



DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 18

[Docket No. FWS–R7–ES–2024–0140; FXES111607MRG01–245–FF07CAMM00]

RIN 1018–BI09

Marine Mammals; Incidental Take of Polar Bears During Specified Activities; North Slope, Alaska

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service, are revising a portion of our regulations under the Marine Mammal Protection Act pertaining to incidental take of marine mammals.

These regulations, codified at 50 CFR part 18, subpart J, authorize the nonlethal, incidental, unintentional take by harassment of small numbers of polar bears from the Southern Beaufort Sea stock and Pacific walruses during year-round oil and gas industry activities in the Beaufort Sea (Alaska and the Outer Continental Shelf) and adjacent northern coast of Alaska. Such take may result from oil and gas exploration, development, production, and transportation activities occurring through August 5, 2026. The revisions made by this final rule authorize incidental Level A harassment of polar bears in addition to the incidental Level B harassment of polar bears and Pacific walruses already authorized. No lethal take is authorized under this rule.

DATES: This rule is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] and remains effective through August 5, 2026.

Information Collection Requirements: If you wish to comment on the information collection requirements in this rule, please note that the Office of Management and Budget (OMB) is required to make a decision concerning the collection of information contained in this rule between 30 and 60 days after the date of publication of this rule in the *Federal Register*.

Therefore, comments should be submitted to OMB by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: *Document availability:* You may view this rule, the associated final supplemental environmental assessment and finding of no significant impact (FONSI), and other supporting material at <https://www.regulations.gov> under Docket No. FWS–R7–ES–2024–0140, or these documents may be requested as described under **FOR FURTHER INFORMATION CONTACT**.

Information Collection Requirements: This final rule is effective on the date set forth in **DATES**. We will, however, accept and consider all public comments concerning the information collection requirements received in response to this final rule. Written comments and suggestions on the information collection requirements may be submitted at any time to the Service Information Collection Clearance Officer, U.S. Fish and Wildlife Service, by email to info_coll@fws.gov; or by mail to 5275 Leesburg Pike, MS: PRB (JAO/3W), Falls Church, VA 22041–3803. Please reference “OMB Control Number 1018–BI09/0070” in the subject line of your comments.

FOR FURTHER INFORMATION CONTACT: Stephanie Burgess, Marine Mammals Management, U.S. Fish and Wildlife Service, 1011 East Tudor Road, MS–341, Anchorage, AK 99503, telephone 907–786–3844, or email: R7mmmregulatory@fws.gov. 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:

Immediate Promulgation

In accordance with the Administrative Procedure Act (APA; 5 U.S.C. 553(d)(3)), we find that we have good cause to make this rule effective less than 30 days after the date of

publication. Immediate promulgation of the rule will ensure that the applicant will continue to implement mitigation, monitoring, and reporting requirements that reduce potential impacts to polar bears (*Ursus maritimus*) and Pacific walruses (*Odobenus rosmarus divergens*), will allow the applicant to receive coverage under the Marine Mammal Protection Act (MMPA) for potential take of polar bears by Level A harassment, increase our understanding of impacts that result from the applicant's activities, and thus further our conservation objectives. Further, because the applicant's activities are ongoing, with no change required to those activities by this final rule, the applicant does not need time to adjust its behavior in response to this rule. Finally, this final rule recognizes an exemption that is afforded the applicant under the MMPA.

Background

In accordance with the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1371 et seq.), and its implementing regulations, the U.S. Fish and Wildlife Service (Service) finalized incidental take regulations in 2021 (hereafter, "2021-ITRs") in response to a request from the Alaska Oil and Gas Association (AOGA). The request was for regulations to provide for the issuance of letters of authorization (LOA) for incidental take of small numbers of Pacific walruses and Southern Beaufort Sea (SBS) polar bears during specified oil and gas industry ("Industry") activities in the Beaufort Sea and adjacent northern coast of Alaska over a 5-year period (86 FR 42982, August 5, 2021). The regulations were added to title 50 of the Code of Federal Regulations (CFR) in part 18 at subpart J and expire August 5, 2026. The 2021-ITRs authorize, via Service-issued LOAs, the incidental Level B harassment of up to 15 Pacific walruses and 92 SBS polar bears each year. The 2021-ITRs do not authorize (or facilitate the authorization of) any incidental Level A harassment or lethal take of any marine mammals during specified Industry activities, and any such take remains prohibited by the MMPA.

The 2021-ITRs, along with the accompanying National Environmental Policy Act (NEPA) environmental assessment and Endangered Species Act (ESA) biological opinion, were

challenged in litigation that commenced in the United States District Court for the District of Alaska (District Court). On March 30, 2023, the District Court issued summary judgment in favor of the Service upholding the 2021-ITRs. Portions of this ruling were appealed to the United States Court of Appeals for the Ninth Circuit (Appellate Court). On March 19, 2024, a three-judge panel of the Appellate Court issued an order that affirmed in part, and reversed in part, the District Court ruling. The Appellate Court panel declined to vacate the 2021-ITRs but issued a remand that requires the Service to conduct additional analysis and, depending on the results, potentially take regulatory action. In their remand order, specific only to polar bears, the Court directed (omitting internal references):

“We ... remand to the Service to offer a fuller explanation for its determination that no Level A incidents are expected during the period covered by the 2021 ITR.... In assessing the ‘negligible impact’ prong on remand, the Service may, consistent with its expertise, emphasize certain outputs over others. However, given the MMPA’s two-part conception of take, it must determine whether aggregating serious and non-serious Level A take yields a ‘reasonably likely’ result.... If so (as the 75 percent figure proffered by Plaintiffs suggests), the Service will then need to determine (i) whether any Level A take predicted will affect only ‘small numbers’ of bears and have a ‘negligible impact’ on the subpopulation and, if so, (ii) whether to issue an updated ITR covering Level A take or no ITR at all....

Hence, we ... remand to the Service so that it may (i) aggregate serious and non-serious Level A take together ... and (ii) determine whether the five-year risk of such take of a denning cub is ‘reasonably likely’.... To the extent that it is, the Service must then evaluate whether the five-year impacts of Level A take is ‘negligible’ and whether such take will be of ‘small numbers’ of bears and possibly amend or reverse the 2021 ITR.”

Accordingly, the Service conducted additional analysis consistent with the Appellate Court’s direction and reported preliminary results and determinations in a proposed rule (89 FR 88216, November 7, 2024). The proposed rule reported the Service’s preliminary determinations that, while no lethal take is predicted to occur over the remainder of the 2021-ITRs’ effective period, it is likely that Level A harassments of polar bears will occur, and that authorizing such take is consistent with MMPA standards. The proposed rule therefore proposed to amend the 2021-ITRs to allow the request for and issuance of LOAs authorizing take by Level A harassment of polar bears that may result from Industry activities.

Section 101(a)(5)(A) of the MMPA gives the Secretary of the Interior (Secretary) the authority to allow the incidental, but not intentional, taking of small numbers of marine mammals, in response to requests by U.S. citizens (as defined in 50 CFR 18.27(c)) engaged in a specified activity (other than commercial fishing) within a specified geographic region. The Secretary has delegated authority for implementation of the MMPA to the Service. According to the MMPA (section 101(a)(5)(A)(i)), the Service shall allow this incidental taking if we find the total of such taking for a 5-year period or less:

- (1) will affect only small numbers of marine mammals of a species or population stock;
- (2) will have no more than a negligible impact on such species or stocks;
- (3) will not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence use by Alaska Natives; and

- (4) we issue regulations that set forth:

- (a) permissible methods of taking;
 - (b) other means of effecting the least practicable adverse impact on the species or stock and its habitat, and on the availability of such species or stock for subsistence uses; and
 - (c) requirements for monitoring and reporting of such taking.

If final regulations allowing such incidental taking are issued, we may then subsequently issue LOAs, upon request, to authorize incidental take during the specified activities.

The term “take” as defined by the MMPA, means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal (16 U.S.C. 1362(13)). Harassment, as defined by the MMPA, 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) (16 U.S.C. 1362(18)).

The terms “negligible impact” and “unmitigable adverse impact” are defined in 50 CFR 18.27 (the Service’s regulations governing small takes of marine mammals incidental to specified activities). “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 § 18.27. However, we do not rely on that definition here as it conflates “small numbers” with “negligible impact.” We recognize “small numbers” and “negligible impact” as two separate and distinct requirements for promulgating incidental take regulations (ITRs) under the MMPA (see *Natural Res. Def. Council, Inc. v. Evans*, 232 F. Supp. 2d 1003, 1025 (N.D. Cal. 2002)). Instead, for our small numbers determination, we estimate the likely take of marine mammals and evaluate if whether the number of marine mammals with take 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 implementing regulations. The Service ensures the least practicable adverse impact by requiring mitigation measures that are effective in reducing the impact of Industry activities but are not so restrictive as to make Industry activities unduly burdensome or impossible to undertake and complete.

The MMPA does not require Industry to obtain an incidental take authorization; however, any taking that occurs without authorization is a violation of the MMPA. Since 1993, the oil and gas industry operating in the Beaufort Sea and the adjacent northern coast of Alaska has requested, and we have issued, incidental take regulations (ITRs) for the incidental take of Pacific walruses and polar bears within a specified geographic region during specified activities. For a detailed history of our current and past Beaufort Sea ITRs, refer to the *Federal Register* at 81 FR 52276, August 5, 2016; 76 FR 47010, August 3, 2011; 71 FR 43926, August 2, 2006; and 68 FR 66744, November 28, 2003. This final rule confirms the preliminary determinations made in the proposed rule and amends regulations that are codified at 50 CFR part 18, subpart J (§§ 18.119 to 18.129).

Changes to 50 CFR Part 18, Subpart J

The 2021-ITRs are amended to allow an applicant to request and the Service to authorize the incidental Level A harassment of polar bears, in addition to the incidental Level B harassment of polar bears and Pacific walruses that the Service may already authorize. The lethal incidental take of polar bears continues to be prohibited, as does any Level A harassment or lethal take of Pacific walrus.

Summary of Changes From the Proposed Rule

In preparing this final rule that revises the final rule of August 5, 2021 (86 FR 42982), for the incidental take of polar bears and Pacific walruses, we reviewed and considered comments and information from the public on our proposed rule that published in the *Federal Register* on November 7, 2024 (89 FR 88216). We also reviewed and considered comments and information from the public on our draft supplemental environmental assessment. Based on those considerations, we are finalizing these regulations with no changes to the regulatory text but with the following changes to our MMPA determinations or other preambulatory text:

- The Service corrected a mathematical error, changing the number of expected takes by Level B harassment over a 2-year period from 186 to 184 ($92+92=184$).

- The Service clarified ambiguous wording surrounding the outcome of the fourth den that was encountered in the 2022–2023 period and the distance of the den to Industry.

- The Service clarified the timing of the litter survival estimates used in our denning analysis and cited in Andersen et al. 2024. References to “litter survival” at approximately 100 days were changed to “survival after spring den emergence” to align more closely with the original dataset.

- The Service added a statement that our estimates concerning non-denning polar bears remain unchanged from the 2021-ITRs.

- The Service added an additional figure that illustrates litter survival probability distributions and mean survival rates that incorporate both Level A and lethal take for the land-based SBS polar bear stock during the remaining 2-year period of the timeframe of the 2021-ITRs.

- The Service has expanded our descriptions of our negligible impact and small numbers findings to more clearly present those findings at both a 2-year and 5-year time scale.

- The Service added a consideration of mitigation measures suggested in public comments to our “least practicable adverse impacts” discussion.

- The Service revised our discussion on the estimated takes by Level A harassment. Instead of referring to “Level A harassment events,” we use the phrase “Level A harassments” because our modeling estimates that two takes by harassment may occur in one event (i.e., if two cubs from the same den are disturbed).

- The Service made four key updates to our assessment of case studies, generated updated model outputs, and has provided updated estimates of take.

New Information and Analysis

Aggregated Level A Harassment Across 5-Year Period

In conducting the additional analysis required by the Court's remand, the Service utilized best available scientific evidence. New information has been acquired, and several advancements in the Service's analytical methods have been made subsequent to the promulgation of the 2021-ITRs. Many of these advancements were recently described and considered in an incidental harassment authorization that was issued by the Service to the Bureau of Land Management (88 FR 88943, December 26, 2023).

Specifically, the denning analysis described in the 2021-ITRs was conducted using the simulation of annual land-based maternal polar bear dens, spatially and temporally explicit descriptions of Industry activity, and predictions of polar bear response rooted in distributions established from den disturbance case studies (*See* 86 FR 42982, August 5, 2021). For each of the five winter seasons analyzed in the 2021-ITRs, a series of dens was simulated by assigning each a location on the landscape, the sow's entrance date, the number of cubs she bore, the cub(s)' birthdate, den emergence date, and den departure date. We then overlaid the season's Industry activity across the same landscape and simulated whether polar bears within maternal dens that fell within a mile of activity responded to Industry-caused disturbances, and if so, how. Potential responses include disturbance of the sow inside the den, den abandonment, early emergence from the den, and early departure from the den site. Polar bear disturbance responses that occurred during the den establishment period were estimated to result in Level B harassment of the sow (no cubs are present during this period). Responses that occurred during the early denning period were estimated to result in Level B harassment of the sow and lethal take of the cub(s). Responses that occurred during the late denning period were estimated to result in Level B harassment of the sow and "serious Level A harassment" (i.e., likely to result in cub mortality) of the cub(s). Responses during the post-emergence period were estimated to result in Level B harassment of the sow and "nonserious Level A harassment" (i.e., not likely to result in cub mortality) of the cub(s).

The denning model was created to assess individual denning seasons and has included several levels of assumptions that generate an estimate of the potential annual impacts to denning polar bears that is somewhat conservative in that it is more likely to overstate, rather than understate, potential impacts. Use of this methodology achieved the objective of ensuring that actual impacts would not exceed what was contemplated in the incidental take authorization and would remain consistent with applicable MMPA thresholds. However, when applied to activities spanning a 5-year period, conservative aspects of certain model assumptions are amplified in a manner that risks unduly overstating projected aggregate impacts, raising the possibility that incidental take resulting from specified activities with acceptable levels of impacts could not be authorized, a scenario that would be inconsistent with the intent of section 101(a)(5)(A) of the MMPA. Thus, in complying with the remand's direction to aggregate Level A harassment estimates over a 5-year period, we reexamined the denning model to incorporate newly available scientific evidence and further refine certain model assumptions where appropriate to achieve greater accuracy.

Since 2021, LOA applicants have annually provided the Service with revised project descriptions and geospatial files that more precisely reflected the scope of their planned activities to be conducted during the ensuing (1-year) LOA period, as compared with the descriptions of specified activities provided during development of the 5-year ITRs. We used the revised files in the present analysis as they constitute the best available information concerning the scope of Industry's specified activities. We also account for AOGA's clarification that no onshore terrestrial seismic surveys will occur during the winter of 2024–2025. Potential seismic surveys in the winter of 2025–2026 remain within the scope of AOGA's specified activities and were analyzed during our re-analysis.

As a condition of their authorizations, LOA holders also submit records of all polar bear encounters during their activities. Using this information, and records from separate activities that were not operating under the 2021-ITRs, we incorporated data from recently observed dens

into our disturbance probabilities and litter size distributions, modified the model to incorporate newly published data that describes the relationship between den emergence date, den departure time, and litter survival (Andersen et al. 2024), and updated the simulation of dens across the landscape to now include several previously unidentified areas that may sustain polar bear dens.

Four known dens (monitored in 2022 and 2023) have occurred near human activity since the promulgation of the 2021-ITRs. Of the four newly observed dens, three were extremely close to human activity (<50 meters), and the fourth was slightly farther away, but within 800 meters of human activity. Despite their close proximity to potential disturbance, 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 reexamined the historic dens that were used to create disturbance probabilities. We found that the distances between human activity and polar bear dens that experienced an observed disturbance response during the early denning period were considerably closer than those dens that experience an observed disturbance response 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 1 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 meters 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 meters. 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 support 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 reduce 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 meters. As a result, dens that were simulated to be within 805 meters of human activity could be disturbed during all denning periods, while dens between 806–1,610 meters of human activity could be disturbed only during the den establishment, late denning, and post-emergence periods.

Finally, the method for categorizing certain disturbance responses was modified to comply with the Court’s direction to provide aggregated estimates of Level A harassment and to better align the model results with the categories of “take” defined in the MMPA. In the preamble to the 2021-ITRs, we drew a distinction between “serious Level A” and “nonserious Level A” harassment and largely addressed these categories separately. If a sow and cub(s) emerged early (i.e., during the late denning period), the litter was assigned serious Level A harassment(s). If the sow and cub(s) departed the den site early (i.e., during the post-emergence period), the litter was assigned nonserious Level A harassment(s). These categories were based on the historic den disturbance case studies. Now we omit the “serious”/“non-serious” dichotomy and instead report results that aggregate all estimated Level A harassments. If an exposure resulted in disturbance during either of these periods, we assigned a Level A harassment to each cub in the litter (table 1).

TABLE 1—PROBABILITY OF SIMULATED EXPOSURES RESULTING IN DISTURBANCE RESPONSE TO DENNING POLAR BEARS
[MMPA Level A and Level B harassment and lethal take]

Denning period	None (sow or cub(s))	Level B (sow)	Level B (cub(s))	Level A (cub(s))	Lethal (cub(s))
Den establishment	0.75	0.25	N/A	N/A	N/A
Early denning	0.92	0.08	0.00	0.00	0.08
Late denning	0.68	0.32	0.00	0.32	0.00
Post emergence— previously undisturbed den	0.00	1.00	0.32	0.68	0.00
Post emergence— previously disturbed den	0.00	1.00	0.67	0.33	0.00

We also use newly described relationships between den emergence date, den departure time, and litter survival (Andersen et al. 2024) to assign litter survival rates to simulated dens that experienced Level A harassment, a method used in recent polar bear take authorizations (88 FR 88943, December 26, 2023). If an exposure resulted in a disturbance response during the late denning period, we first assigned that den a new random earlier emergence date. We then simulated whether that den was disturbed during the post-emergence period. Dens that were disturbed during the post-emergence period were also assigned a new random earlier den departure date. We relied on estimates of litter survival derived from empirical data from observations of family groups in the spring after den emergence (Andersen et al. 2024) to determine the fitness consequence of the Level A harassment, and we consider this information below when addressing the MMPA's negligible impact standard. This revised methodology provides a clearer and more in-depth understanding of the potential fitness consequence of polar bear disturbance.

As in the existing 2021-ITRs, some concepts and mitigation measures could potentially reduce impacts to polar bears, but they are not reflected in our take estimates because their mitigative benefit is not quantifiable. For example, LOA holders must train their staff to identify the characteristics of a polar bear den, and if a suspected den is identified, they must cease operations and notify the Service. However, the efficacy of this technique cannot be quantified and could not be accounted for in the model results. Consideration of the conservative nature of certain model assumptions along with qualitative factors suggests that if the actual number of Level A harassment events does not align with the median model output, then the actual number of Level A harassment events would be fewer than modeled. However, we find, based on best professional judgment, that Level A harassment is reasonably likely to occur, and is anticipated, during the 5-year period of the 2021-ITRs (table 2).

TABLE 2—ANTICIPATED LEVEL A HARASSMENT OF POLAR BEARS OVER THE 5-YEAR PERIOD OF THE 2021-ITRs

Type of take	Probability	Mean	Median	95% CI*
Level A harassment	0.85	3.50	3	0-10

* Confidence interval (CI).

We base this conclusion on the strength of the modeled probability of Level A harassment (0.85), the estimated median number of harassments (3), and denning observations that have occurred within the area of the 2021-ITRs subsequent to the promulgation of the regulations in 2021. Of the four dens that have been observed within 1 mile of the human activity since 2021, two polar bear family groups appear to have spent less time at the den site during the post-emergence period than average. Following the relationship between den emergence date and den departure date described by Andersen et al. (2024), the cubs in the early departing family groups may have experienced a reduction in fitness and, as a result, a temporary decrease in their probability of survival. The Service considers such reductions in fitness as “injuries” for the purposes of interpreting the MMPA’s definition of Level A harassment.

Our reanalysis led to the conclusion that Level A harassment of polar bears is reasonably likely to occur during the 5-year effective period of the 2021-ITRs. Due to this conclusion, and in light of the Court’s remand, we proposed to revise aspects of the 2021-ITRs that pertain to polar bears (but not Pacific walruses). In light of the final determinations reported below, we now finalize those proposed revisions via this final rule.

Small Numbers Determination

In addressing the MMPA’s “small numbers” requirement, we began by focusing on the impact of AOGA’s specified activities that may occur during the 2 remaining years of the 2021-ITRs (which expire August 5, 2026), i.e., the activities to which these revised regulations will apply. We then address the remand directive to consider the 5-year period.

Small Numbers—Remaining 2-Year Period

Using the updated information and denning model methodology described above, we estimated the potential Level B harassment, Level A harassment, and lethal take of denning polar bears that may occur as a result of these specified activities (table 3). Our estimates concerning non-denning bears remain unchanged from the 2021-ITRs.

TABLE 3—ANNUAL (1-YEAR) AND AGGREGATE (2-YEAR) ESTIMATES OF MMPA TAKE OF DENNING POLAR BEARS UNDER THE 2021-ITRs (AUGUST 6, 2024, THROUGH AUGUST 5, 2026)

Type of Take	Probability	Mean	Median	95% CI
Level B harassment: 2-year	0.92	2.80	3	0-7
Level B harassment: 1-year	0.72	1.41	1	0-5
Level A harassment: 2-year	0.60	1.68	2	0-6
Level A harassment: 1-year	0.37	0.85	0	0-4
Lethal take: 2-year	0.34	0.73	0	0-4
Lethal take: 1-year	0.19	0.38	0	0-1

We have determined that AOGA’s specified activities over the remaining 2 years of the 2021-ITRs would incidentally take small numbers of SBS polar bears. For this determination, we consider whether the estimated number of marine mammals to be subjected to incidental take is small relative to the population size of the species or stock.

