2021–2026 Beaufort Sea ITR (86 FR 42982, August 5, 2021).

To calculate the total number of Level B harassment events estimated due to the specified activities, we calculated the number of flight hours for each flight category (i.e., take-offs, low-

altitude travel, mid-altitude travel, high-altitude travel, and landings) for each zone and season combination. These values were then used to calculate the proportion of the season that aircraft occupied their impact areas (i.e., take-off area, landing area, or traveling segment impact areas). This proportion-of-season metric is equivalent to the occupancy rate (r_o) generated for surface-level interaction harassment estimates. The total impact area for each of the flight categories was multiplied by the zone and season-specific polar bear encounter rate to determine the number of polar bears expected in that area for the season (i.e., $B_{es,}$ as seen in equation 1). This number was then multiplied by the proportion of the season to determine the number of polar bears expected in that area when flights are occurring, and the appropriate harassment rate based on flight altitude to estimate the number of polar bears that may be harassed as a result of the flights (as seen in equation 2). Table 5 shows a summary of aircraft operations during the specified activities and the values used to estimate Level B harassment of polar bears during aircraft operations.

Table 5—Summary of aircraft operations by season and activity during the proposed IHA period

	Ice Season (fixed-wing aircraft only)		Open-water Season (helicopter only)			
Activity	Winter support - Cape Halkett	Winter support – Fish Creek	Site inspection – Deadhorse to Cape Halkett	Site inspection – Deadhorse to Fish Creek	Site Inspection – Cape Halkett to Fish Creek	Snow trail inspection and cleanup
Altitude*	High	High	High	High	High	Low
Total Flights	25	25	6	5	2	12
Proportion of Season	0.0026	0.0021	0.0020	0.0012	0.00017	0.01887
Proportion of Flight in Coastal Zone	0.60	0	.60	0	0.51	0.26
Proportion of Flight in Inland Zone	0.40	1	.40	1	0.49	0.74
Total Encounter Rate (bears/km^2/season) **	0.0316	0.004	0.89	0.005	0.7573	0.3885
Harassment Rate	0.001	0.001	0.05	0.05	0.05	0.99
Flight Time Harassment	6.570 x 10^{-07}	6.744 x 10^{-08}	0.000643	2.440 x 10^{-06}	5.295 x 10^{-05}	0.05909

Total Takeoffs and Landings	50	50	12	10	4	24
Landing Time/Season	0.001389	0.001389	0.000725	0.000604	0.000242	0.001449
Landing Time Harassment	0.001628	0.001628 3	0.025146	0.020955	0.008382	0.0502921
Takeoff Time/Season	0.001389	0.001389	0.000725	0.000604	0.000241	0.001449
Takeoff Time Harassment	0.001094	0.001094	0.016893	0.014078	0.00563	0.03379
Number Level B Harassment of Activity	0.002723	0.002723	0.042683	0.035035	0.014066	0.143164
Total number of level B harassment events across all aircraft activities				0.240		

* High-altitude flight is defined as between 457 m [1,500 ft] and 610 m [2,000 ft] altitude. Low altitude is defined as between 122 m [400 ft] and 305 m [1,000 ft] altitude. There are no mid-altitude flights considered for this project.
**Accounts for unequal encounter rates over coastal and inland zones.

Estimated Harassment from Aircraft Activities

Using the approaches described above, we estimated the total number of polar bears expected to be harassed by the aircraft activities during the proposed IHA period as a total of one bear (table 5).

Denning Analysis

Below we provide a complete description and results of the polar bear den simulation model used to assess impacts to denning polar bears from disturbance associated with all phases of the specified activities. In our denning analysis, we used the analytical method described in the 2023-2024 BLM IHA (88 FR 88943, December 26, 2023).

Additionally, on March 19, 2024, regulations promulgated in the 2021–2026 Beaufort Sea ITR (86 FR 42982, August 5, 2021) were challenged in Federal Court and the Ninth Circuit Court of Appeal issued a remand to FWS to conduct certain additional analysis. As a result of the Court's remand and ongoing scientific advancements, the FWS reexamined the denning analysis and incorporated newly available data since 2021 into the denning analysis model, allowing the continued inclusion of best available scientific information. Updates incorporated into the model adjust the impact area that can result in den disturbance, the probabilities of disturbance, and

how FWS reports probabilities of different levels of take, i.e., Level B harassment, Level A harassment, and lethal take. Alterations to the denning model are described in greater detail below.

Den Simulation

We simulated dens across the entire North Slope of Alaska, ranging from the areas identified as denning habitat (Durner et al. 2006, 2013; Durner and Atwood 2018) contained within the National Petroleum Reserve–Alaska (NPR-A) in the west to the Canadian border in the east. To simulate dens on the landscape, we relied on the estimated number of dens in three different regions of northern Alaska provided by Atwood et al. (2020). These included the NPR-A, the area between the Colville and Canning Rivers (CC), and Arctic National Wildlife Refuge (NWR). Den simulations for this proposed IHA were conducted following the exact methodology described previously in the 2023-2024 BLM IHA (88 FR 88943, December 26, 2023).

