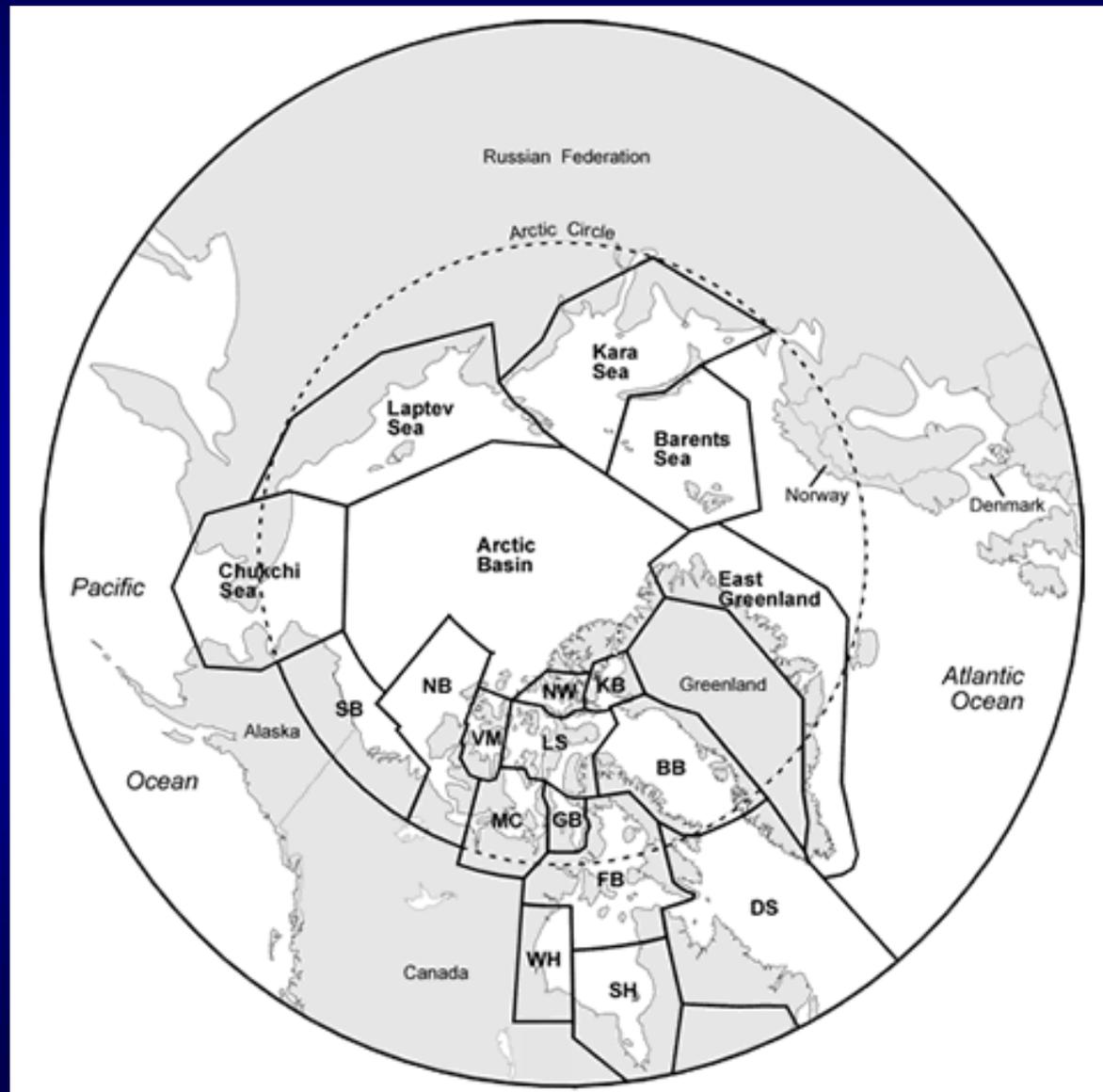


Proposed Polar Bear Critical Habitat in the United States

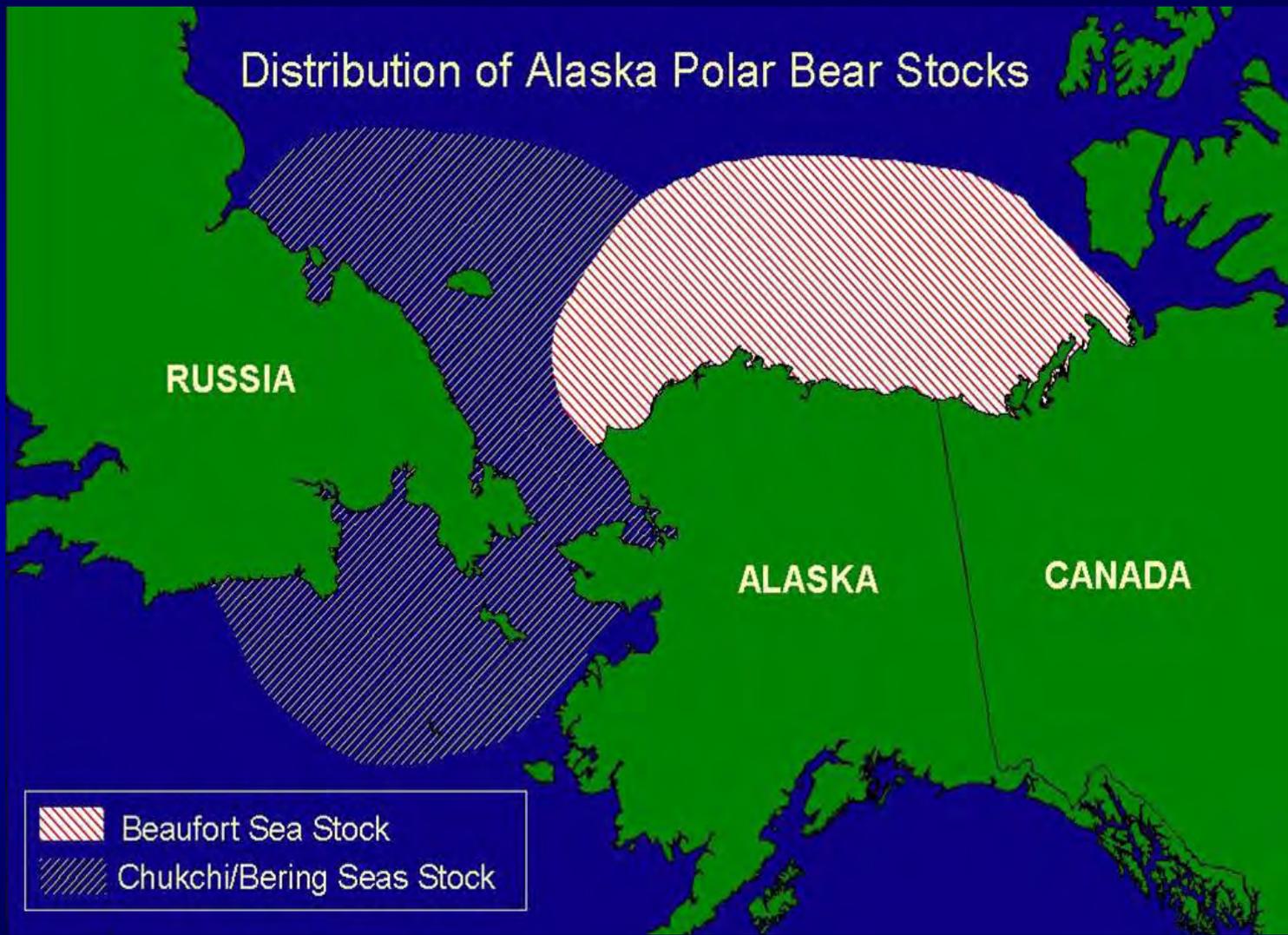


Public Hearing
Barrow, Alaska
17 June 2010

Polar bear distribution in the Arctic



Distribution of Alaska Polar Bear Stocks



Critical Habitat is defined in section 3 of the Endangered Species Act as:

- The specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features
 - ✓Essential to the conservation of the species and
 - ✓Which may require special management considerations or protection; and
- Specific areas outside the geographical area occupied by a species at the time of listing upon a determination that such areas are essential for the conservation of the species.



What Does a Critical Habitat Designation Mean:

- Using the best scientific data available, it identifies habitat areas that provide essential life cycle needs of polar bears.