1. *Within the specified geographical region, the area of Industry activity is expected to be small relative to the range of polar bears.* SBS polar bears range well beyond the boundaries of the Beaufort Sea 2021-ITRs region. As such, the region represents only a subset of the potential area in which SBS polar bears may occur. Further, only seven percent of the 2021-ITRs area (518,800 ha of 7.9 million ha) is estimated to be impacted by Industry activities, even accounting for a disturbance zone surrounding industrial facility and transit routes. We anticipate roughly five percent of yearly SBS dens may be within the disturbance zone, which is a small percentage. Thus, the area of Industry activity will be relatively small compared to the range of polar bears.

We expect that only small numbers of the SBS polar bear stock would be taken by the Industry activities specified in the 2021-ITRs because SBS polar bears are widely distributed throughout their expansive range, which encompasses areas beyond the Beaufort Sea 2021-ITRs region, meaning only a small proportion of the SBS polar bear stock will occur in the areas

where Industry activities will occur, and the estimated number of polar bears that could be impacted by the specified activities is small relative to the size of the stock.

2. The estimated number of polar bears that will be harassed by Industry activity is small relative to the number of animals in their stocks. The Beaufort Sea 2021-ITRs region is completely within the range of the SBS stock of polar bears, and during some portions of the year polar bears can be frequently encountered by Industry. From 2014 through 2018, Industry made 1,166 polar bear reports comprising 1,698 bears. However, when we evaluated the effects upon the 1,698 bears observed, we found that 84 percent (1,434) did not experience take. Over those 5 years, Level B harassments of polar bears totaled 264, approximately 15.5 percent of the observed bears. No other forms of take or harassment were observed. Annually an average of 340 polar bears were observed during Industry activities. The number of observed Level B harassment events averaged 53 per year from 2014 to 2018. In the years since promulgation of the 2021-ITRs, final LOA reports have not indicated that the actual number of Level B harassment events has exceeded those estimated in the original rule. We conclude that over the remaining 2 years of the 2021-ITRs, Industry activities will result in a similarly small number of incidental harassments of polar bears.

Based on this information derived from Industry observations, along with the results of the Service's own predictive modeling analysis described above, we estimate that no more than 184 Level B harassment takes and 2 Level A harassment takes of polar bears will occur during the remaining 2 years of the 2021-ITRs, with no more than 92 Level B and 2 Level A harassment takes occurring within a single year. The estimate of Level A harassment takes was derived using the median value from the Service's modeling analysis (table 3). The median was used because the distribution of possible Level A harassments was non-normal and heavily skewed, as indicated by markedly different mean and median values. In such circumstances, , the median is an appropriate measure of the central tendency in the data and more reflective of what is likely to occur. The estimate of 2 Level A harassment takes is consistent with the number of cubs most

often present in a given den. Conservatively assuming that, in a given year, each estimated take will accrue to a different individual polar bear, we note that take of 94 animals is 10.36 percent of the best available estimate of the current stock size of 907 animals in the SBS stock (Bromaghin et al. 2015, Atwood et al. 2020) $((94 \div 907) \times 100 \approx 10.36)$, and we find that this proportion represents a “small number” of polar bears of that stock. While we do not have data to estimate the frequency of repeated Level B harassments to the same polar bear in different years, polar bears exhibiting terrestrial habitat preferences may be harassed repeatedly. Thus, it is highly probable that the number of individuals experiencing Level B harassment over the 2024–2026 period is less than 184.

Small Numbers—5-Year Period

While the final rule does not retroactively authorize any incidental take, we also address the remand directive to “evaluate the five-year impacts of Level A take” and determine whether that take “will be of ‘small numbers’ of bears.” The same general factors supporting our “small numbers” determination for the 2-year period also apply to the 5-year period, and we do not anticipate more than 92 Level B harassments or 2 Level A harassments occurring in any year over the 5-year period. Once again conservatively assuming that each estimated take over the 5-year period accrues to a different individual polar bear, we note that take is not anticipated to exceed 94 animals in any of the 5 years and take of 94 animals is 10.36 percent of the best available estimate of the current stock size of 907 animals in the SBS stock. This proportion represents a “small number” of polar bears of that stock. We conservatively base this determination on all the specified activities originally described in AOGA’s request, i.e., without discounting the estimated take associated with specified activities that were planned for the initial 3 years of the 2021-ITRs but did not actually occur.

Negligible Impact Determinations

In addressing the MMPA’s “negligible impact” requirement, we began by focusing on the impact of AOGA’s specified activities that may occur during the 2 remaining years of the 2021-ITRs (which expire August 5, 2026), i.e., the activities to which these revised regulations will apply. We then address the remand directive to consider the 5-year period.

Negligible Impact—Remaining 2-Year Period

We have determined that AOGA’s specific activities would result in a negligible impact to the SBS stock of polar bears. For our negligible impact determination, we consider the following:

1. *The number of polar bears that use the terrestrial habitat of the North Slope is small in relation to the entire SBS stock.* 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 particular time and, therefore, few polar bears are likely to be affected.

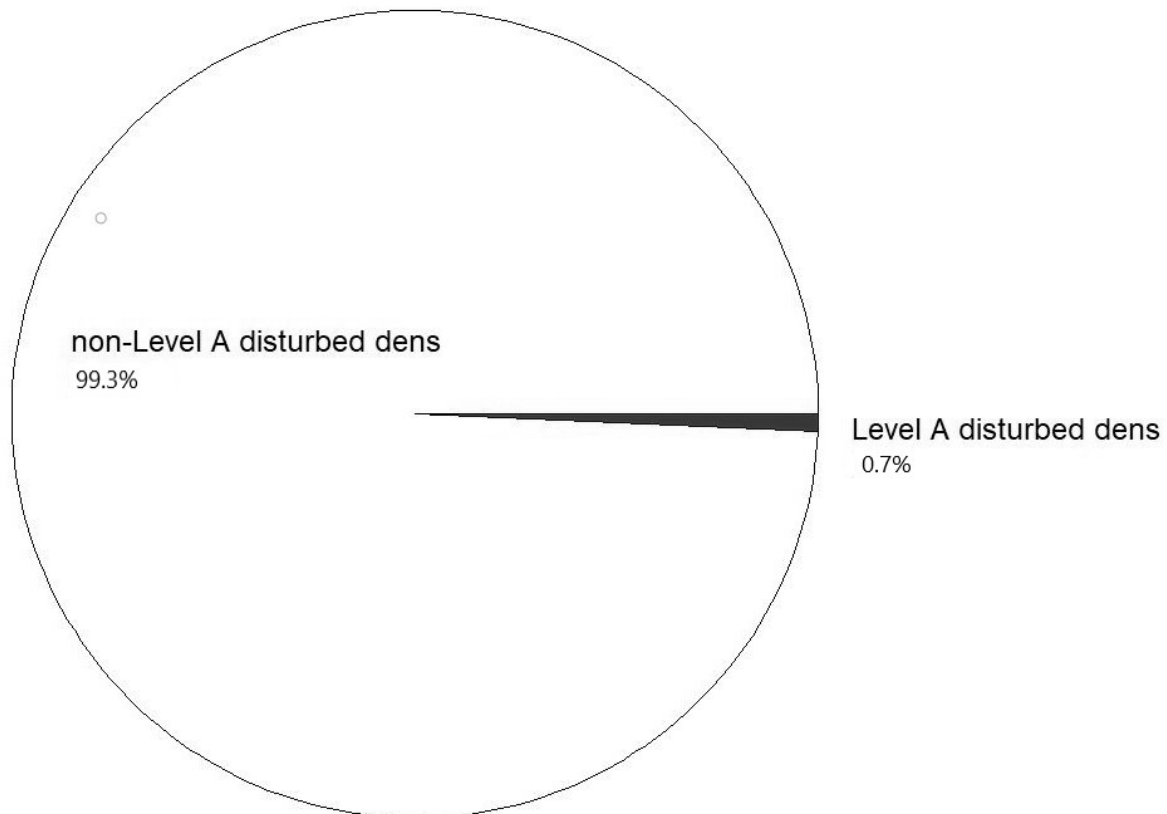
2. *Mitigation measures will reduce potential impacts.* The applicant will be required to adopt monitoring requirements and mitigation measures designed to reduce the potential impacts of their operations on polar bears. Den detection surveys for polar bears and adaptive mitigation and management responses based on real-time monitoring information (described in the proposed rule, 89 FR 88216, November 7, 2024) will be used to avoid or minimize interactions with polar bears and, therefore, limit potential disturbance of these animals.

3. *The majority of human–polar bear interactions will result in no effect or short-term, temporary behavioral changes.* When developing estimates for Level B harassment, we have determined that there is a 99 percent chance that at least 81 percent of encounters with bears on the surface in the open water season and 63 percent of encounters with bears on the surface in the ice season are expected to result in no significant change in a biologically important behavior and we do not consider those interactions to result in a take. The remainder of encounters are anticipated to result in short-term, temporary changes in behavior that are considered a Level B take of the animal.

4. *Few dens would occur in proximity to Industry activities.* Our denning simulations show that on average six dens are estimated to occur within 1 mile of the specified activities during each of the next two denning seasons (2024–2025 and 2025–2026). This number represents roughly five percent of the approximately 120 SBS polar bear dens that are established each year. The mitigation measures required by the 2021-ITRs reduce the estimated number of Level A disturbed dens to 0.7 percent of the land-based dens and 0.35 percent of all dens in the SBS stock (figure 1).

Figure 1—Proportion of SBS land-based dens that are estimated to experience Level A disturbance each year. Land-based dens represent roughly half of the SBS maternal polar bear dens established each year.

Proportion of SBS land based dens with Level A disturbance



5. *Anticipated Level A harassments will not alter the distribution of cub survival probabilities for the SBS stock.* We anticipate two Level A harassments may occur as a result of the specified activities over a period of 2 years. The updated denning analysis model allows us to examine the simulated dens to estimate the probability of litter survival in the spring following den emergence using both their undisturbed and disturbed (if applicable) emergence and departure dates. With this information, we can determine the average decrease in survival probability that can be attributed to potential Industry disturbance. Only 0.35 percent of dens within the SBS stock are anticipated to experience Level A harassment annually. For those dens that experience Level A harassment, the mean probability of litter survival before disturbance was 84.9 percent. After simulating disturbance, the mean probability of litter survival (i.e., the probability that one or more cubs will be alive in their first spring) was 69.4 percent, a decrease of 15 percent. The metric of litter survival incorporates the best available scientific information, as the original number of cubs in a litter is an unknown in underlying empirical studies. While the metric does not account for partial litter loss (because a sow observed with one cub in the spring is assumed to have had an original litter size of one cub), it also cannot account for natural litter sizes of zero (because a sow observed with no cubs in spring is assumed to have lost a litter). Because this metric represents the best available information, and because it is not biased in only one direction, we feel it is the most appropriate available metric to reflect potential impacts to cub survival. However, given the low percentage of SBS dens that are anticipated to experience Level A harassment, the 15 percent decrease does not alter or shift the overall survival probability distribution for the SBS stock (figure 2). Further, if we examine the distribution of survival rates for the entire land-based SBS stock throughout the remaining 2 years of the 2021-ITRs, counting for potential decrease in survival due to both potential Level A harassment and potential lethal take (which is not anticipated due to the low annual probability of den abandonment, nor authorized under this rule), we see no more than a minor change in distribution and the mean survival rate decreases less one percent, from 84.5 percent to 84.2

percent (figure 3). Applying the undisturbed mean survival rate to the estimated number of litters produced annually by sows in SBS land-based dens, we expect the average estimated number of litters with at least one surviving cub in the spring to be 50.7, which we round to 51 litters. This estimate decreases to 50.5 when accounting for disturbance, which we also round to 51 litters, indicating the effect of disturbance at the population level is statistically insignificant.

Figure 2—Litter survival probability distributions for the annual land-based dens of the SBS polar bear stock. The x axes of these graphs depict the simulated probability that one or more cubs from a litter will be alive in the spring, and the y axes of these graphs depict the relative occurrence of the survival probabilities in our simulations.

(Top plot: Survival probabilities simulated with no disturbance from Industry. Bottom plot: Survival probabilities simulated with estimated Level A harassment from Industry activities.)

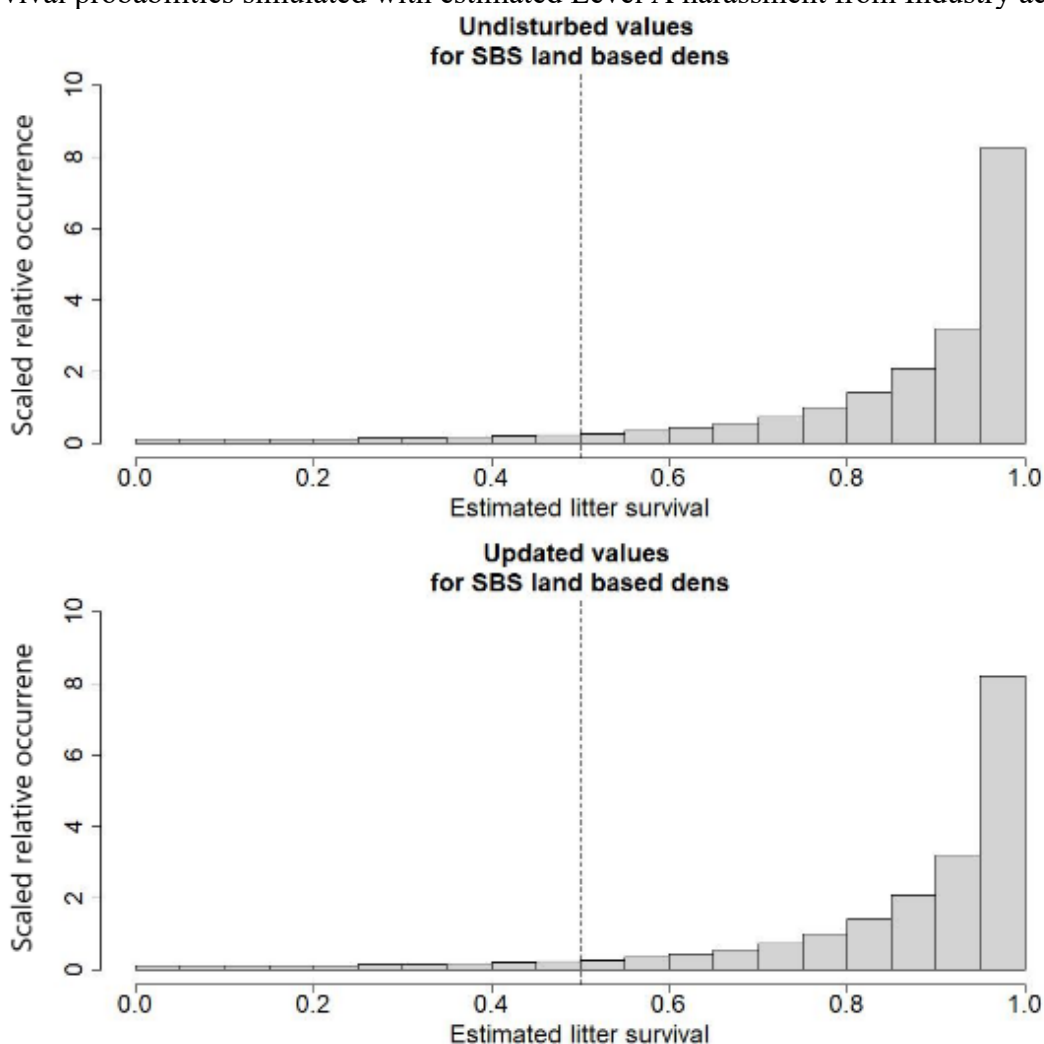
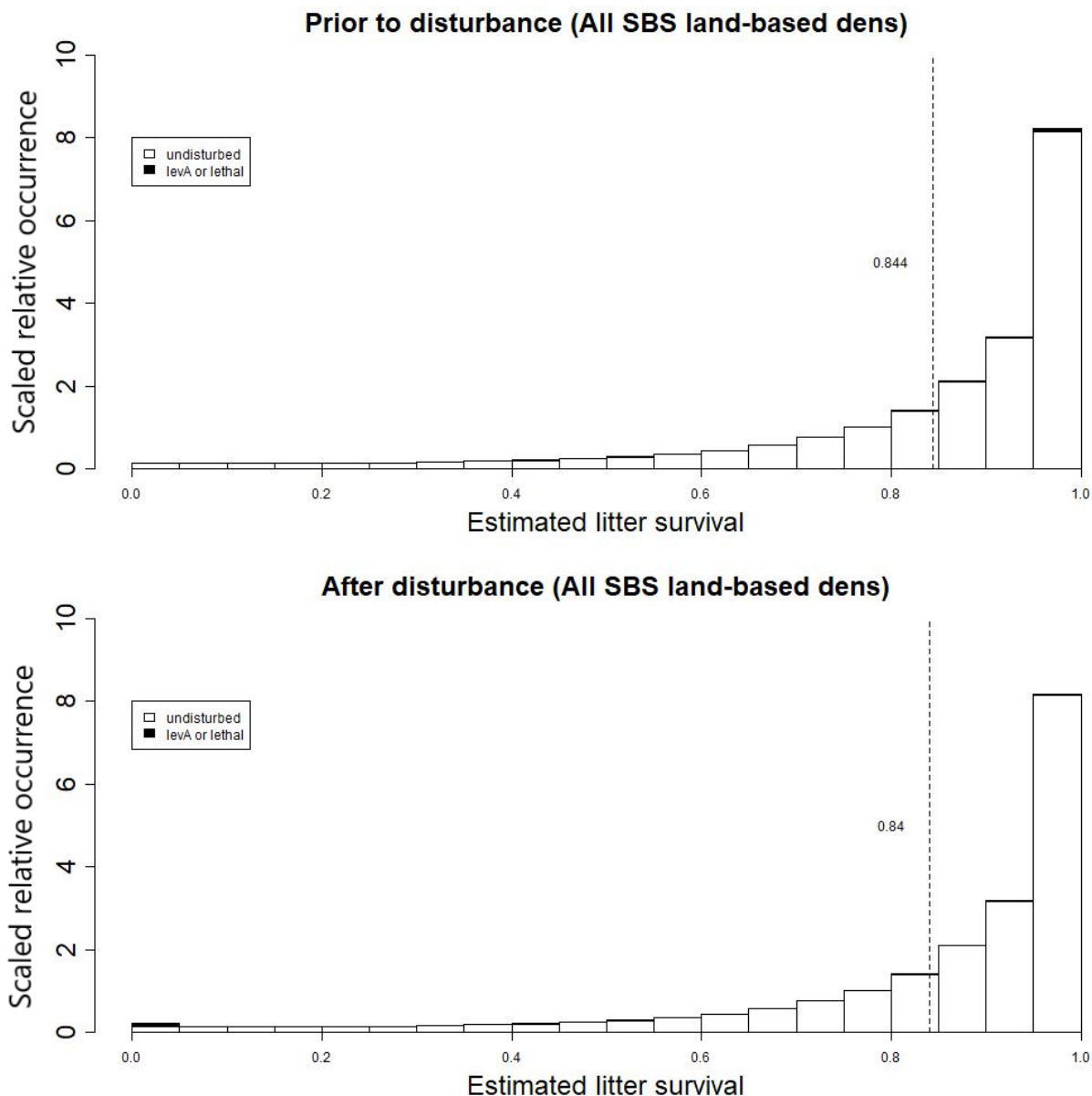


Figure 3—Litter survival probability distributions and mean survival rates for the land-based SBS polar bear stock during the total 2-year period of the 2021-ITRs. The x axes of these graphs depict the simulated probability that one or more cubs from a litter will be alive in the spring,

and the y axes of these graphs depict the relative occurrence of the survival probabilities in our simulations.

(Top plot: Survival probabilities simulated with no disturbance from Industry with mean survival rate. Bottom plot: Survival probabilities simulated after considering potential decrease in survival rate attributable to Industry activities.)



6. Lethal take via den abandonment is rare within the Southern Beaufort Sea stock.

Records of den abandonment in the oilfield are rare—we have only one account of potential den abandonment within the 13 case studies used to develop early denning period disturbance rates.

Applying the denning model, the greatest annual simulated probability of lethal take in the final

2 years of the 2021-ITRs is 0.19. The aggregated probability of lethal take over a 2-year period is 0.34. This modeling output, coupled with the lack of observed den abandonment in the 3 years that the 2021-ITRs have been in place, supports our finding that lethal take due to sow abandonment of the den and litter during the early denning period is unlikely, due to the low annual probability of den abandonment, in the remaining 2 years of the 2021-ITRs. We do not believe the estimate of lethal take is inaccurate; however, it is potentially conservative.

7. We do not anticipate that loss of a cub or litter will adversely affect annual recruitment rates at the population level. If a den is disturbed and the disturbance resulted in cub mortality, such take would not be authorized under the revised 2021-ITRs. Under these ITRs any Level A harassment would be limited to only cubs during the denning period. Impacts to denning females, the demographic group most important to annual recruitment, would be limited to take by Level B harassment. Therefore, the immediate 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. 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 produce another litter during the next denning season.

Cubs inherently cannot contribute to annual rates of recruitment until they have reached sexual maturity because in wildlife biology the concept of recruitment speaks to individuals entering the reproductive population. Further, while adult male bears would contribute to the overall number of individuals in the population, they do not contribute significantly to annual rates of recruitment. While a very small decrease in the number of males in a breeding population may be a concern if the stock was at risk of inbreeding depression or Allee effects, this is not the case in the SBS stock. Female cubs have the opportunity to reach sexual maturity and contribute to annual recruitment; however, natural rates of survival fluctuate in the SBS stock. As such, death of less than one female cub per year is within the natural variability found

within the SBS stock and cannot be reasonably expected to cause an adverse impact on annual rates of recruitment.