Impact Area of Specified Activities

The model developed by Wilson and Durner (2020) provides a template for estimating the level of potential impact on denning polar bears during the specified activities while also considering the natural denning ecology of polar bears in the region. Previous iterations of the denning analysis model, including those utilized in the 2021–2026 Beaufort Sea ITR (86 FR 42982, August 5, 2021) and 2023–2024 BLM IHA (88 FR 88943, December 26, 2023), assumed that during all denning periods, any polar bears within dens within 1.6 km (1 mi) from project activities could exhibit a disturbance response if exposed to industrial stimuli. However, for this IHA, we refined that broad assumption to account for denning data that have been collected subsequent to the promulgation of the 2021–2026 Beaufort Sea ITR. Since 2021, four known dens (monitored in 2022 and 2023) have occurred near human activity. Of the four newly observed dens, three were extremely close to human activity (<50 m), yet the sows remained in their dens until the late denning period. We updated polar bear disturbance probabilities and litter

size distributions with the information from these dens, then re-examined the historic dens that were used to create disturbance probabilities. We found that the distances between human activity and polar bear dens during the early denning period were considerably closer than those observed during other denning periods. Specifically, of the 15 dens within the case studies that were exposed to human activity during the early denning period, only one was potentially disturbed at a distance greater than 800 meters. This single den record also had imprecise information on the distance to human activity, so activity was assumed to occur within 1,610 m of the den and was likely closer. The historic dens analyzed during the den establishment, late denning, and post-emergence periods did not follow this pattern. For those dens, disturbance distances commonly exceeded 805 m. Evidence derived from dens exposed to human activity during the early denning period, including both new den records and historic dens, illustrates the reluctance of sows to abandon their maternal den/cubs in response to exposure to stimuli from nearby activity, and supports the concept that sows may be more risk tolerant during the early denning period. Additionally, sows may be less affected by sound from outside activities during the early denning period because dens are typically closed during that time, which can affect propagation of noise into the den (Owen et al. 2020). Given this evidence, we modified the denning analysis model to adjust the impact area for the early denning period to range from 0 to 805 m. As a result, dens that were simulated to be within 805 m of human activity could be disturbed during all denning periods, while dens between 806 and 1610 m way from human activity could only be disturbed during the den establishment, late denning, and post-emergence periods.

AIR Surveys

We assumed that all remediation and transit areas that will be utilized during denning season would have two AIR surveys flown prior to beginning any operations (figure 1). The first survey would occur between December 1 and December 25, 2024, and the second survey between December 15, 2024, and January 10, 2025, with a minimum of 24 hours between

surveys. During each iteration of the model, each AIR survey was randomly assigned a probability of detecting dens using detection probabilities previously described in the 2023-2024 BLM IHA (88 FR 88943, December 26, 2023).

Model Implementation

For each iteration of the model, we first determined which dens were exposed to the specified activities. Dens that were simulated to be within 805 m (2,641 ft) of human activity could be disturbed during all denning periods, while dens within 806–1610 m (2,644–5,282 ft) of human activity could only be disturbed during the den establishment, late denning, and post-emergence periods. Dens detected during AIR survey were excluded if activity did not occur prior to AIR survey. We identified the stage in the denning period when the exposure occurred based on the date range of the activities the den was exposed to: den establishment (i.e., initial entrance into den until cubs are born), early denning (i.e., birth of cubs until they are 60 days old), late denning (i.e., date cubs are 60 days old until den emergence) and post-emergence (i.e., the date of den emergence until permanent departure from the den site). We then determined whether the exposure elicited a response by the denning polar bear based on probabilities derived from the reviewed case studies (Woodruff et al. 2022a), which were updated with data from the dens monitored in 2022 and 2023 using the methods described in Woodruff et al. (2022a).

Specifically, we divided the number of cases that documented responses associated with either a Level B harassment (i.e., potential to cause a disruption of behavioral patterns), Level A harassment (i.e., potential to injure an animal), or lethal take (e,g,, cub abandonment) of polar bears by the total number of cases with that combination of period and exposure type (table 6). Level B harassment was applicable to both adults and cubs, if present, whereas Level A harassment and lethal take were applicable to only cubs. AIR surveys were not considered to be a source of potential impact. In thousands of hours of AIR surveys conducted in northern Alaska over the last decade, we are not aware of a single instance of a polar bear abandoning its den during the early denning period due to an AIR survey overflight. These responses would be

readily observable on the thermal cameras, and the fact that none have been observed indicates that den abandonment very likely does not occur given the brief duration of the aircraft overflight and the distance and altitude of the aircraft from the den site. Recent peer-reviewed research further supports the model assumption that AIR surveys are not a source of harassment (Quigley et al. 2024).

For dens exposed to activity, we used a multinomial distribution with the probabilities of different levels of take for that period (table 6) to determine whether a den was disturbed or not. If a lethal take was simulated to occur, a den was not allowed to be disturbed again during the subsequent denning periods because the outcome of that denning event was already determined.

The level of impact associated with a disturbance varied according to the severity and timing of the exposure (table 6). Exposures that resulted in emergence from dens prior to cubs reaching 60 days of age were considered lethal takes of cubs. If an exposure resulted in a Level A harassment during the late denning period, we first assigned that den a new random emergence date from a uniform distribution that ranged between the first date of exposure during the late denning period and the original den emergence date. We then determined whether that den was disturbed during the post-emergence period, but the probability of disturbance was dependent on whether or not a den was disturbed (i.e., Level A harassment) during the late denning period (table 6). If an exposure resulted in a Level A harassment during the post-emergence period, we assigned the den a new time spent at the den site post-emergence from a uniform distribution that ranged from 0 to the original simulated time at the den post-emergence.

Recent research suggests that litter survival is related to the date of den emergence and time spent at the den post-emergence (Andersen et al. 2024), with litters having higher survival rates the later they emerge in the spring, and the longer they spend at the den site after emergence. To determine whether dens that were disturbed during the late denning and/or post-emergence period(s) experienced Level A harassment, we relied on estimates of litter survival until approximately 100 days post emergence, derived from the analysis of empirical data on the

dates of emergence from the den and departure from the den site (Anderson et al. 2024). These estimates are dependent on the date of emergence and time spent at the den site post-emergence. For each den disturbed during the late denning and/or post-emergence periods, we obtained a random sample of regression coefficients from the posterior distribution and calculated the probability of a litter surviving approximately 100 days post-emergence with the following equation:

$$logit(\boldsymbol{s}) = \beta_0 + \beta_1 emerge + \beta_2 depart$$

where ***s*** is the probability of at least one cub being alive approximately 100 days post-emergence, β_0 is the intercept coefficient, β_1 is the coefficient associated with the Julian date of emergence (*emerge*), and β_2 is the coefficient associated with the number of days the family group stayed at the den site post-emergence before departing (*depart*). These probabilities are based on estimates of litter survival derived from the analysis of empirical data on the dates of emergence from the den and departure from the den site (Anderson et al. 2024).