What are the benefits of Critical Habitat:

- (1) An indirect benefit is that it clearly identifies areas where polar bear are likely to occur and brings people together to talk
- (2) Increases the likelihood habitat remains for polar bears
- (3) Includes areas for the polar bears' prey



We are recommending:

- BARRIER ISLAND HABITAT
- TERRESTRIAL DENNING HABITAT
- SEA ICE HABITAT



Barrier Island Habitat



T.D. DeBruyn Photo

Barrier Island Habitat



Photo by Susi Miller, FWS

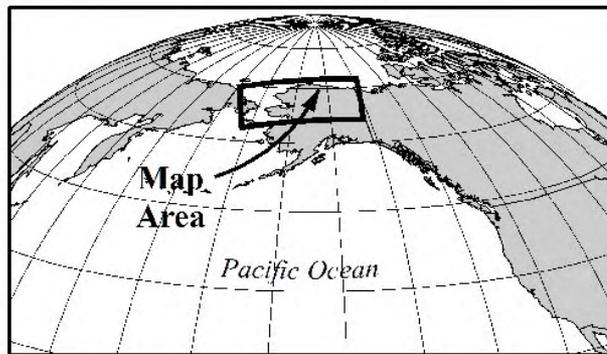
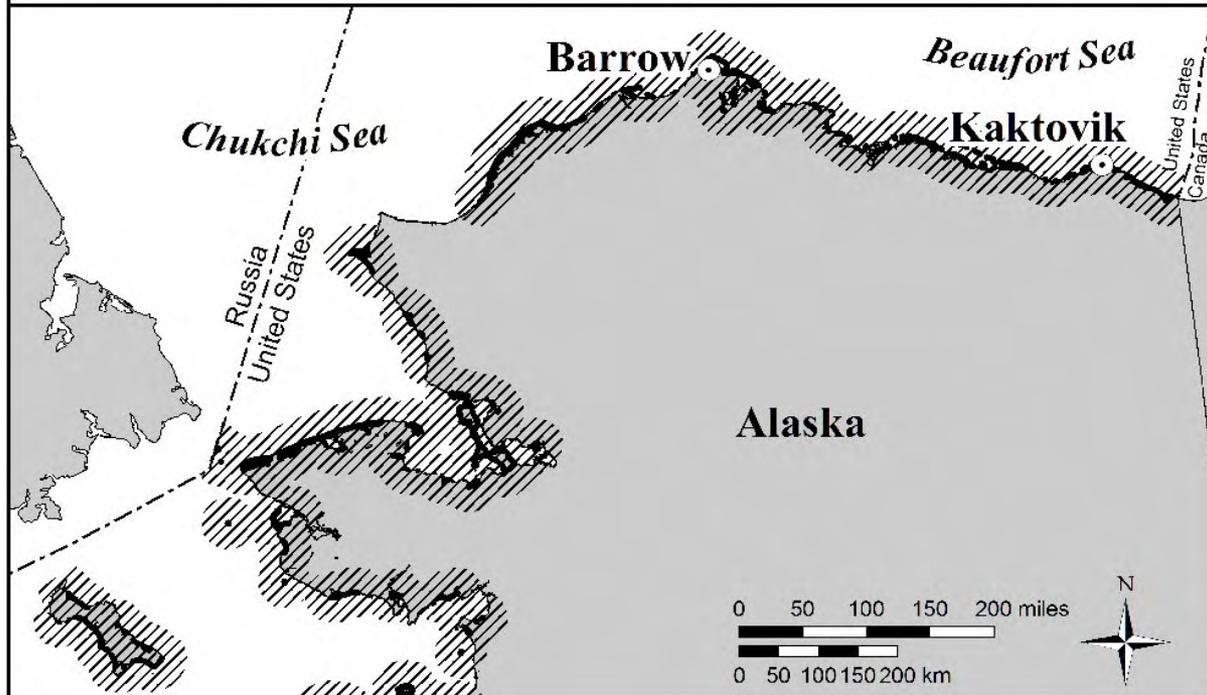
Barrier Island Habitat

Conclusion:

- Within the range of the polar bear population the barrier islands are currently used for denning by pregnant females, as a place to avoid human disturbances, and to move along the coast to access den sites or preferred feeding locations.
- Therefore we believe that barrier island habitat, as undisturbed areas for resting, denning, and movement along the coast are essential to the conservation of the Alaska polar bear populations.