Based on the low percentage of SBS stock polar bears potentially being removed from the stock if den disturbance were to result in the mortality of the cubs, and the expectation that the number of potentially available reproductive females that would contribute to recruitment would be unaffected by den disturbance, the Service does not anticipate that the loss of a cub or litter would adversely affect annual recruitment rates at the population level for the SBS stock of polar bears.

We reviewed the effects of Industry activities on polar bears, including impacts from surface interactions, aircraft overflights, marine vessel traffic, and den disturbance. Based on our review of these potential impacts, past monitoring reports, and the biology and natural history of polar bears, we conclude that any incidental take reasonably likely to occur as a result of specified activities would be limited to short-term behavioral disturbances and temporary reductions in fitness that would not affect the rates of recruitment or survival for the SBS stock of polar bears.

We have analyzed the potential impact of the proposed taking in light of other factors affecting SBS polar bears, including subsistence harvest and other human-caused removals as well as climate change. Climate change is a global phenomenon and was considered as the overall driver of effects that could alter polar bear habitat and behavior. The Service 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. While climate change and other ongoing factors pose significant challenges to SBS polar bears, we do not expect them to influence the degree of impacts (i.e., short-term behavioral responses and temporary reductions in fitness) resulting from the specified activities or incidental harassment to be authorized under revised incidental take regulations.

Our analysis indicates that the impacts of these specified activities over the remaining 2 years addressed by the 2021-ITRs cannot be reasonably expected to, and are not reasonably likely to, adversely affect the SBS stock of polar bears through effects on annual rates of recruitment or survival. We therefore determine that the total of the taking estimated above and to be authorized via the revised 2021-ITRs will have no more than a negligible impact on the SBS stock of polar bears.

Negligible Impact Determination—5-Year Period

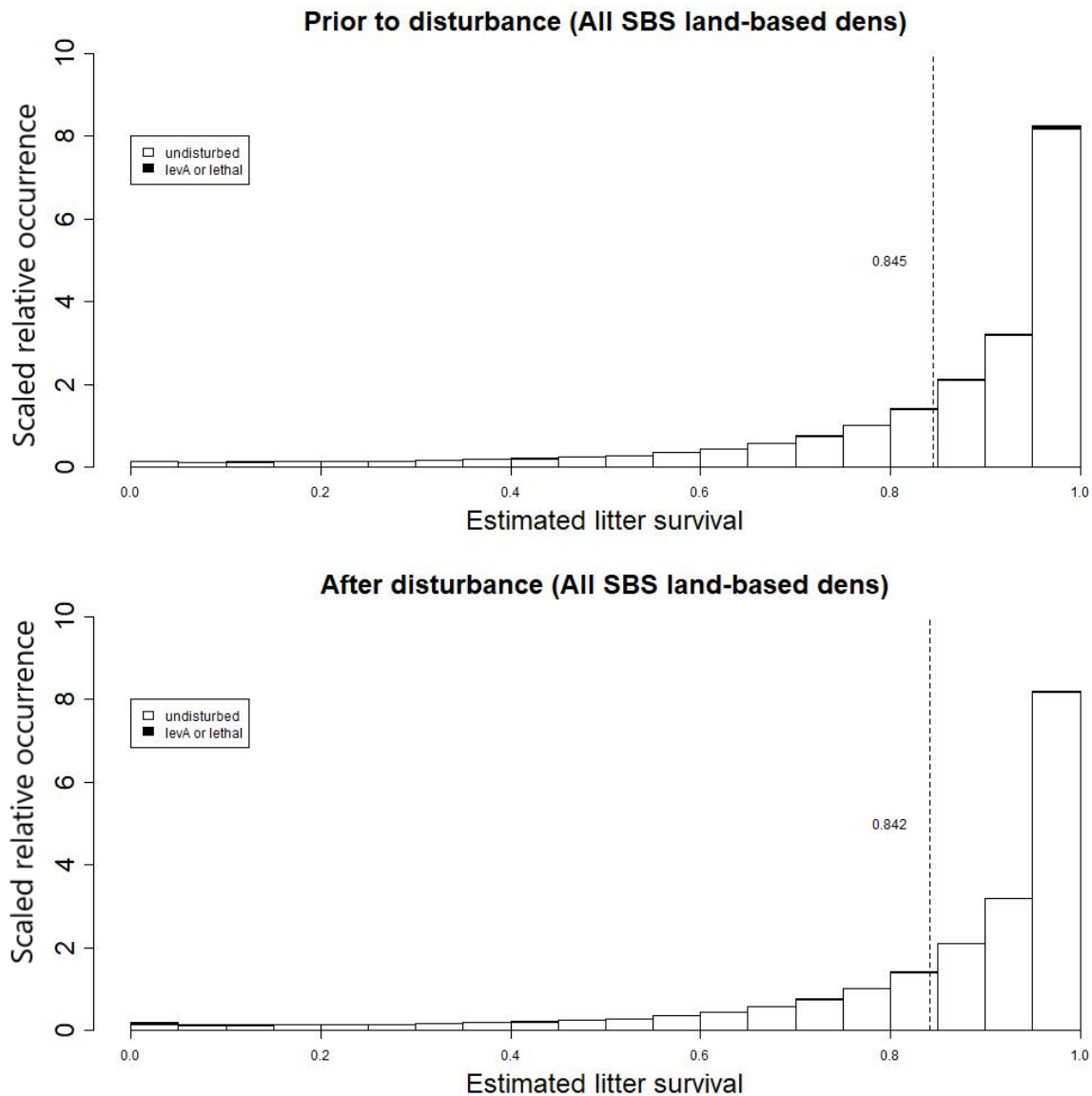
While the Service does not propose to retroactively authorize any incidental take, we also address the remand directive to “evaluate whether the five-year impacts of Level A take is ‘negligible.’” Given the similar nature, degree, and locations of the specified activities across the 5-year period, we find that the same seven general factors described above to support our “negligible impact” determination for the 2-year period also apply to the 5-year period. While the number of estimated takes over the 5-year period is greater than over the 2-year period analyzed above, they would occur over a longer period of time, and the rate of estimated impacts to the SBS stock over the course of the 5-year period is roughly the same as estimated for the 2-year period. Closer analysis of our 5-year estimates further indicates that impacts remain negligible when the 5-year period is considered.

The median number of Level A harassments over the 5-year period is three. As we stated above, there have been no records of den abandonment or sow disturbance response in the early denning period in the 3 years that the 2021-ITRs have been in effect. However, the aggregated simulated probability of sow abandonment of a den and litter during the early denning period across the entire 5-year period of the 2021-ITRs is 0.55, indicating den abandonment may occur. The median number of lethal takes over the entire 5-year period is one. To account for all estimated impacts of the specified activities across the entirety of the 2021-ITRs period, our negligible impact determination considers the potential impacts of 443 Level B harassments, three Level A harassments, and one lethal take occurring over a 5-year period.

If we examine the distribution of survival rates for the entire land-based SBS stock as we did in figure 4, but for the entire 5-year ITR period, we similarly see no more than a negligible change in distribution and the mean survival rate decreases less than one percent, from 84.4 percent to 84.0 percent (figure 4). This negligible change does not support a reasonable expectation of diminished recruitment or survival rates at the stock level.

Figure 4—Litter survival probability distributions and mean survival rates for the land-based SBS polar bear stock during the total 5-year period of the 2021-ITRs. The x axes of these graphs depict the simulated probability that one or more cubs from a litter will be alive in the spring, and the y axes of these graphs depict the relative occurrence of the survival probabilities in our simulations.

(Top plot: Survival probabilities simulated with no disturbance from Industry with mean survival rate. Bottom plot: Survival probabilities simulated after considering potential decrease in survival rate attributable to Industry activities.)



Our analysis indicates that the impacts of these specified activities over the 5-year period addressed by the 2021-ITRs cannot be reasonably expected to, and are not reasonably likely to, adversely affect the SBS stock of polar bears through effects on annual rates of recruitment or survival. We therefore determine that the total taking over the 5-year period will have no more than a negligible impact on the SBS stock of polar bears.

We conservatively base this determination on all the specified activities originally described in AOGA’s request, i.e., without discounting the estimated impacts of specified activities that were planned for the initial 3 years of the 2021-ITRs but did not actually occur.

Impacts on Subsistence Uses

We have not identified any means through which AOGA's specified activity is likely to reduce the availability of SBS polar bears to a level insufficient for harvest to meet subsistence needs. Thus, we determine that the total taking will not have an unmitigable adverse impact on the availability of SBS polar bears or Pacific walruses for taking for subsistence uses.

Least Practicable Adverse Impact

We have not identified any additional (i.e., not already incorporated into the 2021-ITRs) mitigation measures that are effective in reducing the impact of Industry activities but are not so restrictive as to make Industry activities unduly burdensome or impossible to undertake and complete. We received a public comment suggesting several mitigation measures that were commonly used to decrease the level of sound in the water during underwater construction activities (e.g., bubble curtains).

The Service considered but declined to adopt proposed requirements for pile-driving sound mitigation in the original 2021-ITRs rulemaking, and our prior rationale remains applicable now. While bubble curtains can be effective in certain circumstances, they have limited applicability in arctic environments, and cannot be deemed practicable for all specified activities. The 2021-ITRs allow for LOAs to incorporate activity- and location-specific terms and conditions. As such, the Service can evaluate the practicability of these and other measures when contemplating specific LOA applications that contain more detailed project descriptions and site-specific environmental information. Thus, we determine that the mitigation measures required by the 2021-ITRs will ensure the least practicable adverse impacts on SBS polar bears and Pacific walruses.

Monitoring and Reporting

We have not identified any additional (i.e., not already incorporated into the 2021-ITRs) monitoring or reporting requirements to better assess the effects of industrial activities, ensure that the number of takes and the effects of taking are consistent with that anticipated, or detect any unanticipated effects on SBS polar bears or Pacific walruses.

Administrative Updates

In addition to amendments to the regulations in 50 CFR part 18 to accomplish the regulatory revisions described above, we also make regulatory revisions to update our regulations that carry out the Paperwork Reduction Act (PRA; 44 U.S.C. 3501 et seq.). The revisions to §§ 18.4, 18.129, and 18.152 that are set forth in the rule portion of this document are administrative and nonsubstantive. These changes serve only to update and streamline the regulatory text that ensures our regulations in 50 CFR part 18 are in compliance with the PRA.

Summary of and Response to Comments and Recommendations

Response to Comments

The Service published a proposed rule in the *Federal Register* (FR) on November 7, 2024, with a 30-day period seeking comments on both the proposed rule and the draft EA (89 FR 88216). The comment period closed on December 9, 2024. The Service received 85 comments, and an additional mass mailing containing 607 signatures. Comments were received from the Marine Mammal Commission, the State of Alaska, the North Slope Borough, various trade and environmental organizations, and interested members of the public. We reviewed all comments, which are part of the rulemaking docket, for substantive issues, new information, and recommendations regarding the proposed rule and draft EA. The comments are aggregated by subject matter, summarized and addressed below, and changes have been incorporated into the final rule and final EA as appropriate. A summary of the changes to this final rule from the

proposed rule is found above in the preamble under Summary of Changes From the Proposed Rule.

Comment: Numerous commenters opposed the promulgation of the ITRs based on a general opposition to Industry activity, while several commenters supported the promulgation of the ITRs based on a general support for Industry activity.

Response: Language within section 101(a)(5)(A) of the MMPA requires the Service to allow the incidental taking of small numbers of marine mammals provided the Service has made certain determinations regarding the specified activity. Once we make the required determinations, we must promulgate ITRs.

Comment: Several commenters provided copies of their original comments on the 2021-ITRs.

Response: All comments submitted in response to the June 1, 2021, proposed rule (86 FR 29364) and the November 7, 2024, proposed rule (89 FR 88216) have been fully considered in this rulemaking action. Our responses to the comments are set forth in the final rule of August 5, 2021 (86 FR 42982), and this document.

Comment: One commenter stated that the Service's "small numbers" definition is unjustified and the Service's discussion of this MMPA requirement is insufficient.

Response: As we stated in the proposed rule, "small numbers" is defined in § 18.27 of the MMPA. However, we do not rely on that definition as it conflates "small numbers" with "negligible impact." Instead, for our small numbers determination, we estimated the likely number of takes of polar bears and determined that that number was small relative to the size of the SBS stock.

Comment: One commenter suggested that the Service relied solely upon the relatively small size of the specified area of the ITRs relative to the range of SBS polar bears when making its small numbers determination.

Response: The Service's small numbers determination acknowledges but is not solely based on the fact that the SBS stock inhabits a wide range and the specified activities cover only a small portion of the population's range. Our analytical framework takes into account the non-uniform distribution of non-denning and denning polar bears. The Service's new analysis provided an estimate of the number of dens that are estimated to be exposed to human activity, as well as the number of dens that are estimated to be disturbed by human activity. We have worked closely with the applicants to determine a spatially explicit project footprint, and as we stated in the proposed rule, it is anticipated that roughly five percent of yearly SBS dens may be within the impact area, which is indeed a small percentage.

Comment: One commenter stated that the Service did not adequately show that there were no additional practicable mitigation measures that could reduce adverse impacts to SBS polar bears and Pacific walruses.

Response: The Service presented a thorough "least practicable adverse impact" (LPAI) determination and integrated a comprehensive suite of required mitigation measures into the original 2021-ITRs. These measures were designed to ensure the least practicable adverse impact to polar bears and Pacific walruses during the specified activities and include monitoring measures, offset requirements in the event that dens are identified, and temporal restrictions on terrestrial seismic surveys. As part of this subsequent rulemaking, the Service attempted to identify additional measures that could be imposed to ensure LPAI going forward. The Service then reviewed the proposed measures suggested by public commenters. This process did not result in the Service identifying any additional, effective, practicable measures above what is already required.

Comment: One commenter stated that the Service failed to incorporate mitigation measures in the proposed rule to reduce disturbance of polar bears arising from sound-producing offshore activities such as pile driving.

Response: We agree that these measures can be effective; however, they are typically location and activity specific, and not applicable for all construction activities. Bubble curtains specifically have limited applicability in arctic environments. The original 2021-ITRs include a provision to add additional mitigation measures as needed in individual LOAs. As such, the Service can evaluate the need for these mitigation measures when contemplating LOA applications that contain more detailed project descriptions and require them as needed. We also note that in-water activities would not coincide in space and time with denning and thus further mitigation associated with these activities would not be effective in reducing the potential for Level A harassment or lethal take.

Comment: One commenter stated that the mitigation measures presented in the proposed rule were insufficient and vague and rely too heavily on the applicant's compliance.

Response: We disagree. The mitigation measures established in the 2021-ITRs are clear and actionable. They have been implemented successfully by LOA holders since the promulgation of the 2021-ITRs.

Comment: One commenter stated they did not feel it was appropriate to quantitatively account for identification of dens with the naked eye.

Response: As we stated in the cited section of the proposed rule, the potential protective benefit of certain mitigation measures, such as den identification by trained personnel, are not reflected in our modelling outputs because their mitigative benefit is not quantifiable.

Comment: One commenter expressed a desire for a more comprehensive monitoring program, including the use of audio recordings. They also recommended annual or semiannual reassessment, strict enforcement, and active collaboration with Alaska Native communities to ensure compliance with environmental protection standards.

Response: Letters of authorization (LOAs) issued under this ITR are limited to 1-year periods and include robust monitoring and reporting requirements. The Service systematically reviews all reports and associated data. The Service also has authority to impose additional

requirements in LOAs, and to suspend or revoke existing LOAs if warranted. The Service does not find that any additional requirements are needed at this time. The Service also investigates suspected instances of unauthorized take; however, this rulemaking is not an appropriate vehicle to predetermine enforcement approaches or outcomes.

Regarding the use of "audio recordings" for monitoring, we are unaware of any audio monitoring equipment that would be practicable in the terrestrial arctic environment where the specified activities occur, especially since industrial and/or ambient noise would limit the efficacy of this monitoring technique.

Comment: One commenter recommended that instead of expanding regulations to allow for Level A harassment, the Service should prioritize the conservation of polar bears, implement stricter mitigation measures, and enhance monitoring.

Response: The Service presented a thorough description of the monitoring and mitigation measures required in the 2021-ITRs. These measures were designed to ensure the least practicable adverse impact to polar bears during the specified activities, and include monitoring measures, offset requirements in the event that dens are identified, and temporal restrictions on terrestrial seismic surveys. The Service did not identify additional practicable measures to mitigate potential impacts to polar bears that were not already incorporated in the original 2021-ITRs. The Service does not have approval authority over these activities. The issuance of incidental take authorizations such as those presented in this rule is often the sole mechanism through which the Service (or the Federal Government more generally) can require operators to implement mitigation measures, monitor impacts, and report data to the Service. Given the value of ITR-required mitigation measures in reducing impacts to polar bears, and that these ITRs are only finalized because the Service first made the required findings required for their issuance as noted, and the value of data derived from monitoring and reporting requirements in terms of increasing scientific understanding of the SBS stock, this rule furthers, rather than diminishes, the Service's conservation objectives.

Comment: Some commenters stated that the Service did not adequately consider certain mitigation measures (e.g., personnel training and avoidance of observed animals) that operators use to reduce or prevent incidental take of polar bears and that this lack results in the Service overestimating incidental take.

Response: The Service considered all mitigation measures incorporated into AOGA's request when analyzing the effects of the specified activities. The Service's analysis comprises qualitative and quantitative elements. As we explained in the original rulemaking for the 2021-ITRs, it is exceptionally difficult to quantify the effectiveness or accuracy rate of some of the mitigation measures incorporated into AOGA's request. Thus, the modeling component of the Service's larger analysis cannot reliably account for any reduction in potential impacts attributable to such mitigation measures. This does not mean the Service failed to consider such mitigation measures qualitatively.

Comment: One commenter stated that the denning analysis ignores factors that result in less frequent and less significant polar bear interactions, such as personnel training, security patrols, attractants management, and adaptive measures if and when a den is discovered.

Response: As we have stated in previous authorizations, it is exceptionally difficult to quantify the effectiveness or accuracy rate of the mitigation measures presented in this comment. In order to incorporate potential identification of polar bear dens into our take estimates, we would need empirical data that includes search effort and accuracy, with a sample size large enough to capture natural variation in the ability of Industry workers to locate dens. Unopened polar bear dens are extremely difficult to differentiate from neighboring habitat and often have no external identifying features until the polar bear has begun to exit her den, at which point the vast majority of potential disturbance has occurred. It is also incorrect that Industry does not get any "credit" for their "adaptive measures employed if and when dens are discovered." In fact, this credit is inherently built into the model because once a den is discovered, either through forward-looking infrared (FLIR) technology or through disturbance, we assume Industry will

comply with applicable mitigation measures and prevent all future disturbance to the den and thus do not quantify or estimate subsequent takes.

Comment: One commenter indicated that the Service should not authorize purposeful harm of polar bears.

Response: The take regulations provide for authorization of incidental take of polar bears, not intentional take as the commenter is suggesting.

Comment: Several commenters stated that the Service's negligible impact finding must be made using take estimates for the entirety of the 2021-ITRs (5 years) instead of the Service's focus on the remaining 2 years in the regulations. Commenters have stated that the Service has segmented the negligible impact analysis and therefore violated the MMPA and APA.

Response: The Service's negligible impact determination accounts for the total take, both over the 2-year period to be covered by the revised rule, and over the 5-year period as directed by the remand. Revisions to the negligible impact determination have been made to clarify the Service's rationale and thus respond to various issues raised in public comments.

We disagree that our statement regarding the potential population-level effects of the loss of a cub or litter was arbitrary and capricious. We have clearly outlined the reasoning for this statement, which is based on both quantitative and qualitative analysis and an in-depth discussion on wildlife management theory and polar bear population biology.

Comment: Several commenters stated the Service's negligible impact finding must be made using take estimates for the entirety of the 2021-ITRs (5 years). Citing the Service's estimates of five Level A harassments over the 5-year 2021–2026 period, commenters characterized the Service's proposal to authorize only two Level A harassments as confusing.

Response: Commenters are correct that the Service did preliminarily estimate five Level A harassment events over the course of the 5-year (2021–2026) ITR period in the proposed rule. Our updated estimate is three Level A harassment events over the course of the 5-year (2021–2026) ITR period. The Service considers the impact of these takes, along with the impacts of

estimated lethal take over that timeframe, when providing its negligible impact determination. Additional language has been added to the final rule to further explain the Service's rationale on this point. Meanwhile, the Service proposed to authorize only two Level A harassments because the Service does not retroactively authorize take and the Service estimates that only two Level A harassment will occur during the 2-year time period to which this final rule applies. For the sake of thoroughness, and to ensure compliance with MMPA standards as well as remand directions, the Service considers the negligible impact standard with respect to two distinct timeframes, i.e., the timeframe to which this rule revision applies as well as the larger 5-year period.

Comment: A commenter stated that the Service appears to overlook that recruitment is a metric that focuses on cub survival; therefore, it is unreasonable to assume that the death of up to three cubs would not affect recruitment in the year those deaths occur.

Response: Recruitment refers to the number of reproductive age individuals added to a population. For those cubs to be recruited to the population, they would need to survive an additional 3–4 years. The ramifications of losing cubs associated with one den in any given year are addressed in our negligible impact determination. We further note that in addition to recruitment rates, the Service also considered survival rates when it conducted its negligible impact analysis.

Comment: One commenter that characterized the likelihood of lethal take as high asserted that the MMPA's moratorium on taking bars the Service from authorizing take where unauthorized take is also caused by the activities.

Response: The Service does not authorize any lethal take of polar bears and does not anticipate any lethal take occurring while this revised rule is in effect.

Comment: One commenter stated that the Service should reconsider whether to authorize a small number of lethal takes (e.g., one) in the final rule. Additionally, the commenter believes the Service should indicate what response it would take were a bear to be killed incidental to the

covered activities. Specifically, whether the Service would suspend activities until additional authorization is obtained.

Response: The Service does not authorize incidental take that it does not anticipate, and the Service does not anticipate any lethal take over the effective period of the revised rule.