We developed the code to run this model in program R (R Core Development Team 2020) and ran 10,000 iterations of the model (i.e., Monte Carlo simulation) to derive the estimated number of dens disturbed and associated levels of harassment. We then determined the number of cubs that would have lethal take, Level A harassment, and Level B harassment, and the number of females that would experience Level B harassment. Table 6 shows the probability of an exposure resulting in the types of harassment of denning polar bears.

Table 6—Probability that an exposure elicited a response by denning polar bears that would result in Level B harassment, Level A harassment, lethal take, or no take

Denning Period	None (sow or cub(s))	Level B (sow)	Level B (cub(s))	Level A (cub(s))	Lethal cub(s)
Den Establishment	0.750	0.250	0.000	0.000	0.000
Early Denning	0.860	0.140	0.000	0.000	0.130
Late Denning	0.510	0.490	0.000	0.490	0.000
Post Emergence-Previously Undisturbed Den	0.000	1.000	0.200	0.800	0.000
Post Emergence-Previously Disturbed Den	0.000	1.000	0.474	0.526	0.000

NOTE: Level B harassment was applicable to both adults and cubs, if present; Level A harassment and lethal take were applicable to cubs only and were not possible during the den establishment period, which ended with the birth of the cubs. Probabilities were calculated from the analysis of 60 case studies of polar bear responses to human activity. During the early denning period, there was no Level A harassment for cubs, only lethal take. We provide two sets of take probabilities for the post-emergence period. The first (Post-emergence–Undisturbed) is the set of probabilities when a den has not been disturbed during the late denning period. The second (Post-emergence–Disturbed) is the set of probabilities for a den that was disturbed during the late denning period (Rode et al. 2018; Andersen et al. 2024).

Model Results

Our analysis estimates a mean of 1.36 (median = 1; 95 percent CI: 0 – 4) land-based dens in the project area will potentially be exposed to disturbance from the specified activities during the 1-year period of the proposed IHA. Our den simulation analysis predicts this degree of potential exposure will have a zero (0) percent chance of incurring Level B harassment. Furthermore, our analysis predicts a zero (0) percent probability of the BLM's specified activities resulting in either Level A harassment or lethal take during the 1-year period of the proposed IHA.

Critical Assumptions

To conduct this analysis and estimate the potential amount of Level B harassment, Level A harassment, and lethal take, we made several critical assumptions.

Level B harassment is equated herein with behavioral responses that indicate harassment or disturbance, but not to the extent that cause the animal to experience significant biological consequences. Our estimates do not account for variable responses by polar bear age and sex; however, sensitivity of denning polar bears was incorporated into the analysis. The available information suggests that polar bears are generally resilient to low levels of disturbance. Females with dependent young and juvenile polar bears are physiologically the most sensitive (Andersen and Aars 2008) and most likely to experience harassment from disturbance. Not enough information on composition of the SBS polar bear stock in the specified project area is available to incorporate individual variability based on age and sex or to predict its influence on harassment estimates. Our estimates are derived from a variety of sample populations with

various age and sex structures, and we assume the exposed population will have a similar composition, and that, therefore, the response rates are applicable.

The estimates of behavioral response presented here do not account for the individual movements of animals in response to the specified activities. Our assessment assumes animals remain stationary (i.e., density does not change). Not enough information is available about the movement of polar bears in response to specific disturbances to refine this assumption.

The SBS polar bears create maternal dens on the sea ice as well as on land. The den simulation used in our analysis does not simulate dens on the sea ice. However, the specified activities will be conducted entirely on land and only a small percentage of the activities will occur within 1.6 km (1 mi) of the coastline. Therefore, the impact of the activities will be primarily limited to land-based dens within 1.6 km (1 mi) of the project impact areas used during denning season. Additionally, this impact area will be surveyed during AIR surveys to mitigate impacts on denning polar bears.

The specific combination of snow trail segments depicted in figure 1 that will be used for mobilization, resupply, and backhauling is not currently known. For the purposes of the above analyses and estimates of take by Level B and Level A harassment, and the risks of lethal take, we assumed that all routes within the AIR surveyed section (figure 1) of the project might potentially be used at some point during the denning season. This assumption results in a very conservative estimate of take for the 1-year IHA period that accounts for all possible operational scenarios.

Sum of Harassment from All Sources

Our analyses quantified the total number of Level B harassment, Level A harassment, and lethal take likely to result from the BLM's specified activities. We evaluated three potential sources of harassment/take, including surface interactions, aircraft overflights, and den disturbance of sows and/or cubs in our analyses. A summary of total estimated take via Level B harassment during the project by source is provided in table 7. We do not anticipate take by

Level A harassment or lethal take to occur.

Table 7—Total estimated takes by harassment of polar bears, by source

SOURCE AND TYPE OF HARASSMENT	NUMBER OF ESTIMATED HARASSMENTS
Bears on the surface–summer—Level B harassment	1
Bears on the surface–winter—Level B harassment	10
Aircraft activities–summer and winter—Level B harassment	1
Total	12

Determinations and Findings

In making these draft findings, we considered the best available scientific information, including: the biological and behavioral characteristics of polar bears, the most recent information on polar bear distribution and abundance within the area of the specified activities, the current and expected future status of the stock (including existing and foreseeable human and natural stressors), the potential sources of disturbance caused by the project, and the potential responses of polar bears to this disturbance. In addition, we reviewed applicant-provided materials, information in our files and datasets, and published reference materials, and consulted with species experts.