Unit 3: Barrier Island Critical Habitat of the Polar Bear (*Ursus maritimus*)



Legend

 Unit 3 - Barrier Islands

Terrestrial Denning Habitat



Terrestrial Denning Habitat



T.D. DeBruyn Photo

Terrestrial Denning Habitat



T.D. DeBruyn Photo

Proposed Critical Denning Habitat



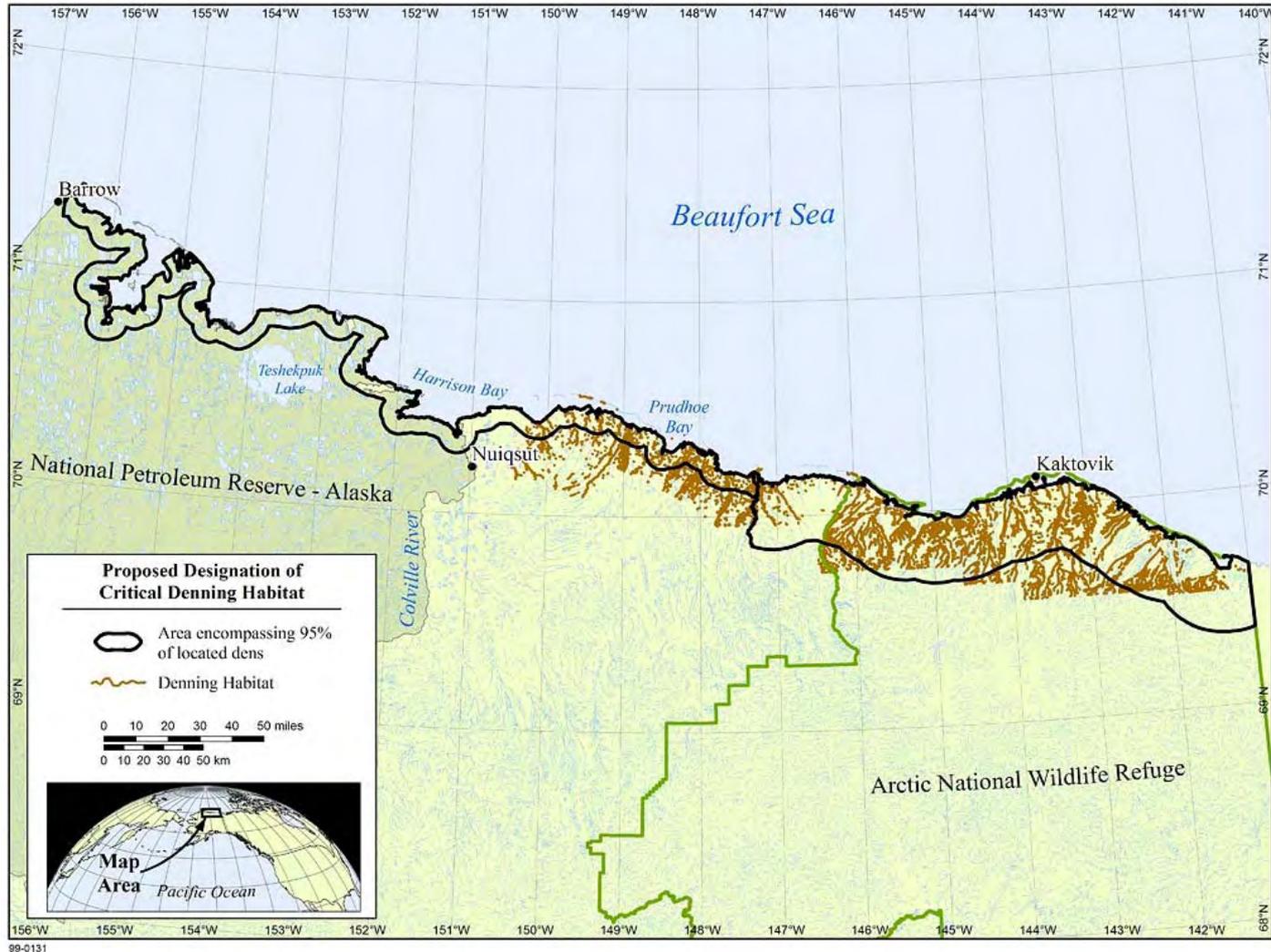
Terrestrial Denning Habitat

Conclusion:

- Pregnant females strive to balance their nutritional demands before and after denning and select den locations that will provide a safe environment from adult males, disturbance, and adverse weather conditions for their cubs.
- The fidelity to general denning areas, loss of sea ice denning habitat, are likely to increase terrestrial denning.
- Therefore suitable terrestrial denning habitat located near the coast including the coastal barrier islands in northern Alaska are considered essential for the conservation of the species.