As noted in the pre-ambulatory text when we finalized regulations for these ITRs (86 FR 42982 at 43042, August 5, 2021), we have incorporated rule reporting requirements for all polar bear and Pacific walrus interactions. Ceasing all activities in an active oil field may not be practicable or safe in certain circumstances, and such a requirement will not be preemptively mandated.

Comment: Several commenters provided general comments stating that authorizing take of polar bears via Level A harassment contravenes the 1973 Agreement on the Conservation of Polar Bears and is at odds with the MMPA and ESA. Some of these comments referred to the status of the SBS polar bear population, which commenters said was declining, the overall impacts of the oil and gas industry in the region, and the effects of climate change in the Arctic.

Response: We disagree. The Service is not authorizing anything that qualifies as a “taking” as that term is defined by the 1973 Agreement on the Conservation of Polar Bears. The Service also disagrees with the notion that lifting the MMPA’s take prohibition with respect to a small number of incidental takes that will result in a negligible impact, while also imposing a host of mitigation, monitoring, and reporting requirements, is at odds with the conservation goals of the MMPA and ESA.

Comment: One commenter suggests that the Service’s take estimates consider only effects to adult denning females, and not her cubs.

Response: The commenter is incorrect that we only consider the taking of adult female bears. Our take estimates account for effects to denning adult females as well as her cubs.

Comment: One commenter stated the Service's simulation of dens across the landscape is not an accurate representation because the simulation relies on only collared bears and does not accurately depict the number of dens on Howe Island or in the NE Colville River Delta.

Response: While it is true that the Service uses data only from collared bears to establish the underlying denning utilization distribution, dens with non-collared bears cannot be easily incorporated into the utilization distribution. We explicitly state that we rely only on collared bears because they represent a random sample of polar bear den distribution. Relying on Industry reports or other sources would have an explicit search bias in that those data are more likely to be from areas near human activity than away from it. Without information on how non-collared dens were discovered and the area that was searched, including them as being a representative sample of denning would be extremely difficult. Because collared bears can move wherever they want on the landscape and den where they see fit, they are a representative sample of where bears choose to den based on what is available to them.

We also add that while it is true that dens on Howe Island are not in the sample of dens used for the utilization distribution, or that more dens seem to occur in the Colville delta than are expected, this is to be expected when working with a random sample of dens. It is the same concept of flipping a coin. While it is reasonable to expect tails 50 percent of the time, you could end up getting tails 70 percent of the time and that would still be a representative sample. But with increased sampling (i.e., sample sizes), we expect the realized sample of dens will lead to more accurate utilization distributions. Lastly, the commenter suggests that the NE Colville River Delta is indicated as having a high density of dens even though there is minimal denning habitat there. Again, we specifically discuss how we use the utilization distribution to simulate dens across the landscape, and it is only one component of that process. In short, we use the utilization distribution to inform the general density across the landscape but then restrict denning to occur in identified denning habitat. So, if there really is minimal denning habitat in the Colville River Delta, it is reflected by this second step in our analysis.

Comment: One commenter stated that the Service's denning model underestimates the potential for zero cub dens, including those that are shelter dens. The commenter further states that the Service's determination of cub mortality in its analysis is reliant upon a single case study, and the Service's classification of that case study contradicts best available data.

Response: This comment indicates a misunderstanding in our analytical approach. We have taken into account the possibility of natural litter sizes of 0 and shelter dens in our analysis based on the current best available data from published peer-reviewed studies. First, litter size is not assumed. We have obtained litter size data for polar bears denning on land in the SBS subpopulation using a variety of published sources. We then draw, at random, a litter size to associate with a simulated den based on the distribution of the empirical litter size data. We then go further and estimate the probability of a female emerging with a litter size of 0 for natural reasons (e.g., failed pregnancy) and have a litter size of 0 as a potential outcome. Secondly, the den simulation does account for shelter denning. The data used to inform the den phenology parameters for den simulation removed bears that were expected to have shelter dens based on the short duration of time in the den (Rode et al. 2018, Andersen et al. 2024). Additionally, the number of dens simulated across the landscape is based on the estimated number of maternal dens, which was derived from demographic data and data from collared bears (Patil et al. 2022) and are thus not confounded with shelter dens. Finally, as is indicated in our updated supplemental material, one case study informs the probability of den abandonment and subsequent cub mortality. The commenter is correct that there are few case studies that show potential evidence of cub mortality, but as we stated in the proposed rule, it is a rare occurrence, which is reflected in our disturbance probabilities. We have already provided justification for our decision related to this den in the case studies table.

Comment: One commenter suggested that the Service inappropriately cited adult females' capacity to produce cubs in the future as the justification for its negligible impact determination.

Response: The Service's negligible impact determination acknowledges, but is not solely based on, the fact that a sow that loses her cubs would be available to breed the following year. We do not anticipate lethal take via cub abandonment and did not propose to authorize lethal take in the ITRs. However, in discussing the potential impacts if a den abandonment did occur, we look to the fundamental wildlife management theory of compensatory mortality, wherein human-caused removals are compensated for by a decrease in other density-dependent sources of mortality. For example, if 50 polar bears died annually in the SBS stock due to natural conditions such as lack of prey availability, and in one year an additional 2 polar bears died as a result of human-caused removal, compensatory mortality theory indicates that the number of deaths that year would not be 52 but would remain at 50. This is because the loss of the 2 polar bears via human-caused removal would alleviate constraints on the population imposed by prey availability and other factors, effectively making "space" for two additional bears to persist and thus compensate for the 2 human-caused removals. The latest abundance estimate indicates that the SBS population has likely stabilized since declines that were observed in the early 2000s (Bromaghin et al. 2021). The population is, therefore, likely experiencing the sort of density-dependent regulation to which compensatory mortality theory applies.

The commenter notes that "the fact that cubs are not reproductively active is not a justification for considering their increased take to be negligible"; however, cubs need to survive multiple years until they are recruited into the population as reproductive individuals. Regehr et al. (2017) showed that a polar bear population declining due to sea ice loss can still have a level of harvest that would not hinder the persistence of the population, supporting the application of the compensatory mortality theory to the SBS stock. Again, the ITRs do not authorize lethal take; however, in the instance of an authorized Level A harassment leading to a decrease in an individual's survival and then the animal later died before reaching sexual maturity, it is important to note that there is some probability the individual would not have reached sexual maturity regardless of the harassment.

Comment: One commenter stated that Andersen et al. (2024), a publication cited by the Service, suggests that a “linkage” (i.e., biological mechanism) between shortened post-emergence periods and cub survival has been identified, with minimal discussion of a plausible biological mechanism other than cub acclimation. The commenter also notes that the denning phenology of Chukchi Sea polar bears was consistent with females in better body-condition (Rode et al. 2018). The commenter believes “integrating this poorly understood relationship into a predictive model introduces a mechanism that has not been tested and is not supported by research.”

Response: We agree that Andersen et al. (2024) supports a strong relationship between the post-emergence period and cub survival. We disagree, however, with the assertion that this is simply a hypothesis without any supporting evidence. In fact, the study does provide data, which is the basis for that relationship to have been established in the study. We do not disagree that maternal condition could play a role in how easy it is to disturb bears or have an influence on departure dates. However, importantly, all females with newborn cubs should be highly motivated to get back onto the sea ice to begin hunting again after multiple months of fasting and the large energetic expenditure of nursing. Thus, the fact that bears will spend up to 3 weeks at the den site after emergence clearly indicates that time at the den site confers some advantage to cubs, likely in the form of cub development to get ready to travel the extended distance out to the sea ice.

While it is true that some females may leave earlier than others because of poor body condition, this again would lead to less time for cubs to get acclimated/ready for the outside world. A female that departs early in low body condition would soon access prey, which would compensate for her lower body condition. This means that it is less likely that a sow’s persistent low body condition contributed to any decrease in survival probability for her cubs than the fact that she potentially forced the cubs to leave the den site before they were ready. Ultimately, if through disturbance bears depart the den site early, there is the potential (based on data) for cubs

to suffer lowered survival. This outcome indicates Level A harassment. Lastly, while we agree with the commenter that the data from Chukchi Sea bears may partially reflect differences in body condition, we also want to highlight another key difference: Bears in the Chukchi Sea tend to den on Wrangel Island where there is very minimal human presence and thus potential for disturbance. This is not the case for bears in the Southern Beaufort Sea that have a portion of their land-based denning habitat overlap with oil and gas activity and infrastructure.

Comment: One commenter stated that the Service incorrectly interpreted studies on polar bear den phenology and biology, the effects of disturbance upon polar bears in dens, the behavioral responses of denning polar bears to disturbance (e.g., displacement from denning habitat, early den departure), polar bears' resilience to or tolerance of disturbance, and the effects of disturbance and early departure from dens upon reproductive success and cub survival.

Response: Except as noted in our separate explanations of additional updates to our denning model assumptions, we disagree with the commenter. At least one member of our analytical team is a coauthor, or first author, on each of the referenced studies, so they are very well qualified to draw conclusions from the study. While the commenter is accurate that the relationship between den emergence date and short-term litter survival was not a primary objective of the Rode et al. (2018) study, the study still did establish this relationship, which was also verified by the Andersen et al. (2024) study. The study did not need to formally establish the relationship between an early emergence caused by disturbance to be used to inform the potential outcome of a disturbance event. As the commenter stated, they agree that premature den emergence can have an effect on cub survival. Rode et al. (2018) and Andersen et al. (2024) both provide a relationship between emergence/departure dates and ultimate cub litter survival.

While we agree that a controlled scientific study would be an ideal way to verify the results of the above cited studies, such a study could never be conducted because it would have the potential to lead to a significant amount of lethal take and Level A harassment of cubs. It would require us to purposefully disturb denning bears at different times during the spring and

then monitor the cubs into the spring to observe their ultimate fate. In addition to being a study for which we would never be able to get approval because of the level of take expected, it would also require adult female bears to be fitted with GPS collars and then re-observed later in the spring. Given stakeholders' concerns with collaring bears and the number of bears that would be required to be collared to gain a sufficient sample size of disturbed and control dens, it is likely never to be feasible or would take >10 years of constant research effort. We used the best available science from the peer-reviewed literature to inform our analytical approach based on studies that have relevant information to inform the impacts of early emergence on cub survival.

Comment: One commenter stated that while Linnell et al. (2000), a publication cited by the Service, identifies a 1-km buffer, it is a review of other relevant literature that show variable responses of polar bears to human activity.

Response: As the commenter notes, the Linnell et al. (2000) paper is a review of the literature from a quarter of a century ago. We have cited it to reflect that others have talked about the potential for disturbance to denning bears and why it is important to consider factors that could disturb denning bears and how to mitigate those disturbances. As we have shown through our thorough description of analytical methods, nothing from Linnell et al. (2000) was used in our model development. We detail our approach and cite the relevant studies/literature from where we draw our data parameters.

Comment: Several commenters cited work by Larson et al. (2020), who concluded that their data showed denning polar bears on Alaska's North Slope are overtly unreactive. The commenter stated that this publication supported the finding that North Slope oil and gas operations have no more than a negligible impact on polar bears and the SBS population.

Response: Several aspects of the Larson study render its results not suitable for use in our analysis. We detail these below:

(1) There is a lack of clarity on data source, types, and limitations for dens, which are currently described as found through a combination of VHF (very high frequency) technology,

GPS (global positioning system) technology, and dens located via aerial- and ground-based FLIR, direct observation (in person and video), and dogs. Authors acknowledge how responses can change depending on the denning stage but do not provide sufficient data for readers to determine when human activities occurred.

(2) The data were collected opportunistically, and no attempt was made to account for sampling effort during different periods of the denning season to account for unequal sampling effort, or differences in human activity between periods. For example, aerial surveys were most likely to occur early during the denning period, likely when researchers were actively searching for dens. Later during denning, however, aerial surveys are likely less frequent and therefore responses from this form of disturbance are lacking when the consequences for cubs could be greater. Further, observations at den sites from cameras or camps mostly occur late in the denning period (i.e., just prior to emergence); therefore, responses to disturbance earlier in the denning period are lacking or at least underrepresented in the data.

(3) The locations of dens in this analysis were likely known prior to disturbance-causing activities were observed. Given that, most dens should have had 1-mile no-activity buffers around them, which likely reduced the frequency and intensity of activity, thus leading to results that are biased low for documenting disturbance to bears.

(4) The analysis is restricted to only overt behavioral responses, but responses can be unobservable and potentially affect cub survival. Thus, ‘no effect’ results are likely overestimated, and actual disturbances related to activity are likely underestimated (i.e., biased low). For example, Rode et al. (2018) showed that earlier emergence dates can lead to lower litter survival after a short period post emergence. These types of responses are ignored in the referenced study.

(5) There is a disconnect between physiological stress responses without associated behavioral response and observed flight response (Ditmer et al. 2015), which limits confidence

in “no effect” statements. This situation was recognized as an issue in Methods; however, this disconnect was not reflected in inferential statements or conclusions.

(6) There is no explicit evaluation of a 1.6-km buffer as a mitigation measure to minimize den abandonment. The study does not provide the actual distances from disturbance to dens for those dens that were greater than 300 m away. Further, they do not provide sample sizes for these cases. Therefore, statements pertaining to this buffer’s effectiveness (or ineffectiveness) are uninformed by data or their approach.

(7) The first sentence of the discussion states that bears are largely overtly unreactive to human activity, but the results of the study show significant proportions of bears responding in manners indicative of harassment under the MMPA. For example, a high proportion (37 percent, p. 199) of dens displayed disturbance at levels considered by the authors to be “harassment” under the MMPA. Even low-intensity stimuli for large machinery resulted in 31 percent of dens displaying behavior consistent with “harassment.”

(8) The authors admit that their small sample size and lack of replication of stressor distances and frequencies mean their data provide limited insight regarding polar bear response to human activity at den sites (p. 203). As an example, they had insufficient data to look at the effects of high-intensity activity, other than from aircraft, so it is not possible to know what impact, for example, high-intensity activity from large or small machinery would have on denning bears. But the authors did not find “significant probabilities for harassment disturbance for large and small machinery at low intensities” (p. 202).

(9) The authors reported the times between den emergence and den site departure were all on the low end of the ‘normal’ established by Smith et al. studies, but all those dens had exposure to human activity (e.g., camps or camera setup activities). It is therefore incorrect to say that dens in Smith et al. studies were from undisturbed sites, and it is very possible those dens were departed sooner than would have occurred without any human activity.

Comment: Some commenters characterize land-denning bears as having particular importance and suggested that the Service did not adequately incorporate risks of mortality to cubs and population effects of cub mortality or low recruitment into our analyses.

Response: While it is true that Rode et al. (2018) have found support for a higher rate of denning success in land-based dens, the available science does not provide a basis for discounting the value of cubs born in sea ice dens. Rode et al. (2018) indicated the likely reason for increased litter survival of land-based dens was later average emergence dates. We incorporated this effect into our model as empirical data from land-based dens were used to create denning parameters in our analysis.

Comment: One commenter suggested that we should provide a table presenting the median and interval estimates for the: (1) number of bears predicted to be in the AOGA petition area, (2) number of bears predicted to be exposed to Industry operations, (3) predicted responses of exposed bears by denning period, and (4) amount of incidental take by denning period and level (Level B, Level A, mortality).

Response: We appreciate this suggestion. The model outputs are highly technical, and it is important to provide this detailed scientific information in a manner that is generally understandable. We have provided the technical aspects of our analysis in supplemental information for the general public to access as they choose, and this table has been revised in response to comments. We also present our results throughout the negligible impact section in paragraph form so that we may provide context throughout.

Comment: One commenter stated that because the development and implementation of recapture methods for abundance modeling is still in progress, any additional take authorization is “unwarranted and alarming.”

Response: The Service based its take estimates on the best available scientific information and determined, among other things, that the total of such taking will have a negligible impact on the SBS stock. While we are continually evaluating (and in many instances,

creating) new scientific information, we cannot lawfully refrain from implementing MMPA provisions, including those concerning the authorization of incidental take, while awaiting additional data.

Comment: One commenter states that a 0.45 probability of lethal take is not “unlikely” because a reasonable person would not dismiss a 0.45 probability of death as being “unlikely” when deciding whether to undertake an activity. The commenter further states that the Service should provide a detailed explanation for its finding that there is a 45 percent chance of lethal take in 2 years, when its prior analysis demonstrated a 45 percent probability of lethal take in each individual year.

Response: The Service disagrees with the commenter’s metric for estimating take. Also, the analysis conducted for the initial 2021-ITRs did not estimate a 0.45 probability of lethal take for each individual year; the commenter appears to misconstrue the scope of certain outputs reported during that process. We also reiterate that the present analysis utilizes new scientific information and improved protocols. Further, due to our re-evaluation of the cases included in our denning analysis, we have repeated our denning analysis with updated disturbance probabilities. We now estimate aggregated probability of lethal take over the final two years of the ITR is 0.34.

Comment: One commenter indicated that the Service used an incorrect population estimate because there are only 573 polar bears in the SBS stock.

Response: The population estimate cited by the commenter is specific to the Alaska portion of the SBS stock and thus fails to encompass the entirety of the stock.

Comment: A commenter criticized the population estimate utilized by the Service, asserting that the Service’s estimate of 907 bears relies on a report published in 2020, but the data used in that report was actually collected from 2001 to 2016.

Response: We agree that having a more recent population estimate would be ideal; unfortunately these data are difficult to obtain and are typically updated on a 10-year interval.

The Service is currently working with the USGS and partners to develop an updated population estimate for the SBS, but it will not be ready for another 1–2 years. Currently, we use the best available science to inform the size of the population, and Bromaghin et al. (2021) showed evidence that the population decline that was noted in the mid-2000s appears to have stabilized.

Comment: One commenter criticized a Service statement about conducting further research and incorporating additional climate change information, on the basis that information concerning sea ice loss, cub survival, and population decline exists now.

Response: The Service agrees that much information concerning these issues exists now, and the Service based its analysis on the best available scientific information. The intent of the referenced statement was to make clear that the Service will continue its research efforts and incorporate new pertinent information in the future as it continues its efforts to conserve polar bears and other species.

Comment: Several commenters objected to the Service authorizing incidental take of polar bears and any new activities in light of studies that provide long-term sea ice modeling and identify potential effects of sea ice loss on polar bears. One commenter referenced the possibility of an ice-free day in the Arctic Ocean as early as 2027 (citing Heuzé, Céline., Jahn, Alexandra. The first ice-free day in the Arctic Ocean could occur before 2030. Nature Communications, 2024; 15 (1) (December 3, 2024), DOI: 10.1038/s41467-024-54508-3).

Response: The Service does not authorize oil and gas activities in the Southern Beaufort Sea area. This rule only provides a means of authorizing the incidental take of polar bears and Pacific walrus anticipated to result from these activities. We acknowledge the effects of climate change and sea ice loss are the largest threat to SBS polar bears. In the 2021-ITRs, we present a comprehensive discussion of the potential impacts of climate change on the SBS stock. The impact analysis provided here appropriately considers the various factors (such as marginal reductions in seasonal sea ice and other climate-change-related effects) that could influence the nature or degree of impacts caused by the applicant's specified activities. However, changes in

environmental conditions that are predicted to occur long after the effective period of this rule have little to no capacity to influence the impacts of the applicant's specified activities. We further note that the literature cited by the commenter states, they were "not suggesting that ice-free conditions will be reached this quickly" and instead strive to "raise awareness for the potential of a rapid loss of sea ice in the near-future."

Comment: Two commenters stated that the Service did not incorporate certain recent information on polar bears and their habitat within the range of SBS polar bears. They recommended two publications: Patil et al. 2022, and Florko et al. 2020.

Response: We appreciate the recommendation. The data from Patil et al. (2022) was indeed used to simulate dens in our denning analysis. The Florko et al. (2020) publication is not applicable to our analyses, as there is not sufficient spatial overlap for its data to inform our utilization distribution.

Comment: Some commenters suggested that the Service must conduct further analysis on the cumulative effects within proximity to the Southern Beaufort Sea area before pursuing any new authorizations that risk negatively impacting SBS polar bears and other marine mammals.

Response: The Service adequately considered cumulative effects while developing this rule. The potential impacts of the applicant's specified activities were considered in light of other ongoing factors and activities affecting the stocks of marine mammals at issue. Cumulative effects are also considered in the environmental assessment examining the effects of the Service's proposed action under the National Environmental Policy Act.

Comment: One comment was specifically directed at the cumulative impacts analysis found in the draft supplemental EA. The comment focuses on the description of past and reasonably foreseeable future actions, including the take that has occurred under the first 3 years of the 2021-ITRs, a proposed incidental harassment authorization for the Bureau of Land Management, and two proposed anticipated take authorizations also located in the North Slope area. The commenter asserts that "the Service must calculate the overall probability of lethal take

posed by issuing the Revised ITR in combination with all existing and proposed take authorizations, and analyze the cumulative impacts of all those activities on the population, along with the other numerous stressors it is already facing, including malnourishment, reduced reproductive success, and reduced cub survival.”

Response: The final supplemental environmental assessment prepared to support this rulemaking contains expanded discussion of cumulative impacts wherein the Service further analyzes and contextualizes the incremental effects of the revised rule when added to the effects of other past, present, and reasonably foreseeable actions (regardless of what agency or person undertakes such other actions). The Service disagrees that it is obligated under NEPA to estimate and report the probability of lethal take specific to particular subsets of these actions and finds that doing so here would not enhance the quality of the NEPA analysis.

Incidental take authorizations do not cause or authorize the specified activities themselves; rather, they provide a mechanism for the Service to impose mitigation, monitoring, and reporting requirements in exchange for removing the MMPA’s take prohibition on the condition that these requirements are followed. The Service issues incidental take authorizations only upon request and upon finding that MMPA standards are met. Generally speaking, there is no requirement to request and obtain an incidental take authorization prior to conducting activities that may take marine mammals. The Service does not receive incidental take requests for all activities that may incidentally take SBS polar bears and lacks the data necessary to provide complete quantitative analysis of the risks to SBS polar bears posed by all relevant activities. Also, any estimates associated with pending incidental take requests are subject to change as the Service analyzes the activities specified therein and reevaluates that analysis after soliciting and considering public comments.