Small Numbers

For our small numbers determination, we consider whether the estimated number of polar bears to be subjected to incidental take is small relative to the population size of the species or stock.

1. We estimate that BLM's proposed specified activities in the specified geographic region will cause the take of no more than 12 polar bears by Level B harassment during the 1-year period of this proposed IHA (table 7). Take of 12 animals is 1.32 percent of the best available estimate of the current SBS stock size of 907 animals (Bromaghin et al. 2015; Atwood et al. 2020) ((12÷907) × 100 ≈ 1.32 percent) and represents a "small number" of polar bears of that stock.

2. The footprint of the specified activities within the specified geographic region is extremely small relative to the range of the SBS stock of polar bears. Polar bears from the SBS stock occur well beyond the boundaries of the proposed IHA region. As such, the IHA boundaries represent only a minute subset of the potential area in which the polar bear may occur. Thus, the FWS concludes that a small portion of the SBS polar bear populations may be present in the specified geographic region during the time of the specified activities.

Small Numbers Conclusion

We propose a finding that take of up to 12 SBS polar bears represents a small number of the SBS stock of polar bears.

Negligible Impact

For our negligible impacts determination, we consider the following:

1. The distribution and habitat use patterns of polar bears indicate that relatively few polar bears will occur in the specified areas of activity at any time and, therefore, few polar bears are likely to be affected.

2. The documented impacts of previous activities, including the 2023-2024 BLM IHA (88 FR 88943), similar to the specified activities on polar bears, and, taking into consideration the baseline of existing impacts from factors such as oil and gas activities in the area and other ongoing or proposed ITAs, suggests that the types of activities analyzed for this proposed IHA will have minimal effects on polar bears. Additionally, the effects will be limited to short-term, temporary behavioral changes, or minor injury. Furthermore, our analyses do not indicate, nor do we anticipate, any take by Level A harassment or lethal take of polar bears during the 1-year period of this proposed IHA. Therefore, we anticipate that the specified activities will not have lasting impacts that could significantly affect an individual polar bear's health, reproduction, or survival. The limited extent of anticipated impacts on polar bears is unlikely to adversely affect annual rates of polar bear survival or recruitment. Thus, we do not expect any long-term negative consequences to either individual- or population-level fitness.

3. The IHA, if finalized, would require implementation of monitoring requirements and mitigation measures designed to reduce the potential impacts of their operations on polar bears. Den detection surveys for polar bears and adaptive mitigation and management responses based on real-time monitoring information (described in this proposed authorization) will be used to avoid or minimize interactions with polar bears and, therefore, limit potential disturbance of these animals.

4. The FWS does not anticipate any lethal take that would remove individual polar bears from the population or prevent their successful reproduction. This proposed IHA does not authorize any take by Level A harassment or injury that will likely result in the death of a polar bear.

We also consider the conjectural or speculative impacts associated with these specified activities. The specific congressional direction described below justifies balancing the probability of such impacts with their severity: If potential effects of a specified activity are conjectural or speculative, a finding of negligible impact may be appropriate. A finding of negligible impact may also be appropriate if the probability of occurrence is low, but the potential effects may be significant. In this case, the probability of occurrence of impacts must be balanced with the potential severity of harm to the species or stock when determining negligible impact. In applying this balancing test, the FWS will thoroughly evaluate the risks involved and the potential impacts on marine mammal populations. Such determination will be made based on the best available scientific information (54 FR 40338, September 29, 1989, quoting 53 FR 8473, March 15, 1988, and 132 Cong. Rec. S 16305 (October 15, 1986)).

The potential effects of most concern here are the mortality of cubs that could result from disturbances during certain periods of the denning season. The FWS estimated that the probability of greater than or equal to one lethal take that is likely to result in the mortality of a denning polar bear is zero within the 1-year period of this proposed IHA. Therefore, the FWS does not anticipate any lethal take will occur during the IHA period. If a den is disturbed and

lethal take were to occur, this take would be limited to only cubs during the denning period. Denning females, the demographic group most important to annual recruitment, are limited to take by Level B harassment. Therefore, the number of potentially available reproductive females that would contribute to recruitment for the SBS stock would remain unaffected if a den disturbance were to result in the mortality of the cubs.

The SBS stock of polar bears is currently estimated as 907 polar bears (Bromaghin et al. 2015, 2021; Atwood 2020). The loss of one litter ranges from 0 percent (0 cubs) to approximately 0.33 percent (3 cubs) of the annual SBS stock size of polar bears (((0 cubs to 3 cubs) ÷907) ×100≈0 to 0.33). Cub litter survival was estimated at 50 percent (90 percent CI: 33–67 percent) for the SBS stock during 2001–2006 (Regehr et al. 2010). A female may lose her litter for several reasons separate from den disturbance. The determining factor for polar bear stock growth is adult female survival (Eberhardt 1990). Consequently, the loss of female cubs has a greater impact on annual recruitment rates for the SBS stock of polar bears compared to male cubs. If a den disturbance were to result in the mortality of the entire litter, the female would be available to breed during the next mating season and could produce another litter during the next denning season.

Based on our projected zero cub mortality associated with these specified activities, and the recognition that even if a den is disturbed, the number of potentially affected cubs would be minimal and the number of reproductive females in the stock would remain the same, the FWS does not anticipate that the conjectural or speculative impacts associated with these specified activities warrant a finding of non-negligible impact or otherwise preclude issuance of this proposed IHA. We reviewed the effects of the specified well-plugging and reclamation activities on polar bears, including impacts from surface interactions, aircraft overflights, and den disturbance. Based on our review of these potential impacts, past monitoring reports, and the biology and natural history of polar bears, we anticipate that such effects will be limited to short-term behavioral disturbances.