Proposed Critical Denning Habitat



Sea Ice Habitat



Photo by Rosa Meehan, FWS

Sea Ice Habitat

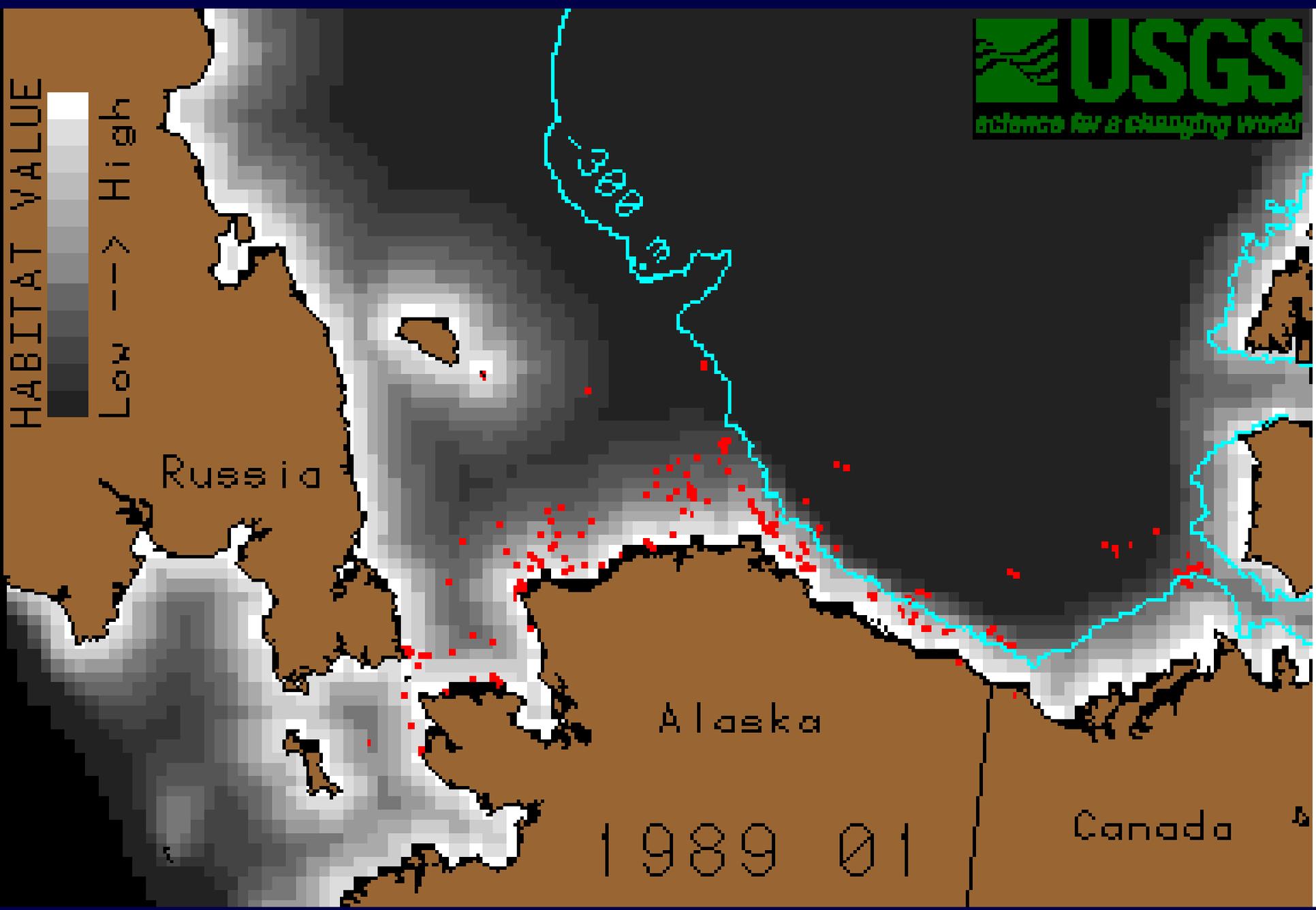


Photo by Rosa Meehan, FWS





HABITAT VALUE
Low --> High

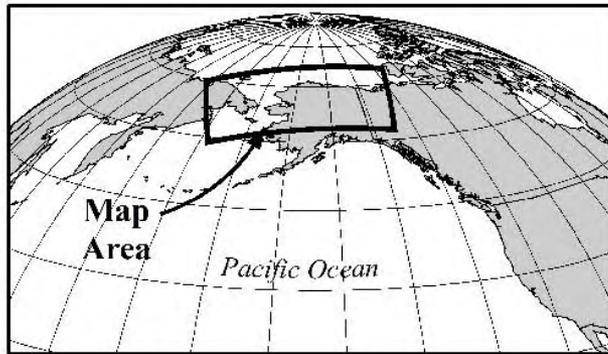
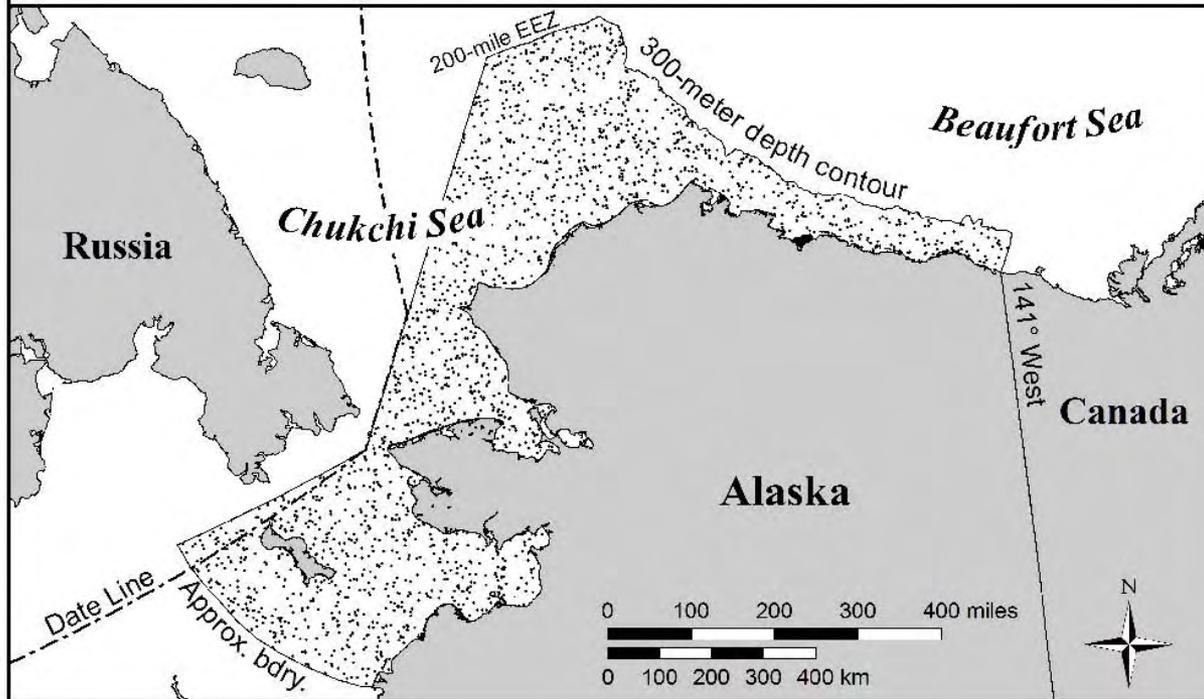


Sea Ice Habitat Conclusion:

- Annually, all sea ice habitat that moves over the shallower waters of the continental shelf ($\leq 300\text{m}$) can be considered at some point critical habitat for polar bears in the Southern Beaufort and Chukchi/Bering Seas.
- Based on best science available, the accessibility and availability of sufficient food resources is dependent upon availability of suitable sea ice habitat over the shallower waters of the Chukchi/Bering Seas and Southern Beaufort Sea.
- Therefore, suitable sea ice habitat for feeding is considered a limiting factor and essential to the conservation of the Alaska polar bear populations.