In the current context, using non-biological parameters to effectively segment the Service’s NEPA analysis is more likely to precipitate misunderstanding of the role of incidental take authorizations in protecting SBS polar bears than it is to inform the Service’s cumulative

impacts analysis, and using preliminary estimates associated with pending requests could undermine the accuracy of any estimate of cumulative risks. The Service also reiterates that this revised rule does not authorize any lethal take.

Comment: One commenter characterized the Service's reliance on data provided by the applicant as problematic and faulted the proposed rule for inadequate discussion of enforcement methods.

Response: Per the Service's implementing regulations, applicants' requests for ITRs must include, among other things, estimates of the species and numbers of marine mammals likely to be taken. The Service considered this information, along with other sources of best available scientific information, when it performed its own analysis.

Comment: One commenter stated that, due to climate change, the SBS stock could see a great decrease in the next decade. They further state all available science indicates that any additional take of SBS bears obstructs recovery by widening the gap between the actual population and the population needed to attain the optimum sustainable population.

Response: Currently, we use the best available science to inform the size of the population and the fact that Bromaghin et al. (2021) showed evidence that the population decline that was noted in the mid-2000s has appeared to stabilize. We also disagree that all available science indicates that any additional take of SBS bears obstructs recovery. Regehr et al. (2017) showed that a polar bear population declining due to sea ice loss can still have a level of harvest that would not hinder the persistence of the population. While the reference to "harvest" is not about hunting, the study does indicate that small levels of removal can occur and would be compensated for by a decrease in other density-dependent sources of mortality without leading to declines in long-term persistence (i.e., compensatory mortality).

Comment: Several commenters expressed concern that the rate of den detection using FLIR indicates that it is not an effective means of locating dens in order to limit disturbance. A comment states that implementation of mitigation and monitoring efforts will not prevent take

since den locations will likely change in response to changing habitat conditions. Another comment claims that the modeling used in the ITR rulemaking underestimates the number of undetected dens.

Response: We agree that finding dens with FLIR alone is insufficient for preventing all incidental takes; hence, our anticipation and analysis of a limited amount of take of undetected denning bears. However, FLIR is an important tool for identifying dens before they can be disturbed during more sensitive periods of cub development. We disagree that our approach to account for FLIR efficacy is unrealistic and arbitrary. Multiple peer-reviewed studies have addressed FLIR efficacy and have all come up with different results. We accounted for this variability when calculating the FLIR efficacy rates used in our modeling. Each of these studies has strengths and weaknesses, and because we cannot determine which particular study most closely reflects reality, we rely on the set of these studies to inform FLIR efficacy. Additionally, multiple factors can affect den detection, so it is both realistic and rational to allow for variation in FLIR efficacy rates between simulated FLIR surveys drawn from three studies published in peer-reviewed journals.

Comment: One commenter stated that the Service should have relied only on the FLIR den detection estimate generated in Woodruff et al. 2022.

Response: Multiple authors on the Woodruff et al. (2022) paper are part of the team that developed the analytical techniques for estimating impacts of development on denning bears. While the commenter correctly cites the results from the Woodruff study, two other published peer-reviewed studies show different results. There were numerous drawbacks from using artificial dens to estimate FLIR efficacy versus real dens used in the Smith et al. and Amstrup et al. studies. The Smith and Amstrup studies also have drawbacks, and it is not clear which study most closely reflects reality. But given the multiple peer-reviewed studies addressing FLIR efficacy and uncertainty in which study most closely reflects reality, it is best to incorporate that

uncertainty into our FLIR efficacy rates than to arbitrarily decide that one study's estimate is superior to another.

Comment: One commenter criticized the Service's finding as to whether the rule revision would impact Tribes and urged the Service to consider government-to-government consultation with the Alaska Native Tribes before finalizing the rule.

Response: The Service has determined that revising the 2021-ITRs would not cause any potential effects that trigger the obligation to engage in government-to-government consultation or government-to-ANCSA (Alaska Native Claims Settlement Act) corporation consultation. The effects of the Service's action are limited: This rule only authorizes up to two Level A harassments of polar bears in addition to the Level B harassment of polar bears and Pacific walrus already authorized. Any resulting effects to individual polar bears would be inherently limited and short term, and, as is explained in more detail elsewhere, would not cause more than a negligible impact to the SBS stock of polar bears and would not cause any unmitigable adverse impacts on the availability of SBS polar bears for subsistence uses. As such, the Service has determined that issuing this final rule will not have any substantial direct effects on any federally recognized Tribes or ANCSA corporations. During the process of proposing and promulgating the 2021-ITRs, the Service did not receive any replies indicating interest in government-to-government consultation or government-to-ANCSA corporation consultation. The Service remains open to consulting with these parties at any time, including prior to the issuance of LOAs, and further notes the regulatory requirement that LOA applicants conduct their own outreach with potentially affected subsistence communities.

Comment: Two commenters stated that the Service did not adequately engage with local stakeholders or incorporate Indigenous Knowledge (IK) into our revisions to the 2021-ITRs.

Response: The Service was directed by the Ninth Circuit Court of Appeals to conduct additional analysis and "furnish promptly" the results. At no point did the Service attempt to downplay the importance and value of Indigenous Knowledge. However, with the tight timeline,

it would have been impossible to meet the court's direction while also undertaking the considerable effort of integrating IK in the manner the commenter suggests. We invite indigenous peoples and their representatives to provide this information at any time, as we are constantly working to improve our analyses and will incorporate data that has been provided to us.

Comment: Some commenters stated that 30 days was an insufficient period of time to review and comment on the proposed rule, and one comment stated this timeline was too short due to the Service's analysis of case studies.

Response: We believe that we provided the public sufficient time to understand our approach, while still complying with the court's remand instructions. The Service's approach to modeling impacts to denning polar bears is very similar to the approach that we used for the initial 2021-ITRs rulemaking, and the limited amount of modifications considered in the proposed rule (such as the inclusion and classification of four additional, recent case studies) were specifically identified in the proposed rule. We also note that the methodology used to analyze the case studies was detailed in Woodruff et al. 2022, which has been available to the general public for 2 years.

Comment: One commenter suggested that the method of information dissemination used by the Service was insufficient and that we were "burying" or "hiding" results. Specifically, the commenter had issue with the Service providing the potential for lethal take over a 5-year period in the supplemental denning analysis documents made available on Regulations.gov.

Response: The information associated with the proposed rule was provided to the general public using the same method as used for the original 2021-ITRs rulemaking, which was a proven way of disseminating information to the public. At no time did the Service attempt to "bury" or "hide" the outputs that were readily accessed by the commenter. We additionally changed the format of our output table to include more easily understood descriptors of model

results, so that the public did not need to be intimately familiar with our model code to interpret the Service's findings.

Comment: One commenter has claimed that the Service is attempting to obscure the impacts of disturbance during the later denning phase by the mean decrease in survival rate for litters that experience Level A harassment. The commenter also states that the Service should examine potential impacts on longer term cub survival and says the Service's reference to litter survival estimates at 100 days in Andersen et al. (2024) is inaccurate.

Response: The Service is not obscuring impacts and has clearly presented our findings both in the preamble of the proposed rule published in November 2024 and in our complete analytical outputs, which were available to the public on Regulations.gov. The studies on which we relied to inform our analysis indicate only a short-term impact of early emergence/early departure on cub litter survival and we are not aware of any studies that indicate the types of disturbance we analyze as having long-term consequences for cub survival. We appreciate the comment regarding the reference to observations of litter survival at 100 days post emergence. We have revisited Rode et al. (2018), the publication originally cited by Andersen et al. (2024), and the authors reference observing collared females with or without dependent young within 100 days post-emergence. We have revised this language in the preamble of this document to refer to this metric as "litter survival in the spring after den departure."

Comment: Several commenters assert that authorizing any Level A harassment or injury of polar bears is contrary to the precautionary principle underpinning the Endangered Species Act and Marine Mammal Protection Act.

Response: The Service must process requests for incidental take regulations in a manner consistent with the requirements of section 101(a)(5)(A) of the MMPA, which establishes specific criteria for when incidental take must be authorized.

Comment: Several commenters have stated that any levels of increase of disturbance to dens and family units or decrease in cub survival, especially when considered in combination

with other factors such as habitat loss or climate change, will result in non-negligible impact at a population level. Some of these commenters also stated that it is not appropriate for the Service to authorize take by Level A harassment for these reasons.

Response: The Service presented a multifaceted negligible impact determination with both qualitative and quantitative arguments as to why we do not anticipate the proposed authorized take to have more than a negligible impact on rates of recruitment or survival. We disagree that the data clearly indicate that SBS bears are a declining population. The last two population assessments have shown that the decline that occurred in early 2000s has since abated and the population is currently stable. Even so, we have presented survival probability distributions for both the baseline of the stock (we explain in our methods how our simulation parameters incorporate best available science and are developed using current data for the SBS stock) and the stock when harassment is simulated. As we note, a mean 15 percent decrease in the survival rate for 0.35 percent of dens in a given year does not shift the distribution of survival probability for the stock.

Comment: Several commenters have stated that any reduction in survival probability constitutes a non-negligible impact to the already-declining SBS polar bear population.

Response: We disagree that the data clearly indicate that SBS bears are a declining population. The last two population assessments have shown the decline that occurred in early 2000s has since likely abated and the population is currently likely stable. As we stated in the negligible impact findings of the proposed rule, where we present a multifaceted discussion of the potential effects of the proposed taking, the number of dens that we anticipate may experience Level A harassment represents 0.7 percent of the land-based dens and 0.35 percent of the total dens each year for the SBS stock. When examining the population-wide consequences of a decrease in survival for such a limited number of dens, we find the change in survival distributions is negligible. Thus, the population-level consequences asserted by the commenters are not anticipated.

Comment: Several commenters have stated that any levels of increase of disturbance to dens and family units or decrease in cub survival, especially when considered in combination with other factors such as habitat loss or climate change, will result in non-negligible impact at a population level. Some of these commenters also stated that it is not appropriate for the Service to authorize take by Level A harassment for these reasons.

Response: We have assessed the impacts of anticipated disturbance to denning bears and determined it to be consistent with the MMPA's negligible impact standard. No evidence exists to support the contention that the proposed authorization would impact mating areas, as mating occurs out on the sea ice in spring and not in the area covered by the proposed activities. Further, existing mitigation measures (e.g., activity restrictions when bears are sighted near operations) provide maximum practicable protection to keep family groups from being separated and prevent bodily harm. Additionally, polar bears primarily prey on seals, and disturbance to bears on land or while denning will have no impact on their prey or their prey's habitat.

Comment: One commenter stated that Amstrup (1993), a publication cited by the Service, found "data indicate that many denned bears exposed to human activities are likely not to be affected in ways that alter their productivity," supporting the concept that polar bears appear to be resilient to human activity.

Response: We agree with the commenter that many of the dens reviewed in Amstrup (1993) show no disturbance, but the commenter also fails to mention numerous records in Amstrup (1993) that show potential negative outcomes to cubs from oil and gas activity. We also agree with the commenter that many bears appear to be resilient to disturbance, but we note that a number of the observations occur during the den establishment period, in which we have also found limited evidence for polar bears to be disturbed. This is also a period when females have yet to give birth to cubs, so the consequences of disturbance are more limited than those that occur once cubs are born. The den disturbance probabilities we use for our model are based on the case studies reviewed in Woodruff et al. (2022). For all denning periods, except post

emergence, the probability of a den that is exposed to industrial stimuli actually being disturbed is lower than the probability of no disturbance. So, in our approach we already capture the tolerance of many bears to disturbance. Lastly, the case studies presented in Amstrup (1993) were also included in our larger set of case studies used to estimate disturbance probability to dens at different periods of denning and were therefore incorporated into our analysis.

Comment: Commenters have expressed concern that the Service overestimates impacts to denning bears because they rely in part on non-relevant case studies (i.e., studies concerning research activities as opposed to oil and gas activities), and these overestimates will unnecessarily lead to restriction of oil and gas activity in the future.

Response: These comments are largely incorrect. While we did include studies such as those in Woodruff et al. (2022), we removed them (and state as such) from the set that is used to inform disturbance probabilities applied to Industry because we agree that den intrusions, collaring, and other invasive research-related activities do not typically have corollaries with industrial activities on the North Slope of Alaska.

However, in response to comments, the Service made four key updates to our assessment of case studies and subsequently incorporated the results into the den disturbance model. First, we established a new decision rule governing the exclusion of case studies from our disturbance probability calculations. This rule excludes any case study where researchers captured polar bears during the den establishment period. The nature of disturbances associated with Industry activities is not analogous to disturbances caused by capture, and polar bears that recently experienced capture may become dramatically more sensitive to ensuing disturbances. This update therefore avoids undue consideration of case studies that are not representative of effects from industry activities. Second, we no longer assign an “early emergence” to any dens where emergence occurred later than the median emergence threshold. Previously we had allowed for inclusion of such cases where additional information indicated that the emergence resulted from a disturbance. We now classify emergences as either early or normal solely in relation to the

median emergence threshold. This update provides for more objective application of median emergence threshold, which is intended to serve a biological metric reflective of natural (i.e., undisturbed) behaviors. Third, we updated our calculated median emergence date based on the observed emergence dates of all Southern Beaufort Sea land-based dens, regardless of whether the sow associated with each den was observed with cubs later that spring. In doing so we used data found in Rode et al. (2018; although published in USGS 2018) and Anderson et al. (2024). This resulted in our median emergency date changing from 15 March to 12 March. This update serves to increase accuracy by accounting for unobserved cubs and the reality that some denning sows may not successfully give birth or may lose their litters to natural mortality. Finally, we are now using the data in Anderson et al. (2024) to inform the den disturbance model's assumption concerning median time spent at the den site, post-emergence. The previous median value of 8 days was generated using dens in Smith et al. 2007, 2013; Robinson 2014, however these studies included dens that were also used in the case study analysis and considered to be exposed to disturbance. The revised median value is now 6.25 days. We have also updated the den disturbance model to use the time at den values from Anderson et al. (2024) to simulate the expected time spent at dens post-emergence for simulated dens. This update increases accuracy because some polar bears that emerge are thought to spend more time at the den site post-emergence as compared to polar bears that emerged consistent with normal timelines.

Comment: Commenters have stated that they find the Service's estimates of take by Level A harassment to be an "abrupt jump" from historic records and suggest that the Service has not used recent data in the oilfield to inform our analytical parameters. They express concern that the estimates of impacts to denning bears are an overestimate that will lead to restriction of oil and gas activity in the future.

Response: As we have stated, our analysis to estimate Level A takes based on proposed industrial activities is based on the best available science, which includes Industry-submitted

observation reports as well as published, peer-reviewed studies when available. As the commenter notes, historic estimated levels of Level A harassment are lower than what we currently estimate. There are a number of reasons for this change. For instance, an increased proportion of polar bears are denning on land compared to historic estimates. This change in denning behavior has been caused by changing sea ice conditions whereby sea ice dens are less reliable and more prone to failure now that sea ice movements are more dynamic. This change in polar bear distribution alone plays a significant role in the increased numbers of Level A harassments estimated compared to historic patterns. Further, the historic estimates the commenter cites are based on an assumption that aerial infrared surveys were capable of detecting 100 percent of dens surveyed. Based on a reanalysis of the original dataset that led to this assumption, and multiple other studies that have been conducted since, we now know that infrared den detection rates are much lower than originally thought.

Additional studies have been published that show a connection between den emergence date and den departure date on the survival of polar bear litters. These analyses had not been conducted when the historic observations noted by the commenter were made. Because the impact of early emergence and/or early departure from the den site cannot be directly observed, it wouldn't have been captured by Industry and therefore would have led to the appearance of lower levels of Level A harassment than may have actually occurred. Thus, it is not reasonable to assume that Industry's take observations account for all the take that occurred. Relying solely on Industry's observations and failing to account for peer-reviewed science would lead to an underestimate of take because impacts that occur after bears depart the den site (i.e., reduced cub survival related to early emergence/departure due to disturbance) typically cannot be observed. We also have no way to understand how many takes go unobserved by Industry due to weather, terrain, or other sources of observer bias, but this situation clearly happens. When we look at annual estimates of the number of dens within a mile of oil and gas activity in northern Alaska that go undetected during aerial infrared surveys, we find this estimate to be consistent with the

number of such dens that Industry observes each year (i.e., 1–2 dens). Thus, our model is actually lining up quite well with Industry’s observations.

We also note that while we agree that some bears likely exhibit tolerance to harassment from industrial activities, this tolerance is already captured in our analytical approach whereby dens exposed to industrial activity are assigned a probability of being disturbed by the activity (i.e., we do not assume that the bears in all exposed dens are disturbed). These probabilities are based on a thorough review of denning case studies, which has been published in a peer-reviewed journal (Woodruff et al. 2022).

Comment: One commenter stated the estimation of two Level A harassments over the next 2 years is inconsistent with decades-long history of polar bear reports from Industry. The commenter further cited the encounter reports from 2014 to 2018, stating that the majority of encounters resulted in no change to biologically important behavior.

Response: Unfortunately, relying only on what is observed during “on the ground” monitoring by Industry does not account for potential impacts to dens that were not detected. A den could easily be located adjacent to industrial activities and never be observed due to terrain obstructions or poor visibility during winter. Further, as documented with published peer-reviewed science, there is the potential for injury to cubs from early emergence/early departure that would never be witnessed by on the ground monitoring. Our modeling framework estimates between 1–2 dens occurring within 1 mile of Industry that go undetected by FLIR technology. This estimate has been shown to reflect reality quite well during the years of the 2021-ITRs.

Comment: Several commenters claimed that any actions with the potential to kill marine mammals cannot be considered Level A harassment and instead must be considered lethal take. A commenter offered a legal argument for this position, which focuses on the use of the word “potential” in certain MMPA provisions defining forms of take. The commenter also asserted that the Service failed to adequately consider the combined likelihood of either lethal take or Level A harassment over the next 2 years, which the commenter characterized as 83 percent.

Response: We disagree. The Service’s application of the term Level A harassment is appropriate. The MMPA defines “take” to include, among other things, “harass” and “kill.” The MMPA further defines two types of harassment (Level A and Level B) and specifically incorporated the concept of “potential” into those definitions. The MMPA does not define “kill.” The Service therefore applies the ordinary meaning of the word “kill,” which is to deprive of life or cause the death of, not to potentially deprive of life or cause the death of.

The limited numbers of Level A harassment contemplated by this rule are estimated to entail an average 14 percent marginal reduction in litter survival probability, which represents a possibility of death, but not a certainty or even likelihood of death. This is not an adequate basis for assuming lethal (i.e., “kill”) take. We also note that such an assumption would be unworkable in the enforcement context in terms of meeting the applicable burden of proof.

The Service also disagrees with the notion that it must report and evaluate a combined likelihood of either lethal take or Level A harassment occurring over the next 2 years. That said, the Service’s negligible impact determination for the 2-year period in which this revised rule will apply does reflect consideration of not only the two anticipated Level A harassments, but also the potential for lethal take.

Comment: Several commenters voiced concern about the Service’s definition of Level A harassment in the proposed rule and the method for estimating Level A harassment. Specifically, the commenters stated that the Service should rely on previous methods for calculating serious Level A take wherein we differentiate those takes that may lead to a survival rate less than 50 percent. One commenter noted that the Service’s model outputs, provided in supplementary material, indicated that at least one of the takes by Level A harassment estimated for the 2021–2026 period should have been considered a lethal take because of this designation.

Response: The commenter has accurately described the previous analytical outputs from the 2021-ITRs and past take authorizations. However, as we explained in the proposed rule, we no longer rely upon a distinction of “above 50 percent” or “below 50 percent” survival

probabilities or the associated categories of “serious” and “non-serious” Level A harassment.

There are several reasons for this change.

First, the revised rule responds to a court remand that instructed the Service to, among other things, make findings based on aggregated Level A harassment, not separate categories of Level A harassment.

Second, after the remand prompted further review of past practices, we recognized that the outputs generated under the prior approach risked incorrectly attributing estimated cub mortality to the specified activities under review. This possibility stemmed from the fact that the post-disturbance survival probabilities underpinning the prior “serious” and “non-serious” Level A harassment outputs reflected combined risks from modeled industrial disturbances and natural causes of mortality.

Third, new additional scientific information is available that allows the Service to employ a better approach. Information in Andersen et al. (2024) now allows the Service to estimate survival rates of individual simulated dens. We provide estimates of the mean decrease in survival in our negligible impact determinations. By comparing post-disturbance survival probabilities against a baseline that accounts for natural mortality, we discern the marginal decreases in survival attributable to the specified activities. Our improved approach better aligns with MMPA standards concerning the scope of negligible impact analyses.

Comment: One commenter suggested that the Service’s negligible impact determination for the 5-year period should consider the number of cubs whose survival rates will drop below 50 percent due to Industry disturbances. The comment appears to estimate that number as seven.

Response: For reasons explained in the response above, the Service no longer uses the serious/non-serious Level A harassment dichotomy or its 50 percent survival probability threshold to estimate forms of take, and the Service bases its negligible impact analyses on more suitable analytical techniques.

Comment: One commenter stated that combining the potential for lethal takes and the potential for takes by Level A harassment would not be “double counting.”

Response: The commenter is correct that, in our analytical framework, simulated dens that experience disturbance and subsequent den abandonment are not later allowed to be disturbed again. In our description of the estimated take, as well as our negligible impact determinations, the Service does not assert that combining lethal and Level A takes would be “double counting.” We speak about these potential impacts differently because they are different behavioral responses with different consequences for the litter.

Comment: One commenter argues that the Service’s negligible impact determination must account for the model’s estimates of three reasonably likely cub deaths and four additional substantial contributions to cub deaths.