We have evaluated climate change regarding polar bears as part of the environmental baseline. Climate change is a global phenomenon and was considered as the overall driver of effects that could alter polar bear habitat and behavior. The FWS is currently involved in research to understand how climate change may affect polar bears. As we gain a better understanding of climate change effects, we will incorporate the information in future authorizations.

We find that the impacts of these specified activities cannot be reasonably expected to, and are not reasonably likely to, adversely affect SBS polar bears through effects on annual rates of recruitment or survival. We therefore find that the total of the taking estimated above and proposed for authorization will have a negligible impact on SBS polar bears. We do not propose to authorize lethal take or any take by Level A harassment that we believe could result in long-term individual or population level fitness consequences.

Impact on Subsistence Use

Based on past community consultations, locations of hunting areas, no anticipated overlap of hunting areas and project activities, and the best scientific information available, including monitoring data from similar activities, we propose a finding that take caused by the oil well plugging and reclamation; soil sampling; snow trail, pad, and airstrip construction; and summer cleanup activities in the project area will not have an unmitigable adverse impact on the availability of polar bears for taking for subsistence uses during the proposed timeframe.

While polar bears represent a small portion, in terms of the number of animals, of the total subsistence harvest for the Utqiagvik, Nuiqsut, Wainwright and Atqasuk communities, their harvest is important to Alaska Natives. The BLM will be required to notify the cities of Wainwright and Utqiagvik and the Native villages of Atqasuk and Nuiqsut of the planned activities and document any discussions of potential conflict. The BLM must make reasonable efforts to ensure that activities do not interfere with subsistence hunting and that adverse effects on the availability of polar bears are minimized. Should such a concern be voiced, development

of plans of cooperation (POC), which must identify measures to minimize any adverse effects, will be required. The POC will ensure that project activities will not have an unmitigable adverse impact on the availability of the species or stock for subsistence uses. This POC must provide the procedures addressing how the BLM will work with the affected Alaska Native communities and what actions will be taken to avoid interference with subsistence hunting of polar bears, as warranted.

The FWS has not received any reports and is not aware of information that indicates that polar bears are being or will be deterred from hunting areas or impacted in any way that diminishes their availability for subsistence use by oil well plugging and reclamation; soil sampling; snow trail, pad, and airstrip construction; and summer cleanup. If there is evidence that these activities are affecting the availability of polar bears for take for subsistence uses, we will reevaluate our findings regarding permissible limits of take and the measures required to ensure continued subsistence hunting opportunities.

Least Practicable Adverse Impact

We evaluated the practicability and effectiveness of mitigation measures based on the nature, scope, and timing of the specified activities, the best available scientific information, and monitoring data during the BLM's activities in the specified geographic region. We propose a finding that the mitigation measures included within the BLM's Request will ensure least practicable adverse impacts on polar bears (BLM 2024).

Polar bear den surveys at the beginning of the winter season, the resulting 1.6-km (1-mi) operational exclusion zone around any known polar bear dens, and restrictions on the timing and types of activities in the vicinity of dens will ensure that impacts to denning female polar bears and their cubs are minimized during this critical period. Minimum flight elevations over polar bear areas and flight restrictions around observed polar bears and known polar bear dens will reduce the potential for aircraft disturbing polar bears. Finally, the BLM will implement mitigation measures to prevent the presence and impact of attractants in camps such as the use of

wildlife-resistant waste receptacles, daily food waste incineration, and storing hazardous materials in drums or other secure containers. These measures are outlined in a polar bear interaction plan that was developed in coordination with the FWS and is part of the BLM's application for this IHA. Based on the information we currently have regarding den and aircraft disturbance and polar bear attractants, we concluded that the mitigation measures outlined in the BLM's Request (BLM 2024) and incorporated into this authorization will minimize impacts from the specified oil well plugging and reclamation, soil sampling, snow trail, pad, and airstrip construction, and summer cleanup activities to the extent practicable.

Several mitigation measures were considered but determined to be not practicable. These measures are listed below:

- *Grounding all flights if they must fly below 457 m (1,500 ft)*—Requiring all aircraft to maintain an altitude of 457 m (1,500 ft) at all times is not practicable as some operations may require flying below 457 m (1,500 ft) to perform necessary inspections or maintain safety of flight crew. Aircraft are required to fly above 457 m (1,500 ft) at all times within 805 m (0.5 mi) of an observed polar bear unless there is an emergency;
- *One-mile buffer around all known polar bear denning habitat*—One-mile (1.6-km) buffer around all known polar bear denning habitat is not practicable as much of the BLM's proposed project area occurs within 1.6 km (1 mi) of denning habitat; thus, to exclude all areas within 1.6 km of denning habitat would preclude the planned activities from occurring;
- *Prohibition of driving over high relief areas, embankments, or stream and river crossings*—While the denning habitat, such as high relief areas, embankments, and streams or river banks, must be considered during tundra travel, complete prohibition is not practicable. High relief areas, embankments, streams, and rivers occur throughout the project area. To completely avoid these types of areas would likely cause personnel to drive further away from established operational areas and unnecessarily create additional safety concerns. Furthermore,

other mitigation measures to minimize impact to denning habitats are included and will minimize the risk imposed by driving over high relief areas, embankments, or stream and river crossings;

- *Use of a broader definition of "denning habitat" for operational offsets*—There is no available data to support broadening the defining features of denning habitat beyond that established by the USGS. Such a redefinition would cause an increase in the area surveyed for maternal dens, and the associated increase in potential harassment of polar bears on the surface would outweigh the mitigative benefits;

- *Establishment of corridors for sow and cub transit to the sea ice*—As there is no data to support the existence of natural transit corridors to the sea ice, establishment of corridors in the IHA area would be highly speculative. Therefore, there would be no mitigative benefit realized by their establishment;

- *Require all activities to cease if a polar bear is injured or killed until an investigation is completed*—The FWS has incorporated reporting requirements into this proposed authorization for all polar bear interactions. While it may aid in any subsequent investigation, ceasing all activities may not be practicable or safe and, thus, will not be mandated;