Unit 1: Sea Ice Critical Habitat of the Polar Bear (*Ursus maritimus*)



Legend

 Unit 1 - Sea ice habitat

What Critical Habitat Designations Do Not Do:

- Affect anyone's right to defend their life against a polar bear.
- Designation of polar bear critical habitat will not affect the ability of Alaska Natives to harvest polar bears.





Regulatory Impact of Critical Habitat

- Section 7(a)(2) of the ESA requires Federal agencies to consult with the Service whenever activities that they undertake, authorize, permit, or fund may affect a listed species or designated critical habitat.
- Absent critical habitat designation, these section 7 consultations ensure that any action authorized, funded, or carried out by a Federal agency will not likely jeopardize the continued existence of any endangered or threatened species.
- **The direct, incremental impacts of critical habitat designation stem from the additional consideration of the potential for destruction or adverse modification of critical habitat during section 7 consultations.**

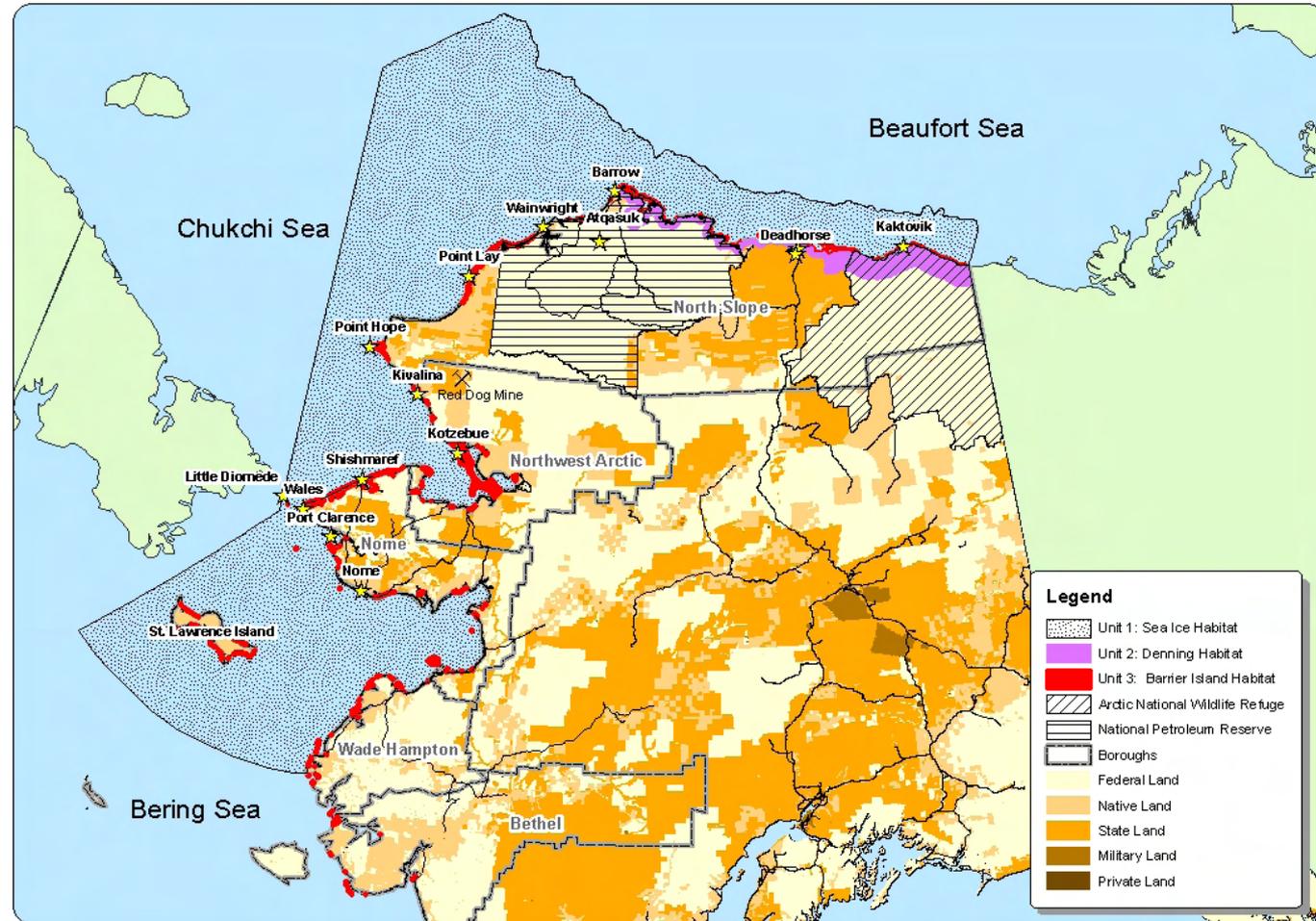
Purpose of the DEA

- Under section 4(b)(2) of the ESA, the FWS must consider the economic impacts, impacts to national security, and other relevant impacts of designating any particular area as critical habitat.
- An area may be excluded from designation as critical habitat if the benefits of exclusion (*i.e.*, the impacts that would be avoided if an area were excluded from the designation) outweigh the benefits of designation (*i.e.*, the conservation benefits if an area were designated), so long as exclusion of the area will not result in extinction of the species.
- **The DEA provides information to assist in determining whether the benefits of excluding particular areas from the designation outweigh the benefits of including those areas in the designation.**

DEA Study Area

**187,166
square
miles**

- 95% sea ice habitat
- 3% terrestrial denning habitat
- 2% barrier island habitat



Source:
1. US Fish and Wildlife Service, Field Office
2. Environmental Systems Research Institute, Inc. (ESRI), Redlands, California, USA

Miles
0 25 50 100 150 200

IEc
INDUSTRIAL ECONOMICS CORPORATION

General Framework for DEA

Baseline (without critical habitat): Qualitative discussion of existing protections already accorded the polar bear under existing regulations. Provides context for the incremental analysis.

Incremental (with critical habitat): The focus of the DEA is on describing, and quantifying where possible, changes in regulation and management of economic activities following the critical habitat designation. The DEA considers both **direct** (section 7 related) and **indirect** (other potential changes in behavior precipitated by the designation) incremental impacts.

Activities Subject to the Analysis

- Oil and Gas Activities (includes exploration, development, production and associated infrastructure construction)