Response: The commenter, using undefined terms, mischaracterizes the model results, which estimate for the 2021–2026 period a median of two lethal takes and a median of five Level A harassments. The implication that all Level A harassments will substantially contribute to cub deaths is unfounded. The Service’s negligible impact determination fully considers (for both the 2-year period to which the revised rule applies, as well as the 5-year period covered by the prior and current versions of the rule) the impacts estimated by the model.

Comment: Some commenters have asserted that the statistical model used in our denning analysis is not applicable for the AOGA 2021-ITRs. Comments characterize that model as developed to analyze a 1-year project in the 1002 area (i.e., the land designated in section 1002 of the Alaska National Interest Lands Conservation Act—part of the Arctic National Wildlife Refuge in northeastern Alaska) as opposed to a suite of activities over 5 years in a different portion of the North Slope.

Response: Modeling is a statistical tool that can be used to generate estimates of future conditions or potential impacts based upon a series of inputs. By design, statistical models are dynamic and can be modified to answer new questions at different temporal or spatial scales as

needed. The Service has thoroughly described each iteration of their denning analysis over a period of several proposed and final MMPA authorizations. Each time, we have detailed the changes to the model as well as the changes in our inputs. The code has been provided for the general public to see and comment on our changes. Further, the model as initially developed for the survey in the 1002 area built a conceptual framework for polar bear denning ecology based on decades of research. Thus, the underlying conceptual framework can be applied across the North Slope by modifying the spatial and temporal components of human activity to be analyzed. Here, our modeling outputs are derived from consideration of (among other things) polar bear distribution data specific to the specific geographical region under review, project-specific footprints and occupancy rates provided by the applicant, and applicable mitigation measures.

Comment: One commenter questioned the need and rationale for adopting a model-based approach to analyzing effects to denning polar bears and stated that there was no reason to depart from the approach used by the Service for estimating take for previous ITRs, which they distinguished as a “data-driven” approach.

Response: It is incorrect that the Service abandoned a data-driven approach when it incorporated modeling into its analyses. The Service has always based its analyses on best available science, which has improved over time, and which sometimes warrants altering prior assumptions, e.g., the outdated assumption that FLIR is 100 percent effective at finding polar bear dens. When research indicated that dens cannot be detected 100 percent of the time, and new scientific literature furthered our understanding of the relationship between den emergence date and short-term litter survival, we recognized the need to take a deeper look at polar bear denning ecology and human disturbance. Our denning model now enables us to account for impacts that would be incapable of complete detection on the ground. Throughout our analysis, we use empirical data to derive model parameters, or use the results from published, peer-reviewed science to inform our assessment. Additionally, conditions have changed significantly

for the Southern Beaufort Sea subpopulation with more bears denning on land than previously has occurred. These factors further supported our need to take a more data-driven approach to understanding the different factors that can affect denning polar bears when evaluating ongoing and future activities.

Comment: One commenter stated that a theoretical model cannot fully capture the variability of nature and therefore cannot accurately predict what will occur.

Response: No model can predict the future with absolute certainty, and it is true that in this way every model that exists is “inaccurate.” However, as we have explained in multiple rulemakings, the Service has designed our denning analysis using parameters derived from best available scientific data. We incorporate the variability of denning parameters into our analysis, which simulates dens across the impacted area using information from best available science. These parameters are designed to account for the natural processes of polar bear denning phenology, such as variation in litter size, den entry date, birth date, etc. Validation of model performance in this environment is difficult, because, as our estimates suggest, we do not anticipate human disturbance to occur frequently, and unobserved harassment may occur. However, when we look at annual estimates of the number of dens within a mile of oil and gas activity in northern Alaska that go undetected during aerial infrared surveys, we find this estimate to be consistent with what Industry observes each year (i.e., 1–2 dens), indicating our model is actually lining up quite well with Industry’s observations.

Comment: One commenter presented an opinion that in Woodruff et al. (2022), a publication cited by the Service, no biological mechanisms are used for the classification of human disturbance. They state that imperfect information and small sample sizes were used to partition denning behavior into simplified stages based on calendar dates. The commenter believes that an outcome of this strategy is a simplistic, biologically unrealistic, and highly conservative bias to classifying the effects of disturbance that leads to overrepresentation of human causation.

Response: We disagree that “no biological mechanisms are utilized for the classification of human disturbance.” The process laid out in Woodruff et al. (2022) clearly articulates why disturbance during different denning periods is problematic to polar bears. For example, the identification of the early denning period is tightly linked to biological mechanisms (i.e., cub age) and the fact that cubs at this age are not viable outside of the den due to thermoregulatory issues and an inability to keep up with their mother. If a female leaves the den with or without her cubs before they are 60 days old, the expectation is of a lethal outcome.

The commenter also claims that the methods used by Woodruff et al. (2022) lead to an “almost certainty that cub mortality would be highly likely using these methods.” If the commenter is referring to the assumption that den abandonment itself would result in certain lethal take, that is correct: We do anticipate cub death will occur if a sow abandons her less than 60-day old cubs in a den. However, as we have described in table 1 of the proposed rule (89 FR 88216 at 88219, November 7, 2024), lethal take of cubs would only be anticipated in one denning period, the early denning period, as a result of den abandonment. The probability of den abandonment in our updated denning analysis is 0.08 or 8 percent for exposed dens (i.e., less likely than not). This probability of den abandonment was created using the case studies, and the commenter is correct that, absent any information to the contrary, and with evidence of human-caused disturbance, the Service has assumed the cause for the bear’s behavior was human disturbance. We have used this method because we are tasked by the MMPA to estimate take resulting from the specified activities, and thus it is imperative that we capture those disturbances that potentially caused a behavioral response.

Comment: Commenters suggested that the case studies used in the Service’s analyses resulted in an overestimation of effects of oil and gas activities to denning polar bears. The commenters cited differences in distances from and nature of sources of anthropogenic disturbances, seasonality, den phenology, and location as factors in the Service’s interpretation of the data in a manner that the commenter deemed overly conservative.

Response: We agree with the commenter that there is a relationship between the distance between a den and the source of disturbance. This factor was apparent in the recent study of aircraft overflights that the Service published on the relationship between altitude and polar bear take. Unfortunately, these data are challenging to collect in a designed study because they would require purposefully disturbing dens, which could lead to significant demographic impacts to the population. Instead, we must rely on existing case study data to help inform this critical model parameter. The arguments made by the commenter highlight this difficulty. While it is true that the distances between simulated dens and Industry are higher than in the case study dataset, this is likely because of a detection bias in the case studies toward dens found closer to infrastructure. But just because fewer dens were detected farther from human activity in the case studies does not mean that dens farther out were not potentially disturbed, it is more likely that they were just not detected.

Comment: One commenter suggested that the data used to formulate the den disturbance model did not accurately represent disturbance to polar bears from oil and gas related activities and that the model therefore provided artificially inflated estimates of potential effects to denning polar bears. The commenter further suggested that the Service's model is biased and its use in incidental take authorization processes has resulted in overregulation of oil and gas operations, thereby increasing costs and inhibiting development and exploration efforts.

Response: We disagree that the model is biased. There is a difference between bias and precision. We agree there is room for added precision in the model as additional data are collected. Our model is based on significant amounts of published, peer-reviewed science or analyses based on empirical data, so we use the best available science to inform our analysis and do not apply any biased perspectives in its development or application.

The Service authorizes incidental take when applicable MMPA requirements and standards are met. Economic considerations may come into play when reviewing the practicability of potential mitigation measures but are not to influence the Service's analysis of

whether specified activities meet MMPA standards such as “small numbers” and “negligible impact.”

Comment: Several commenters have stated that the Service failed to base its take estimates on best available scientific information, and that the denning analysis (also referred to as “the model”) used by the Service is overly conservative and therefore an inappropriate method for estimating potential take.

Response: The Service’s model is not intentionally designed to be conservative, nor is it intended to reflect precautionary principles. The Service has used best available science to present the most accurate estimation of take currently possible. Data concerning SBS polar bears and the effects of oil and gas activities on SBS polar bears is not perfect and complete, owing to inherent limitations in what can be observed or measured, along with other factors. As with any predictive model grappling with inherent uncertainties, the Service’s model must rely in part on some reasonable assumptions. Assumptions that are more likely to err, if at all, on the side of overestimating rather than underestimating take are specifically acknowledged as potentially conservative by the Service for the sake of transparency. These statements should not be misconstrued as evidence that the assumptions are unreasonable, or that the Service’s model as a whole is “conservative.”

Comment: Commenters suggested that the case studies used in the Service’s analyses resulted in an overestimation of effects of oil and gas activities to denning polar bears. The commenters cited differences in distances from and nature of sources of anthropogenic disturbances, seasonality, den phenology, and location as factors in the Service’s interpretation of the data in a manner that the commenter deemed overly conservative.

Response: The commenter is incorrect that the Service’s definitions of “early emergence” and “early departure” do not reflect the actual range of emergence departure dates in published studies. When we assign den phenology metrics to simulated dens, the dates of den entrance are derived from a distribution based on empirical data from published studies. Similarly, the date of

den emergence and time spent at the den site post emergence before departing the den site are all informed based on empirical distributions informed by data published in the studies cited by the commenter. As a result of this and other comments on the proposed ITR, we have re-evaluated our case studies. As a result we have updated our calculated median emergence date for use in our case study determinations to be derived from median emergence date of all Southern Beaufort Sea land-based dens regardless of whether they were observed with cubs later that spring or not. We used data found in Rode et al. (2018; although published in USGS 2018) and Andersen et al. (2024). This resulted in our median emergence date changing from 15 March to 12 March. We are also now using the data in Andersen et al. (2024) to inform the median time spent at the den site, post-emergence. The previous the median value of 8 days was generated using dens presented in Smith et al. 2007, 2013; Robinson 2014, however dens in these studies were also used in the case study analysis and considered to be exposed to disturbance. The revised median value is now 6.25 days. We have also updated the den disturbance model to use the time-at-den values from Andersen et al. (2024) to simulate the expected time spent at dens post emergence for simulated dens.

Comment: One commenter stated that a retrospective analysis that reviews and summarizes incidental take from Industry activities that have occurred in the past would provide a far more accurate estimate of incidental take likely to occur from those same activities in the future.

Response: We do not see how the type of retrospective analysis suggested by the commenter would be more accurate at estimating take from ongoing and future activities than the techniques utilized by the Service in this rulemaking action. The commenter does not explain, for example, how the suggested retrospective analysis could fully account for past take that occurred but was not observed, or for current polar bear distribution data as they relate to current locations of Industry activities.

Comment: Commenters suggested that the Service’s model estimates maximum levels of take that could occur in a single year, that these overestimates compound over time, and that the Service acknowledges as much.

Response: We disagree. The referenced Service language was part of a larger discussion of the ways in which the Service modified aspects of its modeling approach so as to avoid overestimating the take considered in this revised rule. The Service does not estimate, and the rule does not consider, “maximum” levels of take during any time period.

Comment: One commenter stated the Service is using the den disturbance model, which the commenter believes is overly conservative, exclusively and to the exclusion of all other relevant data when assessing effects to denning polar bears.

Response: The commenter seems to imply that the den disturbance model is simply a conceptual framework that is not based on empirical data. This is an incorrect assessment. In reality, the “model” is fundamentally based on what is known about polar bear denning ecology. Then the specific parameters within the model are derived from empirical data to objectively inform them. So, we do not exclude consideration of “available, relevant information” and are quite clear in our documentation where our data and information come from and how we integrate it into our analytical framework. As explained elsewhere, we have not stated, and do not believe, that the model or its outputs are “overly conservative.” Any implication that the Service’s analysis is wholly quantitative, and does not account for qualitative considerations, is also incorrect. Qualitative considerations and best professional judgment inform not only the development, refinements, and use of the model, they also provide additional forms of support for the Service’s MMPA-required determinations, e.g., “small numbers” and “negligible impact.”

Comment: One commenter stated that the reduction of the impact area during the early denning period was appropriate but that impact areas for all denning periods should be similarly reduced to reflect average distances at which polar bear responses have been observed.

Response: Unfortunately, we cannot rely on the average response distance to improve the model. We need to know how disturbance probability varies with distance, and it needs to be specific to the different denning periods because of variation in how sensitive bears are depending on what period of denning they are in. Further, if the Service were to rely upon the average distance at which denning bears responded to Industry, we would almost certainly fail to account for some responses, as the nature of averages dictates occurrences both higher and lower than average.

Comment: One commenter cited the preamble of the proposed rule, where the Service used the phrasing “risks unduly overstating projected aggregate impacts, raising the possibility that incidental take resulting from specified activities with acceptable levels of impacts could not be authorized” and “would be inconsistent with the intent of section 101(a)(5)(A) of the MMPA” (89 FR 88216 at 88218, November 7, 2024).

Response: The commenter is referring to the statement wherein the Service describes the reason for our reexamination of a specific aspect of past model iterations. As we stated in the proposed rule, our current analysis incorporated newly available scientific evidence and further refined certain model assumptions where appropriate to achieve greater accuracy.

Comment: One commenter stated that the Service presented a known overestimate of incidental take that misleads the public regarding the amount and severity of potential impacts to polar bears from oil and gas operations. The commenter further stated that this overestimate undercuts the efforts of Industry and other governments and agencies to manage oil and gas activities in a sustainable manner.

Response: The Service presented our analytical methods in the proposed rule; we do not believe that our estimates are an “overestimate” and state that clearly. As the commenter stated, there is a large amount of variability in the natural world, and there is no one “right” answer to how many takes will occur in the future. We have no intention of undercutting the work of State, and borough agencies, and we look forward to continuing our coordination with these entities in

the future. We coordinate closely with Industry members to develop and help in the implementation of mitigation measures and look forward to continuing that relationship as well.

Comment: One commenter suggested that the Service did not adequately describe the incorporation of Andersen et al. (2024) into our denning analysis.

Response: In short, simulated dens are assigned “natural” (i.e., not exposed to human activity) emergence and departure dates, and for those that are disturbed by human activities (assigned randomly based on the probabilities of response estimated from the ITR case studies), earlier dates of emergence and departure are assigned. The model of Andersen et al. (2024)—which links emergence date, post-emergence duration, and litter survival—is then used to determine the difference in litter survival attributable to the disturbance and concomitant earlier phenological dates.

Comment: One commenter believes that the model underestimates the impacts of Industry activities to polar bears.

Response: We based our analysis on the best available science, which includes a substantial number of published peer-reviewed studies that are used to inform our analytical framework. Based on these studies (e.g., Woodruff et al. 2022, Rode et al. 2018, Andersen et al. 2024), we have accounted for the impacts of harassment impacting life stages of cubs and the associated take (i.e., Level B) for the nursing female. Further, our analysis relies on a thorough assessment of case studies where denning bears were exposed to human activity. This is a published, peer-reviewed study (Woodruff et al. 2022), and we incorporated it into analysis. The commenter did not provide specific assumptions they believe underestimate impacts to polar bears, so we cannot specifically address this comment other than to state that we strive to make the model as accurate as possible.

Comment: One commenter states that the Service’s description of the estimated reduction in cub survival rates is confusing and underestimates impacts to cub survival. The commenter refers to a report by Dr. Trent MacDonald that discusses combining disturbances in the early and

late denning periods. The commenter also states that the Service ignores potential lethal takes in our reporting.

Response: We disagree. The Service provided our comprehensive analytical methods and outputs on Regulations.gov; the updated aggregated 5-year probability of lethal take is 0.55 (although see our negligible effects determination for further context for this potential impact); and our lethal take estimate was limited to early denning disturbances. The Service has reviewed the report by Dr. MacDonald, and, based on our analysis, we disagree with the report's findings as they may apply to our analysis. We do not ignore potential lethal takes in our reporting.

As is explained elsewhere, we disagree with the assertion that all take by Level A harassment should be considered as commensurate to lethal take. The anticipated behavioral response that may lead to lethal take was abandonment of a den by a sow, causing the death of the cubs. In contrast, early emergence from a den and/or early departure from the den site were identified as behaviors that may cause injury in the form of a decrease in survival rate of the cubs (as they may be smaller and less suited for their environment); however, we do not anticipate mortality as a result of these behavioral responses. The Service further described the influence of emergence date and den departure date on the survival probability of polar bear cubs and estimated the average decrease in litter survival as a result of industrial disturbance. While we consistently strive to incorporate best available science in our take estimates, there is currently no data to describe the potential impact of emergence date and den departure date on cub survival past spring den emergence days. Therefore, any quantitative estimate of impacts to cubs past spring den emergence would be arbitrary at this time. We disagree that our focus on Level A harassment was confusing or unclear. We clearly explain our results. However, in response to this comment, we have additionally provided a figure that illustrates the population-level effects of both lethal and Level A take on estimated litter survival over the 5-year period.

Comment: One commenter stated that there does not appear to be a significant effect of exposure on the emergence date of polar bears in the late denning period. The commenter

presents their analysis, using a Mann-Whitney U test (Wilcoxon rank-sum test) to compare the median dates of den emergence between case studies used in the 2021-ITRs and the land-based Beaufort Sea dens in Andersen et al. (2024). The median emergence date for the 2021-ITRs case study dens was 1 day later (March 18) than the median emergence date for the Beaufort Sea land-based dens evaluated by Andersen et al. (2024; March 17; figure 1). They state a pattern of case study emergence dates being earlier instead of a day later (i.e., essentially the same date) would be expected if exposures cause early emergences some of the time.

The commenter states in the 2021-ITRs denning analysis, the probability that about half of simulated dens that are exposed to activities in the late denning period cause early emergences is largely the result of a conservative assumption made in evaluating the case studies. This conservative evaluation assumption would classify approximately half of a random set of undisturbed dens as being early emergers. In the evaluation of case studies, 19 of 39 dens (i.e., about half the dens) were classified as being early emergers, which is about the average of what would be anticipated if there was no effect of exposure on early emergence.

Response: We agree that emergence dates at dens exposed to human activities would be earlier, on average, than those at undisturbed dens if those human activities caused bears to emerge earlier than they would have under undisturbed conditions. This assumption can be tested across datasets, however, only when other variables are controlled for adequately, and phenology is estimated with similar methods so that “emergence” represents the same activity. Unfortunately, this is not the case with the observer-based estimates from the ITR case studies and those from Andersen et al. (2024), which were estimated from collar temperature data. In Andersen et al. (2024), “emergence” represents the act of opening a den and exposing the relatively warm den to colder ambient air; the date of emergence is estimated by identifying the point in the time-series data when sensor temperature decreases markedly.

In the ITR case studies, emergence is estimated as the first day a bear was seen outside of a den, which means that these estimates represent the latest possible date that a bear could have

emerged. Because bears can open dens days before they exit the den for the first time, and because polar bears can spend >97% of their time in the den during the post-emergence period (Smith et al. 2013; Robinson 2014), it is likely that bears in many case studies opened their dens (or left their dens for the first time) before they were first observed. In the absence of emergence dates estimated with similar methodology that ensures estimates represent the same denning event, a comparison of median emergence dates is inappropriate as a test for an effect of disturbance on emergence. Because the outcomes of case studies during the late denning period are characterized as early or late emergences by comparing the date a bear was first reported on the surface (the maximum possible emergence date) to the mean date of emergence as defined by den opening (the earliest possible emergence date), the process for predicting take is certainly not overly conservative.

Comment: One commenter disputed the Service's assumptions regarding the post-emergence periods and offered their own analysis of some of the scientific materials utilized by the Service.

Response: The median number of days bears spent at the den site after den emergence in the ITR case studies was 3.0 days, not 4 as claimed by the commenter (durations were 18, 8, 3, 2, 1, 3, 6, 0, 2, 3, 14, 5, 14, 6, 2, 4, 4, 0, and 3 days; ranges represent uncertainty in phenology). Consequently, the difference in median durations between the ITR case studies (3.0 days) and productive land-based dens in the Southern Beaufort Sea subpopulation in Andersen et al. (2024; 6.3 days) was 3.3 days, which means that bears in the ITR case studies remained at the den site, on average, only 48 percent of the time bears remained at undisturbed den sites which the commenter acknowledges. Because research has shown that time spent at the den site post-emergence is related to litter survival (Andersen et al. 2024), we cannot ignore the fact that there is a potential for disturbance near a den site to lead to earlier departure. The lack of statistical

difference in time spent at dens post-emergence does not mean there is not a biological effect, especially considering the relatively small sample sizes for comparison.

Further, the commenter is incorrect that we're using the mean time spent at den as our threshold value to determine early departure which then leads to a majority of dens being classified as early departures given the skewed distribution of observations. Instead, we actually use the median time spent at the den for undisturbed dens as our threshold, thus it would not lead to the biases indicated by the commenter. If dens exposed to disturbance were not leaving earlier than undisturbed dens, we would only expect 50% of case study dens to exhibit departures earlier than the median undisturbed den departures. Instead, the case studies show that 68% of dens had shorter time spent at the den post emergence than the median for undisturbed dens.

While it is true that Fig. 3 in Andersen et al. (2024) does show a relationship between emergence and time spent at den post-emergence, that graph was not specific to land-based dens. When restricted to land-based dens only, there is no significant correlation between emergence date and time at the den post-emergence for dens known to have cubs, or for land dens irrespective of cub status.

Lastly, the commenter is incorrect that the Service did not consider post-emergence duration for dens that had an early emergence in the case studies. In fact, we do consider those dens too, but because of the disturbance leading to early emergence, we treat that probability separately in our modeling to ensure that the previous disturbance is being accounted for in the bear's response. We presented those values in the proposed rule and those dens have a lower probability of an early departure (0.33) than if they did not have an early emergence (0.68).

Comment: One commenter stated that the Service's model parameters, which are derived from the Service's case studies, do not reflect the data in the "original sources of information," nor do they account for natural variation in bear denning periods. The commenter states that the Service then applies these probabilities, based on "inaccuracies," which compounds conservative assumptions and leads to unrealistic results.