- *Require use of den detection dogs*—It is not practicable or safe to require scent-trained dogs to detect dens due to the large spatial extent that would need to be surveyed within activity areas;

- *Require the use of handheld or vehicle-mounted Forward Looking Infrared (FLIR)*—The efficacy rates for AIR have been found to be four times more likely to detect dens versus ground-based FLIR (handheld or vehicle-mounted FLIR) due to impacts of blowing snow on detection. The BLM has incorporated into their mitigation measures the use of handheld or vehicle-mounted FLIR when transiting rivers occurring in suitable denning habitat, but it is not practicable to use the equipment during all transit;

- *Construct safety gates, fences, and enclosures to prevent polar bears from accessing facilities*—This project will require no permanent facility/structures and encompasses a large

area. Construction and deconstruction of barriers for a moving camp would increase potential human– polar bear interactions and impacts to polar bear habitat;

- *Employ protected species observers (PSOs) for monitoring, recording, reporting, and implementing mitigation measures*—All personnel will be trained in wildlife observation, employment of PSOs would not be anticipated to reduce impacts to polar bears. Monitoring, recording, reporting are described in the IHA application;
- *Avoid areas of high-density polar bear use (e.g., barrier islands and coastline) including the establishment of camps and pads*—This measure is not practicable because the legacy wells that this project is focused on are all located along the coastline, and snow trail must also cross through these areas to reach the well sites;
- *Avoid predominantly coastal routes for flight pathways*—This measure is not practicable because the remediation sites are located along the coast, and aviation access routes to project sites must occur over the coast; and
- *Restrict activity and travel over polar bear denning habitat to eliminate or lessen risk of den collapse*—This project has activities that will travel over potential polar bear denning habitat. The BLM has committed to multiple effective mitigation measures to minimize their potential impacts to polar bear denning habitat and reduce to chance of den collapse. Therefore, we believe that the probability of this project's activities causing a den collapse is near zero and additional mitigation measures would not further reduce the probability.

Required Determinations

National Environmental Policy Act (NEPA)

We have prepared a draft environmental assessment in accordance with the NEPA (42 U.S.C. 4321 *et seq*.). We have preliminarily concluded that authorizing the nonlethal, incidental, unintentional take of 12 SBS polar bears by Level B harassment during the proposed harassment authorization period would not significantly affect the quality of the human environment and, thus, preparation of an environmental impact statement for this incidental harassment

authorization is not required by section 102(2) of NEPA or its implementing regulations. We are accepting comments on the draft environmental assessment as specified above in **DATES** and **ADDRESSES**.

Endangered Species Act

Under the Endangered Species Act (ESA) (16 U.S.C. 1536(a)(2)), all Federal agencies are required to ensure the actions they authorize are not likely to jeopardize the continued existence of any threatened or endangered species or result in destruction or adverse modification of critical habitat. Prior to issuance of a final IHA, the FWS will complete intra-Service consultation under section 7 of the ESA on our proposed issuance of an IHA. These evaluations and findings will be made available on the FWS's website at *https://ecos.fws.gov/ecp/report/biological-opinion.*

Government-to-Government Consultation

It is our responsibility to communicate and work directly on a Government-to-Government basis with federally recognized Alaska Native Tribes in developing programs for healthy ecosystems. We seek their full and meaningful participation in evaluating and addressing conservation concerns for protected species. It is our goal to remain sensitive to Alaska Native culture, and to make information available to Alaska Tribal organizations and communities. Our efforts are guided by the following policies and directives:

(1) The Native American Policy of the FWS (January 20, 2016);

(2) The Alaska Native Relations Policy (currently in draft form; see 87 FR 66255, November 3, 2022);

(3) Executive Order 13175 (January 9, 2000);

(4) Department of the Interior Secretarial Orders 3206 (June 5, 1997), 3225 (January 19, 2001), 3317 (December 1, 2011), 3342 (October 21, 2016), and 3403 (November 15, 2021) as well as Director's Order 227 (September 8, 2022);

(5) The Alaska Government-to-Government Policy (a departmental memorandum issued

January 18, 2001); and

(6) the Department of the Interior's policies on consultation with Alaska Native Tribes and organizations.

We have evaluated possible effects of the proposed IHA on federally recognized Alaska Native Tribes and ANCSA (Alaska Native Claims Settlement Act) Corporations. The FWS has determined that authorizing the Level B harassment of up to 12 polar bears from the BLM's specified activities would not have any Tribal implications or ANCSA Corporation implications and, therefore, Government-to-Government consultation or Government-to-ANCSA Corporation consultation is not necessary. However, we invite continued discussion, either about the project and its impacts or about our coordination and information exchange throughout the IHA/POC public comment process.

Paperwork Reduction Act

This proposed IHA does not contain any new collection of information that requires approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). The OMB has previously approved the information collection requirements associated with IHAs and assigned OMB Control Number 1018–0194 (expires 08/31/2026). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Proposed Authorization

We propose to authorize, for 1 year from date of issuance, the nonlethal, incidental take by Level B harassment of up to 12 polar bears from the SBS stock of polar bears for activities associated with the BLM's oil well plugging and reclamation, soil sampling, snow trail, pad, and airstrip construction, and summer cleanup activities in the North Slope Borough of Alaska between Wainwright and Oliktok. Authorized take will be limited to Level B harassment only, i.e., disruption of behavioral patterns, and not anticipated to incur any significant impacts to either individual- or population-level fitness. We do not anticipate or authorize any take by Level

A harassment, lethal take, or any other injury.