- Construction and Development (includes wind energy, commercial and residential development, transportation, and mining)
- Shipping and Transportation (focuses on the Northern Sea Route)
- Military Activities (includes U.S. Coast Guard and Air Force activities)

DEA Includes:

1. Forecast of scope and scale within proposed critical habitat
2. Description of baseline polar bear conservation actions
3. Analysis of incremental impacts

Key Findings: Baseline

- Polar bear conservation is subject to **strong baseline regulation**:
 - MMPA Incidental Take Regulations (ITRs)
 - Alaska DNR Division of Oil and Gas Permits
 - BLM NPR-A Final Integrated Activity Plans
 - Oil Pollution Act (OPA)
 - ESA listing
- Baseline conservation measures include, for example, avoiding known polar bear dens by a mile, monitoring and reporting, and minimizing attraction of bears to project sites.

Key Findings: Direct Incremental Impacts

- The Service believes that:

“At this time, on the basis of how conservation measures are being implemented for the polar bear under the MMPA and ESA, we do not expect that designation of critical habitat will result in additional significant conservation actions...”*

* Source: USFWS, “Incremental Effects of Critical Habitat Designation for the Polar Bear,” November 2, 2009 (Appendix C of the DEA).

Key Findings: Direct Incremental Impacts

- **The analysis concludes that the direct economic impacts of CH will be limited.** CH designation is not expected to result in additional polar bear and habitat conservation requirements. Thus, the direct economic impacts are limited to administrative costs of section 7 consultations (approx. \$54,000 per year).

Key Findings: Indirect Incremental Impacts

- The potential for **indirect impacts** of critical habitat is a source of concern to landowners, industry, and stakeholders. For example:
 - Concern that existence of critical habitat may be used in litigation to delay or stop oil and gas activities in the region.
 - Critical habitat maps may provide new information on where Federal agencies should be undertaking section 7 consultation.
 - Concern that regulatory uncertainty will result in industry avoiding critical habitat.
- The DEA includes discussion of the potential for indirect impacts and associated economic impacts.

Additional Key Findings

- **Alaska Native subsistence activities are not affected by critical habitat designation.** These activities are exempt from regulation under ESA and MMPA.
- **No direct economic benefit of critical habitat designation.** Absent changes in polar bear conservation requirements, no direct economic benefits of critical habitat designation are expected.

Fish and Wildlife Service mission is to work with others to conserve, protect, and enhance fish, wildlife, plants, and their habitat for the continuing benefit of the American people.