Response: We articulated our decision-making process in the published, peer-reviewed study Woodruff et al. (2022), and our model parameters are consistent with the information in the case studies. There is no compounding of conservative assumptions. Recently published studies have shown there is an effect of early emergence/early departure on litter survival. Because these relationships are dependent on how far along in the denning period a den is when it is disturbed, we needed to add a date on which the disturbance occurred and therefore how those updated emergence/departure dates translated into litter survival. Much of the activity conducted by member companies of AOGA occur year-round, so if a disturbance occurs during a denning period in our analysis, we need to simulate the date at which it occurred. But the simulation could mean, for example, that a den was disturbed only a day before its intended emergence date, in which case the impact on a litter's survival would be small. The converse is also true, but it highlights that this approach does not compound "conservative assumptions," but rather objectively allows variation in how disturbance affects denning polar bears.

It is not accurate to imply that all of the model's assumptions are conservative in nature. The Service and partners have developed numerous peer-reviewed and published papers that we use to more objectively inform parameters used in the model. Where we still lack adequate data, we may use our best professional judgment to develop and implement reasonable assumptions. It is false to suggest that all of our assumptions are conservative. Our assumptions, some of which are more likely to err on the side of overestimating take, and some of which are more likely to err on the side of underestimating take, are structured to, on balance, achieve the maximum degree of accuracy currently possible.

Comment: Several commenters state the probabilistic inputs to the denning model skew results because they include events that are unrepresentative of Industry activities, such as researchers engaging in invasive activities like collaring. Specifically, one commenter states that the case study dataset includes 41 records that involve invasive research activities that have a greater likelihood of incidental take than the industrial activity to which they are applied.

Response: The commenter is largely incorrect. While we did include studies such as those in Woodruff et al. (2022), we removed them (and state as such) from the set that is used to inform disturbance probabilities applied to Industry because we agree that den intrusions, collaring, and other invasive research-related activities do not typically have corollaries with industrial activities on the North Slope of Alaska. As we stated in a previous response, we established a new decision rule in response to comments to exclude case studies from our disturbance probability calculations this rule excludes any case study where researchers captured bears during den establishment from disturbance probability calculations.

We also continuously update our set of dens used to estimate disturbance probabilities. In the denning analyses conducted for this proposed rule, we included four additional dens that had been exposed to industrial activity on the North Slope (without regard to whether the activities were conducted pursuant to the 2021-ITRs). Two of these occurrences indicated impacts consistent with Level A harassment, and the other two were examples of bears exhibiting resilience to disturbance.

Comment: Commenters suggested that the case studies used in the Service's analyses resulted in an overestimation of effects of oil and gas activities to denning polar bears. The commenters specifically cited case studies 8 and 32 as cases they felt were not applicable to the Service's analysis.

Response: We set clear parameters, outlined in the 2021-ITRs, to determine the inclusion of case studies into our disturbance distributions. Following those parameters, case study 8 and case study 32 were both retained and used to calculate den abandonment probabilities. In response to comments, we have re-evaluated the inclusion of research-related studies, and established a new decision rule to exclude case studies from our disturbance probability calculations this rule excludes any case study where researchers captured bears during den establishment from disturbance probability calculations. We have subsequently removed case 8 from our calculation of disturbance probabilities. In case study 32, we determined there was a

potential for den abandonment and subsequent cub mortality. While the commenter accurately notes that the Service's trip report does not confirm cub death, it does not definitively rule it out, importantly noting that faint, parallel lines were found in the snow near old fox tracks, potentially indicating scavenger activity. As such, we feel both cases are applicable in our analysis, and should be retained in the disturbance probability calculations.

Comment: A commenter stated that a decrease in cub survival of 14 percent will lead to population decline and thus a non-negligible impact.

Response: As we stated in the proposed rule, a decrease in cub survival is anticipated for only a very small number of dens, representing only 1.8 percent of land-based SBS dens and 0.9 percent of all SBS dens that exist that year. We do not anticipate this limited amount of impact to lead to population decline in the SBS stock.

Comment: Several commenters stated that, given the decline of the Southern Beaufort Sea population, its small size, the poor recruitment due to low cub survival rates, predicted habitat loss and climate-related effects, and the greater importance of land dens given their greater likelihood of yielding cubs that survive, the loss of even one additional cub is very significant to the long-term survival of the stock, and certainly cannot be written off as a negligible impact. The commenters further stated that the Service's own revised modeling shows multiple deaths of cubs based on the 5-year cumulative impacts, as described above.

Response: For reasons explained in our negligible impact determination, we disagree with commenters' conclusory assertion that the loss of one cub is inconsistent with the negligible impact standard. We also disagree that the limited loss of cubs estimated in our 5-year analysis would obstruct the stock's recovery. Our analysis is informed by studies such as Regehr et al. (2017), which showed that a polar bear population declining due to sea ice loss can withstand continued harvest at current levels without hindering the persistence of the population. While this rule does not pertain to harvest or contemplate additional removals at levels approaching ongoing subsistence harvest rates, we acknowledge the general principle that small levels of

removal can occur, under the theory of compensatory mortality (e.g., Burnham and Anderson 1984, Bartmann et al. 1992), without leading to declines in long-term persistence.

Comment: Several commenters asserted that continued oil and gas activities are incompatible with polar bear conservation efforts and objected to the Service authorizing oil and gas activities, or take incidental to oil and gas activities, within the range of SBS polar bears. Further, two commenters stated that the Service did not incorporate the potential effects of climate change and Arctic warming on polar bears and their habitat within the range of SBS polar bears.

Response: The Service does not authorize oil and gas activities in the Southern Beaufort Sea area, only the take of small numbers of polar bears and Pacific walrus incidental to these activities. We acknowledge the effects of climate change and sea ice loss are the largest threat to SBS polar bears. However, as we have presented during this rulemaking, we do not believe that the incidental takes by Level B and Level A harassment that are anticipated pose a critical threat to the stock. We have presented a comprehensive background on polar bear biology, habitats, prey, spill risk, climate change, and potential consequence of disturbance in the original 2021-ITRs.

Comment: One commenter stated that the Service's discussion on the relationship between potential male cub death and population recruitment irrationally ignores that killing cubs, regardless of their gender, necessarily prevents the addition of a new individual to the population and instead focuses only on the reproductive capacity of the lost individual. They also take issue with the Service's statement that "loss of less than one female cub per year is within the natural variability" and therefore "cannot be reasonably expected to cause an adverse impact on annual rates of recruitment," as this statement irrationally ignores that these cub deaths caused by the activities under the 2021-ITRs are additional to the "natural" cub deaths from other causes. The commenter also states that the Service fails to address that the "natural" cub deaths

reflect a cub mortality level that has prevented the population from increasing after it was devastated.

Response: The Service is not authorizing the lethal take of cubs in this rule but acknowledges that there is the potential for decreased survival rates of cubs due to disturbance at the den site. The Service's negligible impact analysis focuses on potential impacts at the stock level. Because recruitment occurs on an annual basis, and because cubs generally have high mortality rates during their first year even in the absence of disturbance, we show that the potential death of 1–2 cubs is unlikely to lead to population-level effects, especially when considering the concept of compensatory mortality, wherein human-caused removals are compensated for by a decrease in other density-dependent sources of mortality. Further, while it is true that the death of a male cub would still lead to a reduction of the population by one individual, we again find that the potential loss of a male cub is less influential on stock dynamics than the loss of a female cub. This assumption is firmly established in the field of wildlife management with few exceptions that do not apply here (e.g., Allee effects).

The commenter states that any potential cub death would be in addition to natural cub deaths; however, this statement oversimplifies population ecology and fails to take into account the potential causes of death that may happen between spring of a cub's first year and the time of its reproductive maturity. The commenter incorrectly states that the SBS polar bear population is currently in decline. While it is true that the subpopulation has exhibited a decline beginning in the early 2000s, that decline appears to have stabilized based on the current science that we cite (Bromaghin et al. 2021). No one is certain about the cause of the decline, but it has been suggested to have been associated with a die-off of seals during the early/mid 2000s, which has since abated. We are not certain on what information the commenter is basing a claim that the subpopulation's decline has been due to high rates of cub death.

Comment: One commenter stated that the Service must consider whether loss of one or more cubs impairs the prospects for stabilizing the stock or reversing decline to attain improved

population growth rates. The commenter further stated that a taking that will potentially impair the survival of a number of polar bears exceeding the PBR [potential biological removal] estimated for the SBS stock cannot be a negligible impact, and an impact that would cumulate with other sources of anthropogenic take to result in potential deaths exceeding the PBR similarly cannot be a negligible impact.

Response: We disagree that the data clearly indicate that SBS bears are a declining population. The last two population assessments have shown the decline that occurred in the early 2000s has since abated and the population is currently stable.

Oil and gas activities have occurred in the region of the 2021-ITRs for several decades. These activities occurred prior to the SBS polar bear stock's decline in the early to mid-2000s, during that period of decline, and in more recent years as the population has stabilized. We are unaware of any data demonstrating a link between the types of activities considered here and fluctuations in SBS polar bear stock numbers. While no one is certain about the cause of the decline in the early to mid-2000s, it has been suggested that the decline was associated with a die-off of seals during the early/mid 2000s, which has since abated. In any event, available data does not support the commenter's assumption that oil and gas activities in the region of the 2021-ITRs are causing population-level declines or are inconsistent with the stock increasing in the future.

Our negligible impact analyses consider the impacts of the total taking in light of the baseline of existing impacts to the stock, which here include climate change, subsistence harvest, variability in prey abundance, and other factors. For the reasons explained in the negligible impact determination, the Service does not expect or think it likely that impacts properly attributed to the take considered in this rule will result in a non-negligible impact to the stock.

Comment: Once commenter indicated concern about the lack of consideration of the intrinsic value of individual polar bears and the reduction of impacted bears to statistics.

Response: Under the MMPA, we are tasked with assessing the potential impacts on marine mammal stocks. Statistical analysis helps us better understand these impacts and should not be construed as disrespecting the intrinsic value of polar bears.

Comment: One commenter stated that the Service did not adequately address risks of oil spills.

Response: We presented a comprehensive risk assessment of the potential for major oil spills in the initial rulemaking for the period 2021–2026, and we do not have any new information to warrant revising that analysis. The Service is an active participant in State-wide oil spill response and works cooperatively with Industry members, oil spill response organizations, and organizations like the Alaska Zoo to maintain preparedness in the event of an oil spill.

Comment: Some commenters suggested that the Service did not adequately address effects to movement corridors and of sea ice loss when considering revisions to the 2021 rule.

Response: No current literature supports the idea of Industry activities impacting polar bear movement throughout the area of the 2021-ITRs. The Service is actively conducting capture and tagging work within the oilfield to gather more information on polar bear movements; however, at this time there is no indication that bear movements are impacted by Industry presence.

Comment: One commenter stated that the Service's citation of 15.5 percent of encounters resulting in Level B harassment is an overestimate.

Response: We disagree. The Service's assessment of past polar bear encounter records has indicated roughly 15.5 percent of polar bear encounters entail Level B harassment. Our take determinations have been conducted through careful consideration by Federal wildlife biologists with years of polar bear experience.

Comment: One commenter stated that the harassment rate for polar bears used in the surface analyses should not include polar bear encounters in which intentional take occurred.

Response: The harassment rate referenced by the commenter pertains to surface interactions and Level B harassment only, not the Level A harassment that was the focus of the court remand and is the focus of this revised rule. While we continue to welcome information and suggestions that may improve our future analyses, we are not aware of any information that warrants revising our estimates of Level B harassment at this time. We reviewed the information concerning the frequency of Level B harassment occurring during activities authorized under the 2021-ITRs and found no information suggesting the rates of Level B harassment are different than those contemplated in the original rule.

Comment: One commenter stated that the Service overestimated the surface encounter rate for polar bears in coastal waters when estimating takes by Level B harassment.

Response: The encounter rate referenced by the commenter pertains to surface interactions and Level B harassment only, not the Level A harassment that was the focus of the court remand and is the focus of this revised rule. While we continue to welcome information and suggestions that may improve our future analyses, we are not aware of any information that warrants revising our estimates of Level B harassment at this time.

Comment: One commenter stated that the Service did not account for repeated encounters of the same individual polar bears and, as a result, overestimated the number of animals taken by Level B harassment.

Response: The harassment rate referenced by the commenter pertains to surface interactions and Level B harassment only, not the Level A harassment that was the focus of the court remand and is the focus of this revised rule. While we continue to welcome information and suggestions that may improve our future analyses, we are not aware of any information that warrants revising our estimates of Level B harassment at this time.

Comment: One commenter argued that the Service's surface analysis, which relies upon polar bear encounter rates, estimates of human occupancy, and a harassment rate to estimate take by Level B harassment, is not supported by best available science because the addition of new

facilities and infrastructure does not correlate with an increase in the number of harassment events. The commenter also argues that “occupancy” is not an act of pursuit, torment, or annoyance and therefore cannot constitute harassment under the MMPA.

Response: Occupancy rates feed into the Service’s larger modeling analysis and further our understanding of how, when, and where the specified activities may interact with, and cause impacts to, SBS polar bears. The Service recognizes that many of the specified activities are seasonal. Contrary to what the comment suggests, occupancy rates are applied in order to refine estimates of take such that they are limited to those times and locations where Industry acts create stimuli that can affect polar bears. The Service does not view a departure from this approach as warranted at this time.

Comment: One commenter disagreed that the Service has authority to authorize Level A harassment when it has not been requested by the petitioner.

Response: The Service has revised the 2021-ITRs in a manner consistent with its updated analysis and the remand instructions.

Required Determinations

National Environmental Policy Act (NEPA)

We prepared a final supplemental environmental assessment (EA) and finding of no significant impact (FONSI) in accordance with NEPA (42 U.S.C. 4321 et seq.). We found that issuance of this final rule would not significantly affect the quality of the human environment and, thus, preparation of an environmental impact statement for this rulemaking action is not required by section 102(2) of NEPA or its implementing regulations. A copy of the EA and FONSI can be obtained from the locations described in **ADDRESSES**.

Endangered Species Act (ESA; 16 U.S.C. 1531 et seq.)

Under the ESA, 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. The polar bear is listed as a threatened species under the ESA at 50 CFR 17.11(h) with provisions issued under section 4(d) of the ESA at 50 CFR 17.40(q) and designated critical habitat for polar bear subpopulations in the United States at 50 CFR 17.95(a). Prior to issuance of this final rule, we completed intra-Service section 7 consultation with the Service's Northern Alaska Field Office regarding the effects of these revised regulations. The Service has found that the issuance of this final rule will not jeopardize the continued existence of polar bears or adversely modify their designated critical habitat, not will it affect other listed species or designated critical habitat. The evaluations and findings that resulted from this consultation are available on the Service's website and at <https://www.regulations.gov>.

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866, as reaffirmed by E.O. 13563, provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules, as defined by E.O. 12866. OIRA has determined that this rule is significant under E.O. 12866.

As reported in the preamble to the 2021-ITRs, Industry expenses were expected to be related to, but not necessarily limited to: the development of requests for LOAs; monitoring, recordkeeping, and reporting activities conducted during Industry oil and gas operations; development of polar bear interaction plans; and coordination with Alaska Natives to minimize effects of operations on subsistence hunting. Realistically, these costs are minimal in comparison to those related to actual oil and gas exploration, development, and production operations. As is presently the case, profits will accrue to Industry; royalties and taxes will accrue to the Government; and the 2021-ITRs likely had little or no impact on decisions by Industry to relinquish tracts and write off bonus payments. Compliance with the revisions made by this final rule is not expected to result in additional costs to Industry.

OIRA has determined that this rule does not meet the criteria set forth in 5 U.S.C. 804(2), subtitle E of the Small Business Regulatory Enforcement Fairness Act. This rule is not likely to result in a major increase in costs or prices for consumers, individual industries, or government agencies or have significant adverse effects on competition, employment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Regulatory Flexibility Act

We have also determined that this rule would not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). Oil companies and their contractors conducting exploration, development, and production activities in Alaska have been identified as the only likely applicants under the regulations, and these potential applicants have not been identified as small businesses. Therefore, neither a regulatory flexibility analysis nor a small entity compliance guide is required.

Takings Implications

This rule does not have takings implications under Executive Order 12630 because it authorizes the nonlethal, incidental, but not intentional, take of polar bears by Industry and thereby, exempts these companies from civil and criminal liability as long as they operate in compliance with the terms of their LOAs. Therefore, a takings implications assessment is not required.

Federalism Effects

This rule does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under Executive Order 13132. The MMPA gives the Service the authority and responsibility to protect polar bears.

Unfunded Mandates Reform Act

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), this rule would not “significantly or uniquely” affect small governments. A small government agency

plan is not required. The Service has determined and certifies pursuant to the Unfunded Mandates Reform Act that this rulemaking will not impose a cost of \$100 million or more in any given year on local or State governments or private entities. Therefore, this rule is not a “significant regulatory action” under the Unfunded Mandates Reform Act.

Government-to-Government Coordination

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 Alaskan Tribal organizations and communities.

Our efforts are guided by the following policies and directives:

- (1) The Native American Policy of the Service (January 20, 2016);
- (2) The Alaska Native Relations Policy;
- (3) Executive Order 13175 (January 9, 2000);
- (4) Department of the Interior Secretary’s 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 rule on federally recognized Alaska Native Tribes and ANCSA (Alaska Native Claims Settlement Act) Corporations. The Service determined that additionally authorizing two takes by Level A harassment of polar bears during the remaining 2 years of the 2021-ITRs, with no more than two Level A harassment takes occurring within a single year from the SBS stock of polar bears, 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. Nevertheless, and to ensure Alaska Native Tribes and Corporations were aware of this regulatory action, the Service wrote to potentially affected Tribal Governments and Corporations to inform them of the proposed rule changes and seeking their comment; however, the Service did not receive any requests for consultations or any such comments. The Service invites continued discussion as we implement this final rule.

Civil Justice Reform

The Department's Office of the Solicitor has determined that these regulations do not unduly burden the judicial system and meet the applicable standards provided in sections 3(a) and 3(b)(2) of Executive Order 12988.

Paperwork Reduction Act

This rule requests a revision to an existing information collection. All information collections (ICs) require approval under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). We may not conduct or sponsor, and you are not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB previously reviewed and approved the information collection requirements associated with incidental take of marine mammals in 50 CFR subparts J and L and assigned OMB Control Number 1018–0070 (expires July 31, 2026).

In accordance with the PRA and its implementing regulations at 5 CFR 1320.8(d)(1), we provide the general public and other Federal agencies with an opportunity to comment on our proposal to revise OMB Control Number 1018–0070 and on our request for a new control number as described below. This input will help us assess the impact of our information collection requirements and minimize the public's reporting burden. It will also help the public understand our information collection requirements and provide the requested data in the desired format.

As part of our continuing effort to reduce paperwork and respondent burdens, and in accordance with 5 CFR 1320.8(d)(1), we invite the public and other Federal agencies to comment on any aspect of this proposed information collection, including:

(1) Whether or not the collection of information is necessary for the proper performance of the functions of the agency, including whether or not the information will have practical utility;

(2) The accuracy of our estimate of the burden for this collection of information, including the validity of the methodology and assumptions used;

(3) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(4) Ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of response.

Comments that you submit in response to this rulemaking are a matter of public record. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

This is a nonform collection. Respondents must comply with the regulations at 50 CFR part 18, which outline the procedures and requirements for submitting a request. Specific regulations governing authorized incidental take of marine mammal activities are contained in 50 CFR part 18, subparts J (incidental take of polar bears and Pacific walrus in the Beaufort Sea) and L (incidental take of northern sea otters in the Gulf of Alaska). These regulations provide the applicant with a detailed description of information that we need to evaluate the proposed activity and determine if it is appropriate to issue specific regulations and, subsequently, LOAs.

We use the information to verify the findings required to issue incidental take regulations, to decide if we should issue an LOA, and (if an LOA is issued) what conditions should be included in the LOA. In addition, we analyze the information to determine impacts to polar bears, Pacific walruses, northern sea otters, and the availability of those marine mammals for subsistence purposes of Alaska Natives.

In conjunction with this rulemaking, we will request OMB approval of the following:

(1) ***Revise and renew OMB Control No. 1018-0070 to retain the currently approved ICs and burden estimates associated with 50 CFR part 18, subpart J – Beaufort Sea***—This ITR in subpart J, issued to the Alaska Oil and Gas Association (AOGA) is effective August 5, 2021, through August 5, 2026. It authorizes the nonlethal incidental, but not intentional, take of small numbers of polar bear and Pacific walrus for oil and gas exploration, development, and production activities in the Beaufort Sea and adjacent northern coast of Alaska. Unless a new ITR is issued for subpart J, we will discontinue OMB Control No. 1018–0070 when the ITR expires in 2026.

We request OMB approval to renew the following ICs and to adjust the currently approved burden associated with the ICs in subpart J that will remain in OMB Control No. 1018–0070:

(A) ***Incidental Take of Marine Mammals – Application for Regulations***—Regulations at 50 CFR part 18 require the applicant to provide information on the activity as a whole, which includes, but is not limited to, an assessment of total impacts by all persons conducting the activity. Applicants can find specific requirements in 50 CFR part 18, subpart J. These regulations provide the applicant with a detailed description of information that we need to evaluate the proposed activity and determine whether to issue specific regulations and, subsequently, LOAs. The required information includes:

1. A description of the specific activity or class of activities that can be expected to result in incidental taking of marine mammals.