A. General Conditions for the IHA for the BLM

1. Activities must be conducted in the manner described in the revised Request dated August 2024 (received August 26, 2024) for an IHA and in accordance with all applicable conditions and mitigation measures. The taking of polar bears whenever the required conditions, mitigation, monitoring, and reporting measures are not fully implemented as required by the IHA is prohibited. Failure to follow the measures specified both in the revised Request and within this proposed authorization may result in the modification, suspension, or revocation of the IHA.

2. If project activities cause unauthorized take (i.e., take of more than 12 polar bears from the SBS stock by Level B harassment or a form of take other than Level B harassment, or take of 1 or more polar bears through methods not described in the IHA), then BLM must take the following actions:

i. Cease its activities immediately (or reduce activities to the minimum level necessary to maintain safety);

ii. Report the details of the incident to the FWS within 48 hours; and

iii. Suspend further activities until the FWS has reviewed the circumstances and determined whether additional mitigation measures are necessary to avoid further unauthorized taking.

3. All operations managers, aircraft pilots, and vehicle operators must receive a copy of this IHA and maintain access to it for reference at all times during project work. These personnel must understand, be fully aware of, and be capable of implementing the conditions of the IHA at all times during project work.

4. This IHA will apply to activities associated with the proposed project as described in this document and in the BLM's revised Request. Changes to the proposed project without prior authorization may invalidate the IHA.

5. The BLM's revised Request is approved and fully incorporated into this IHA unless exceptions are specifically noted herein. The revised Request includes:

i. The BLM's original *Request for an IHA*, dated June 2024, (received by the FWS June 17, 2024) which includes the BLM's *Polar Bear Safety, Awareness, and Interaction Plan* and geospatial files; and

ii. The BLM's revised *Request for an IHA*, dated August 2024 (received by the FWS August 26, 2024).

6. Operators will allow the FWS personnel or the FWS's designated representative to visit project work sites to monitor for impacts to polar bears and subsistence uses of polar bears at any time throughout project activities so long as it is safe to do so. "Operators" are all personnel operating under the BLM's authority, including all contractors and subcontractors.

The BLM must implement the following policies and procedures to avoid interactions and minimize to the greatest extent practicable any adverse impacts on polar bears, their habitat, and the availability of these marine mammals for subsistence uses.

B. General Avoidance Measures

1. The BLM must cooperate with the FWS and other designated Federal, State, and local agencies to monitor and mitigate the impacts of activities on polar bears.

2. Trained and qualified personnel must be designated to monitor for the presence of polar bears, initiate mitigation measures, and monitor, record, and report the effects of the activities on polar bears. The BLM must provide all operators with polar bear awareness training prior to their participation in project activities.

3. An FWS-approved polar bear safety, awareness, and interaction plan must be on file with the FWS Marine Mammal Management office and available onsite. The interaction plan must include:

i. A description of the proposed activity (i.e., a summary of the plan of operations during the proposed activity);

ii. A food, waste, and other attractants management plan;

iii. Personnel training policies, procedures, and materials;

iv. Site-specific polar bear interaction risk evaluation and mitigation measures;

v. Polar bear avoidance and encounter procedures; and

vi. Polar bear observation and reporting procedures.

4. The BLM must contact potentially affected subsistence communities and hunter organizations to discuss potential conflicts caused by the activities and provide the FWS documentation of communications as described in *D. Measures To Reduce Impacts to Subsistence Users*.

5. *Mitigation measures for aircraft.* The BLM must undertake the following activities to limit disturbance from aircraft activities:

i. Operators of support aircraft shall, at all times, conduct their activities at the maximum distance practicable from concentrations of polar bears.

ii. Fixed-wing aircraft and helicopter operations within the IHA area must maintain a minimum altitude of 457 m (1,500 ft) above ground level when safe and operationally possible.

iii. Under no circumstances, other than an emergency, will aircraft operate at an altitude lower than 457 m (1,500 ft) within 805 m (0.5 mi) of a polar bear observed on ice or land measured in a straight line between the polar bear and the ground directly underneath the aircraft. Helicopters may not hover or circle above such areas or within 805 m (0.5 mi) of such areas. If weather conditions or operational constraints necessitate operation of aircraft at altitudes below 457 m (1,500 ft), the operator must avoid areas of known polar bear concentrations and should take precautions to avoid flying directly over or within 805 m (0.5 mi) of these areas.

iv. Aircraft may not be operated in such a way as to separate individual polar bears from a group (i.e., two or more polar bears).

6. *Mitigation measures for winter activities*. The BLM must undertake the following activities to limit disturbance around known polar bear dens:

i. The BLM must conduct two aerial infrared (AIR) surveys of all denning habitat located within 1.6 km (1 mi) of specified activities in an attempt to identify maternal polar bear dens. The first survey obtained must occur between December 1 and December 25, 2024, and the second survey obtained must occur between December 15, 2024, and January 10, 2025, with at least 24 hours occurring between the completion of the first survey and the beginning of the second survey.

ii. All observed or suspected polar bear dens must be reported to the FWS prior to the initiation of activities.

iii. If a suspected den site is located, the BLM will immediately consult with the FWS to analyze the data and determine if additional surveys or mitigation measures are required. The FWS will determine whether the suspected den is to be treated as a putative den for the purposes of this IHA.

iv. Operators must observe a 1.6-km (1-mi) operational exclusion zone around all putative polar bear dens during the denning season (November–April, or until the female and cubs leave the areas). Should a suspected den be discovered within 1 mile of activities, work must cease, and the FWS must be contacted for guidance. The FWS will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential actions may range from cessation or modification of work to conducting additional monitoring, and the BLM must comply with any additional measures specified.

v. In determining the denning habitat that requires surveys, the den habitat map developed by the USGS should be used. A map of potential coastal polar bear denning habitat can be found at: *https://www.usgs.gov/centers/asc/science/polar-bear-maternal-denning?qt-science_center_objects=4#qt-science_center_objects*.