2. The dates and duration of such activity and the specific geographical region where it will occur.
3. Based on the best available scientific information, each applicant must also provide:
 - a. An estimate of the species and numbers of marine mammals likely to be taken by age, sex, and reproductive conditions;
 - b. The type of taking (e.g., disturbance by sound, injury or death resulting from collision, etc.) and the number of times such taking is likely to occur;
 - c. A description of the status, distribution, and seasonal distribution (when applicable) of the affected species or stocks likely to be affected by such activities;
 - d. The anticipated impact of the activity upon the species or stocks; and
 - e. The anticipated impact of the activity on the availability of the species or stocks for subsistence uses.
4. The anticipated impact of the activity upon the habitat of the marine mammal populations and the likelihood of restoration of the affected habitat.
5. The availability and feasibility (economic and technological) of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, their habitat, and, where relevant, on their availability for subsistence uses, paying particular attention to rookeries, mating grounds, and areas of similar significance. (The applicant and those conducting the specified activity and the affected subsistence users are encouraged to develop mutually agreeable mitigating measures that will meet the needs of subsistence users.)
6. Suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species through an analysis of the level of taking or impacts and suggested means of minimizing burdens by coordinating such reporting requirements with other schemes already applicable to persons conducting such activity.

7. Suggested means of learning of, encouraging, and coordinating research opportunities, plans, and activities relating to reducing such incidental taking from such specified activities, and evaluating its effects.

8. Applicants must develop and implement a site-specific (or umbrella plan addressing site-specific considerations), Service-approved marine mammal monitoring and mitigation plan to monitor and evaluate the effectiveness of mitigation measures and the effects of activities on marine mammals and the subsistence use of these species.

9. Applicants must also provide trained, qualified, and Service-approved onsite observers to carry out monitoring and mitigation activities identified in the marine mammal monitoring and mitigation plan.

This information is necessary for the Service to anticipate the impact of the activity on the species or stocks and on the availability of the species or stocks for Alaska Native subsistence uses. Under requirements of the MMPA, we cannot authorize a take unless the total of all takes will have a negligible impact on the species or stocks and, where appropriate, will not have an unmitigable adverse impact on the availability of the species or stocks for subsistence uses. These requirements ensure that applicants are aware of related monitoring and research efforts they can apply to their situation, and that the monitoring and reporting that we impose are the least burdensome to the applicant.

(B) *Incidental Take of Marine Mammals – Requests for LOA*—LOAs, which may be issued only to U.S. citizens, are required to conduct activities pursuant to any specific regulations established. Once specific regulations are effective, the Service will, to the maximum extent possible, process subsequent requests for LOAs within 30 days after receipt of the request by the Service. All LOAs will specify the period of validity and any additional terms and conditions appropriate for the specific request. Issuance of LOAs will be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under the specific regulations.

(C) *Incidental Take of Marine Mammals – Final Monitoring Report*—The results of monitoring and mitigation efforts identified in the marine mammal monitoring and mitigation plan must be submitted to the Service for review within 90 days of the expiration of an LOA. Upon request, final report data must be provided in a common electronic format (to be specified by the Service). Information in the final (or annual) report must include, but is not limited to:

1. Copies of all observation reports submitted under the LOA;
2. A summary of the observation reports;
3. A summary of monitoring and mitigation efforts including areas, total hours, total distances, and distribution;
4. Analysis of factors affecting the visibility and detectability of walruses and polar bears during monitoring;
5. Analysis of the effectiveness of mitigation measures;
6. Analysis of the distribution, abundance, and behavior of walruses and/or polar bears observed; and
7. Estimates of take in relation to the specified activities.

(D) *Polar Bear Den Detection Report*—Holders of an LOA seeking to carry out onshore activities in known or suspected polar bear denning habitat during the denning season must make efforts to locate occupied polar bear dens within and near proposed areas of operation. They may use any appropriate tool, such as forward-looking infrared imagery and/or polar bear scent-trained dogs, in concert with denning habitat maps along the Alaskan coast.

1. In accordance with 50 CFR 18.128(b)(1) and (b)(2), LOA holders must report all observed or suspected polar bear dens to us prior to the initiation of activities. We use this information to determine the appropriate terms and conditions in an individual LOA in order to minimize potential impacts and disturbance to polar bears.

2. Holders of an LOA seeking to carry out onshore activities during the denning season (November–April) must conduct two separate surveys for occupied polar bear dens in all

denning habitat within 1.6 km (1 mi) of proposed activities using aerial infrared (AIR) imagery. Further, all denning habitat within 1.6 km (1 mi) of areas of proposed seismic surveys must be surveyed three separate times with AIR technology.

3. Flight crews will record and report environmental parameters including air temperature, dew point, wind speed and direction, cloud ceiling, and percent humidity, and a flight log will be provided to the Service within 48 hours of the flight.

(E) *In-season Monitoring – Activity Progress Reports*—Holders of an LOA must:

1. Notify the Service at least 48 hours prior to the onset of activities;

2. Provide the Service weekly progress reports of any significant changes in activities and/or locations; and

3. Notify the Service within 48 hours after ending of activities.

(F) *In-season Monitoring – Observation Reports*—Holders of an LOA must report, within 48 hours, all observations of polar bears and potential polar bear dens, during any Industry activity. Upon request, monitoring report data must be provided in a common electronic format (to be specified by the Service). Information in the observation report must include, but is not limited to:

1. Date, time, and location of observation;
2. Number of bears;
3. Sex and age of bears (if known);
4. Observer name and contact information;
5. Weather, visibility, sea state, and sea-ice conditions at the time of observation;
6. Estimated closest distance of bears from personnel and facilities;
7. Industry activity at time of sighting;
8. Possible attractants present;
9. Bear behavior;
10. Description of the encounter;

11. Duration of the encounter; and

12. Mitigation actions taken.

(G) *Notification of LOA Incident Report*—Holders of an LOA must report, as soon as possible, but within 48 hours, all LOA incidents during any Industry activity. An LOA incident is any situation when specified activities exceed the authority of an LOA, when a mitigation measure was required but not enacted, or when injury or death of a marine mammal occurs.

Reports must include:

1. All information specified for an observation report;
2. A complete detailed description of the incident; and
3. Any other actions taken.

(H) *Mitigation – Interaction Plan*—All holders of an LOA must have an approved polar bear safety, awareness, and interaction plan on file with the Service’s Marine Mammals Management Office and onsite and provide polar bear awareness training to certain personnel.

Interaction plans must include:

1. The type of activity and where and when the activity will occur (i.e., a summary of the plan of operation);
2. A food, waste, and other “bear attractants” management plan;
3. Personnel training policies, procedures, and materials;
4. Site-specific walrus and bear interaction risk evaluation and mitigation measures;
5. Bear avoidance and encounter procedures; and
6. Bear observation and reporting procedures.

(I) *Mitigation – 3rd Party Notifications*—All applicants for an LOA must contact affected Alaska Native subsistence communities and hunter organizations to discuss potential conflicts caused by the activities and provide the Service documentation of communications.

(J) *Mitigation – Requests for Exemption Waivers*—Exemption waivers to the operating conditions in 50 CFR 18.126(c) may be issued by the Service on a case-by-case basis,

based upon a review of seasonal ice conditions and available information on walrus and polar bear distributions in the area of interest.

(K) *Mitigation – Plan of Cooperation*—When appropriate, a holder of an LOA will be required to develop and implement a Service-approved plan of cooperation (POC).

1. The POC must include a description of the procedures by which the holder of the LOA will work and consult with potentially affected Alaska Native subsistence hunters and a description of specific measures that have been or will be taken to avoid or minimize interference with subsistence hunting of otters, walruses, and polar bears and to ensure continued availability of the species for subsistence use.

2. The Service will review the POC to ensure that any potential adverse effects on the availability of the animals are minimized. The Service will reject POCs if they do not provide adequate safeguards to ensure the least practicable adverse impact on the availability of walruses and polar bears for subsistence use.

(2) *Revise OMB Control No. 1018–0070 to remove references to, and all burden associated with, information collections (ICs) in 50 CFR part 18, subpart K – Cook Inlet, to include updating the title of this collection*—The ITR in 50 CFR subpart K, issued to Hilcorp Alaska, LLC, Harvest Alaska, LLC, and the Alaska Gasline Development Corporation on August 1, 2019, authorized the nonlethal, incidental, but not intentional, take of small numbers of northern sea otters (*Enhydra lutris kenyoni*) for activities associated with or in support of oil and gas exploration, development, production, and transportation in Cook Inlet, Alaska. This ITR expired on August 1, 2024, and is no longer active; therefore, we are removing the reference to the ICR, along with the associated burden, from OMB Control No. 1018–0070.

(3) *Request a new control number for the currently approved ICs and burden estimates associated with 50 CFR part 18, subpart L – U.S. Coast Guard*—We will submit a separate information collection request to OMB for approval that will contain the applicable ICs and associated burden for subpart L previously approved by OMB under OMB Control No.

1018–0070. The ITR in subpart L, effective May 19, 2023, authorizes the nonlethal, incidental, unintentional take by harassment of small numbers of northern sea otters (otters; *Enhydra lutris kenyoni*) while engaged in activities associated with or in support of marine construction activities in the Gulf of Alaska. Unless a new ITR is issued for subpart L, we will discontinue the newly assigned control number when the ITR expires on May 19, 2028.

We propose to transfer the following currently approved ICs from OMB Control No. 1018–0070 into a new control number:

(A) *Incidental Take of Marine Mammals – Application for Regulations*—Regulations at 50 CFR part 18 require the applicant to provide information on the activity as a whole, which includes, but is not limited to, an assessment of total impacts by all persons conducting the activity. Applicants can find specific requirements in 50 CFR part 18, subpart J. These regulations provide the applicant with a detailed description of information that we need to evaluate the proposed activity and determine whether to issue specific regulations and, subsequently, LOAs. The required information includes:

1. A description of the specific activity or class of activities that can be expected to result in incidental taking of marine mammals.
2. The dates and duration of such activity and the specific geographical region where it will occur.
3. Based on the best available scientific information, each applicant must also provide:
 - a. An estimate of the species and numbers of marine mammals likely to be taken by age, sex, and reproductive conditions;
 - b. The type of taking (e.g., disturbance by sound, injury or death resulting from collision, etc.) and the number of times such taking is likely to occur;
 - c. A description of the status, distribution, and seasonal distribution (when applicable) of the affected species or stocks likely to be affected by such activities;

- d. The anticipated impact of the activity upon the species or stocks; and
- e. The anticipated impact of the activity on the availability of the species or stocks for subsistence uses.

4. The anticipated impact of the activity upon the habitat of the marine mammal populations and the likelihood of restoration of the affected habitat.

5. The availability and feasibility (economic and technological) of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, their habitat, and, where relevant, on their availability for subsistence uses, paying particular attention to rookeries, mating grounds, and areas of similar significance. (The applicant and those conducting the specified activity and the affected subsistence users are encouraged to develop mutually agreeable mitigating measures that will meet the needs of subsistence users.)

6. Suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species through an analysis of the level of taking or impacts and suggested means of minimizing burdens by coordinating such reporting requirements with other schemes already applicable to persons conducting such activity.

7. Suggested means of learning of, encouraging, and coordinating research opportunities, plans, and activities relating to reducing such incidental taking from such specified activities, and evaluating its effects.

8. Applicants must develop and implement a site-specific (or umbrella plan addressing site-specific considerations), Service-approved marine mammal monitoring and mitigation plan to monitor and evaluate the effectiveness of mitigation measures and the effects of activities on marine mammals and the subsistence use of these species.

9. Applicants must also provide trained, qualified, and Service-approved onsite observers to carry out monitoring and mitigation activities identified in the marine mammal monitoring and mitigation plan.

This information is necessary for the Service to anticipate the impact of the activity on the species or stocks and on the availability of the species or stocks for Alaska Native subsistence uses. Under requirements of the MMPA, we cannot authorize a take unless the total of all takes will have a negligible impact on the species or stocks and, where appropriate, will not have an unmitigable adverse impact on the availability of the species or stocks for subsistence uses. These requirements ensure that applicants are aware of related monitoring and research efforts they can apply to their situation, and that the monitoring and reporting requirements that we impose are the least burdensome to the applicant.

(B) *Incidental Take of Marine Mammals – Requests for LOA*—LOAs, which may be issued only to U.S. citizens, are required to conduct activities pursuant to any specific regulations established. Once specific regulations are effective, the Service will, to the maximum extent possible, process subsequent requests for LOAs within 30 days after receipt of the request by the Service. All LOAs will specify the period of validity and any additional terms and conditions appropriate for the specific request. Issuance of LOAs will be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under the specific regulations.

(C) *Incidental Take of Marine Mammals – Final Monitoring Report*—The results of monitoring and mitigation efforts identified in the marine mammal monitoring and mitigation plan must be submitted to the Service for review within 90 days of the expiration of an LOA. Upon request, final report data must be provided in a common electronic format (to be specified by the Service). Information in the final (or annual) report must include, but is not limited to:

1. A summary of monitoring efforts (hours of monitoring, activities monitored, number of PSOs, and, if requested by the Service, the daily monitoring logs).
2. A description of all project activities, along with any additional work yet to be done. Factors influencing visibility and detectability of otters (e.g., sea state, number of observers, and fog and glare) will be discussed.

3. A description of the factors affecting the presence and distribution of sea otters (e.g., weather, sea state, and project activities). An estimate will be included of the number of sea otters exposed to noise at received levels greater than or equal to 160 dBRMS re: 1 μ Pa (decibels root-mean squared referenced to 1 microPascal) (based on visual observation).

4. A description of changes in sea otter behavior resulting from project activities and any specific behaviors of interest.

5. A discussion of the mitigation measures implemented during project activities and their observed effectiveness for minimizing impacts to sea otters. Sea otter observation records will be provided to the Service in the form of electronic database or spreadsheet files.

(D) *In-season Monitoring – Activity Progress Reports*—Holders of an LOA must:

1. Notify the Service at least 48 hours prior to the onset of activities;
2. Provide the Service weekly progress reports of any significant changes in activities and/or locations;
3. Injured, dead, or distressed sea otters that are not associated with project activities (e.g., animals known to be from outside the project area, previously wounded animals, or carcasses with moderate to advanced decomposition or scavenger damage) must be reported to the Service within 24 hours of the discovery to either the Service MMM (1–800–362–5148, business hours); or the Alaska SeaLife Center in Seward (1–888–774–7325, 24 hours a day); or both. Photographs, video, location information, or any other available documentation must be provided to the Service.

4. Notify the Service within 48 hours after ending of activities.

(E) *In-season Monitoring – Observation Reports*—Holders of an LOA must report, within 48 hours, all observations of polar bears and potential polar bear dens, during any Industry activity. Upon request, monitoring report data must be provided in a common electronic format (to be specified by the Service). Information in the observation report must include, but is not limited to:

1. Date, time; the observer's locations, heading, and speed (if moving); weather; visibility; number of animals; group size and composition (adults/juveniles); and the location of the animals (or distance and direction from the observer);

2. Initial behaviors of the sea otters, descriptions of project activities and underwater sound levels being generated, the position of sea otters relative to applicable monitoring and mitigation zones, any mitigation measures applied, and any apparent reactions to the project activities before and after mitigation;

3. Distance from the vessel to the sea otter upon initial observation, the duration of the encounter, and the distance at last observation in order to monitor cumulative sound exposures; and

4. Any instances of animals lingering close to or traveling with vessels for prolonged periods of time.

(F) *Notification of LOA Incident Report*—Holders of an LOA must report, as soon as possible, but within 48 hours, all LOA incidents during any Industry activity. An LOA incident is any situation when specified activities exceed the authority of an LOA, when a mitigation measure was required but not enacted, or when injury or death of a marine mammal occurs.

Reports must include:

1. All information specified for an observation report;
2. A complete detailed description of the incident; and
3. Any other actions taken.

(G) *Mitigation – Interaction Plan*—All holders of an LOA must have an approved polar bear safety, awareness, and interaction plan on file with the Service's Marine Mammals Management Office and onsite and provide polar bear awareness training to certain personnel.

Interaction plans must include:

1. The type of activity and where and when the activity will occur (i.e., a summary of the plan of operation);

2. Personnel training policies, procedures, and materials;
3. Site-specific sea otter interaction risk evaluation and mitigation measures;
4. Sea otter avoidance and encounter procedures; and
5. Sea otter observation and reporting procedures.

(H) *Mitigation – 3rd Party Notifications*—All applicants for an LOA must contact affected Alaska Native subsistence communities and hunter organizations to discuss potential conflicts caused by the activities and provide the Service documentation of communications.

(I) *Mitigation – Requests for Exemption Waivers*—Exemption waivers to the operating conditions in 50 CFR 18.126(c) may be issued by the Service on a case-by-case basis, based upon a review of seasonal ice conditions and available information on marine mammal distributions in the area of interest.

(J) *Mitigation – Plan of Cooperation*—When appropriate, a holder of an LOA will be required to develop and implement a Service-approved plan of cooperation (POC).

1. The POC must include a description of the procedures by which the holder of the LOA will work and consult with potentially affected subsistence hunters and a description of specific measures that have been or will be taken to avoid or minimize interference with subsistence hunting of marine mammals and to ensure continued availability of the species for subsistence use.

2. The Service will review the POC to ensure that any potential adverse effects on the availability of the animals are minimized. The Service will reject POCs if they do not provide adequate safeguards to ensure the least practicable adverse impact on the availability of marine mammals for subsistence use.

Title of Collection: Incidental Take of Marine Mammals During Specified Activities, 50 CFR 18.27 and 50 CFR part 18, Subpart J.

OMB Control Number: 1018–0070.

Form Numbers: None.

Type of Review: Revision of a currently approved collection.

Respondents/Affected Public: Oil and gas industry representatives, including applicants for ITRs and LOAs, operations managers, and environmental compliance personnel.

Total Estimated Number of Annual Respondents: 61.

Total Estimated Number of Annual Responses: 201.

Estimated Completion Time per Response: Varies from 1.25 hours to 150 hours, depending on activity.

Total Estimated Number of Annual Burden Hours: 1,426.

Respondent's Obligation: Required to obtain or retain a benefit.

Frequency of Collection: On occasion.

Total Estimated Annual Nonhour Burden Cost: \$350,000.

Title of Collection: Incidental Take of Marine Mammals During Specified Activities, 50 CFR 18.27 and 50 CFR part 18, Subpart L.

OMB Control Number: 1018-0202.

Form Numbers: None.

Type of Review: New.

Respondents/Affected Public: Federal Government – U.S. Coast Guard.

Total Estimated Number of Annual Respondents: 10.

Total Estimated Number of Annual Responses: 22.

Estimated Completion Time per Response: Varies from 1.25 hours to 150 hours, depending on activity.

Total Estimated Number of Annual Burden Hours: 325.

Respondent's Obligation: Required to obtain or retain a benefit.

Frequency of Collection: On occasion.

Total Estimated Annual Nonhour Burden Cost: None.

Send your comments and suggestions on this information collection by the date indicated in **DATES** to the Service Information Collection Clearance Officer, U.S. Fish and Wildlife Service, 5275 Leesburg Pike, MS: PRB (JAO/3W), Falls Church, VA 22041–3803 (mail); or *Info_Coll@fws.gov* (email). Please reference OMB Control Number 1018–New/0070 in the subject line of your comments.

Energy Effects

Executive Order 13211 requires agencies to prepare statements of energy effects when undertaking certain actions. This rule provides exceptions from the MMPA’s taking prohibitions for Industry engaged in specified oil and gas activities in the specified geographic region. By providing certainty regarding compliance with the MMPA, this rule will have a positive effect on Industry and its activities. Therefore, this rule is not expected to significantly affect energy supplies, distribution, or use and does not constitute a significant energy action. No statement of energy effects is required.

References

For a list of the references cited in this rule, see Docket No. FWS–R7–ES–2024–0140, available at <https://www.regulations.gov>.

List of Subjects in 50 CFR Part 18

Administrative practice and procedure, Alaska, Imports, Indians, Marine mammals, Oil and gas exploration, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

For the reasons set forth in the preamble, the U.S. Fish and Wildlife Service amends part 18, subchapter B of chapter I, title 50 of the Code of Federal Regulations as set forth below.

PART 18—MARINE MAMMALS

1. The authority citation for part 18 continues to read as follows:

Authority: 16 U.S.C. 1361 et seq.

§ 18.4 [Removed]

2. Remove § 18.4.

3. Revise § 18.124 to read as follows:

§ 18.124 Authorized take allowed under a Letter of Authorization (LOA).

(a) An LOA allows for the nonlethal, non-injurious, incidental, but not intentional take by Level B harassment, as defined in § 18.3 and under section 3 of the Marine Mammal Protection Act (16 U.S.C. 1362), of Pacific walruses while conducting oil and gas industry exploration, development, and production within the Beaufort Sea ITR region described in § 18.120.

(b) An LOA allows for the nonlethal, incidental, but not intentional take by Level A harassment and Level B harassment, as defined in § 18.3 and under section 3 of the Marine Mammal Protection Act (16 U.S.C. 1362), of polar bears while conducting oil and gas industry exploration, development, and production within the Beaufort Sea ITR region described in § 18.120.

(c) Each LOA will identify terms and conditions for each activity and location.

4. Revise § 18.125 to read as follows:

§ 18.125 Prohibited take under a Letter of Authorization (LOA).

Except as otherwise provided in this subpart, prohibited taking is described in § 18.11 as well as:

(a) Level A harassment, as defined in section 3 of the Marine Mammal Protection Act (16 U.S.C. 1362), of Pacific walruses and intentional take and lethal incidental take of polar bears or Pacific walruses; and

(b) Any take that fails to comply with this subpart or with the terms and conditions of an LOA.

5. Revise § 18.129 to read as follows:

§ 18.129 Information collection requirements.

The Office of Management and Budget (OMB) has approved the information collection requirements contained in this part and assigned OMB Control Number 1018–0070. Federal agencies 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. Direct comments regarding the burden estimate or any other aspect of the information collection to the Service's Information Collection Clearance Officer at the address provided at 50 CFR 2.1(b).

§ 18.152 [Amended]

6. Amend § 18.152 by removing the words “contained in this part and assigned OMB Control Number 1018–0070” and adding in their place the words “contained in this subpart and assigned OMB Control Number 1018–0202”.

Maureen D. Foster,

Chief of Staff,

Exercising the Delegated Authority of the Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2025-11778 Filed: 6/25/2025 8:45 am; Publication Date: 6/26/2025]