C. Monitoring

1. Operators must provide onsite observers and implement the FWS-approved polar bear safety, awareness, and interaction plan to apply mitigation measures, monitor the project's

effects on polar bears and subsistence uses, and evaluate the effectiveness of mitigation measures.

2. Onsite observers must be present during all operations and must record all polar bear observations, identify and document potential harassment, and work with personnel to implement appropriate mitigation measures.

3. Operators shall cooperate with the FWS and other designated Federal, State, and local agencies to monitor the impacts of project activities on polar bears. Where information is insufficient to evaluate the potential effects of activities on polar bears and the subsistence use of this species, the BLM may be required to participate in joint monitoring efforts to address these information needs and ensure the least practicable impact to this resource.

D. Measures To Reduce Impacts to Subsistence Users

The BLM must conduct its activities in a manner that, to the greatest extent practicable, minimizes adverse impacts on the availability of polar bears for subsistence uses.

1. The BLM will be required to develop a FWS-approved POC if, through community consultation, concerns are raised regarding impacts to subsistence harvest or Alaska Native Tribes and organizations.

2. If an FWS-approved POC is required, the BLM will implement that POC

3. Prior to conducting the work, the BLM will take the following steps to reduce potential effects on subsistence harvest of polar bears:

i. Avoid work in areas of known polar bear subsistence harvest;

ii. Notify the cities Wainwright and Utqiagvik and the Native Villages of Atqasuk and Nuiqsit of the proposed project activities;

iii. Work to resolve any concerns of potentially affected Alaska Native Tribal organizations and corporations regarding the project's effects on subsistence hunting of polar bears;

iv. If any unresolved or ongoing concerns of potentially affected Alaska Native Tribal

organizations and corporations remain, modify the POC in consultation with the FWS and subsistence stakeholders to address these concerns; and

v. Implement FWS-required mitigation measures that will reduce impacts to subsistence users and their resources.

E. Reporting Requirements

The BLM must report the results of monitoring to the FWS Marine Mammals Management office via email at: *FW7_mmm_reports@fws.gov*.

1. *In-season monitoring reports.*

2. *Activity progress reports.* The BLM must:

(i) Notify the FWS at least 48 hours prior to the onset of activities;

(ii) Provide the FWS weekly progress reports of any significant changes in activities and/or locations; and

(iii) Notify the FWS within 48 hours after ending of activities.

3. *Polar bear observation reports.* The BLM must report, within 48 hours, all observations of polar bears and potential polar bear dens during any project activities. Upon request, monitoring report data must be provided in a common electronic format (to be specified by the FWS). Information in the observation report must include, but need not be limited to:

i. Date and time of each observation;

ii. Locations of the observer and polar bears (GPS coordinates if possible);

iii. Number of polar bears;

iv. Sex and age class—adult, subadult, cub (if known);

v. Observer name and contact information;

vi. Weather, visibility, and if at sea, sea state, and sea-ice conditions at the time of observation;

vii. Estimated closest distance of polar bears from personnel and facilities;

viii. Type of work being conducted at time of sighting;

ix. Possible attractants present;

x. Polar bear behavior—initial behavior when first observed (e.g., walking, swimming, resting, etc.);

xi. Potential reaction—behavior of polar bear potentially in response to presence or activity of personnel and equipment;

xii. Description of the encounter;

xiii. Duration of the encounter; and

xiv. Mitigation actions taken.

4. *Human–polar bear interaction reports.* The BLM must report all human–polar bear interaction incidents immediately, and not later than 48 hours after the incident. Human–polar bear interactions include:

i. Any situation in which there is a possibility for unauthorized take. For instance, when project activities exceed those included in an IHA, when a mitigation measure was required but not enacted, or when the injury or death of a polar bear occurs. Reports must include all information specified for an observation report in paragraphs (3)(i)–(xiv) of this section E, a complete detailed description of the incident, and any other actions taken.

ii. Injured, dead, or distressed polar bears that are clearly not associated with project activities (e.g., animals found outside the project area, previously wounded animals, or carcasses with moderate to advanced decomposition or scavenger damage) must also be reported to the FWS immediately, and not later than 48 hours after discovery. Photographs, video, location information, or any other available documentation must be included.

6. *Final report.* The results of monitoring and mitigation efforts identified in the marine mammal avoidance and interaction plan must be submitted to the FWS for review within 90 days of the expiration of this IHA. Upon request, final report data must be provided in a common electronic format (to be specified by the FWS). Information in the final report must include, but need not be limited to:

i. Copies of all observation reports submitted under the IHA;

ii. A summary of the observation reports;

iii. A summary of monitoring and mitigation efforts including areas, total hours, total distances, and distribution;

iv. Analysis of factors affecting the visibility and detectability of polar bears during monitoring;

v. Analysis of the effectiveness of mitigation measures;

vi. A summary and analysis of the distribution, abundance, and behavior of all polar bears observed; and

vii. Estimates of take in relation to the specified activities.

Request for Public Comments

If you wish to comment on this proposed authorization, the associated draft environmental assessment, or both documents, you may submit your comments by either of the methods described in **ADDRESSES**. Please identify whether you are commenting on the proposed authorization, draft environmental assessment, or both, make your comments as specific as possible, confine them to issues pertinent to the proposed authorization, and explain the reason for any changes you recommend. Where possible, your comments should reference the specific section or paragraph that you are addressing. The FWS will consider all comments that are received before the close of the comment period (see **DATES**). The FWS does not anticipate extending the public comment period beyond the 30 days required under section 101(a)(5)(D)(iii) of the MMPA.

Comments, including names and street addresses of respondents, will become part of the administrative record for this proposal. Before including your address, telephone number, email address, or other personal identifying information in your comment, be advised that your entire comment, including your personal identifying information, may be made publicly available at

any time. While you can ask us in your comments to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

Peter Fasbender,
Assistant Regional Director—Fisheries and Ecological Services, Alaska Region.
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