

## **NOAA OER Project Design Criteria for ESA Section 7 Programmatic Letter of Concurrence**

### **1.1 Project Design Criteria**

Project design criteria (PDCs) are identified as part of a programmatic consultation and are applicable to future projects implemented under the program. In the case of this consultation, PDCs include best management practices (BMPs) developed by OER to limit the effects of its marine operation activities. These environmental protection measures will lead to avoidance and minimization of effects to ESA-listed species and designated and proposed critical habitat in the action area to assist in the conservation of these resources. OER's Expedition Coordinator (or the project's Principal Investigator) is responsible for ensuring all PDCs are shared and discussed with the Ship's command, department heads, and mission team leads, and those leads review and, as necessary, provide training to their staff on how to monitor and execute these protocols appropriately. PDCs include:

#### **1.1.1 Protected Species Observers (PSO)**

To ensure the protection of endangered and threatened species, the following PSO guidelines are required:

- 1) During daylight hours (i.e. from 30 minutes prior to sunrise and through 30 minutes following sunset), a minimum of one PSO must be on duty observing for listed species at all times the vessel is actively transiting, conducting acoustic sonar survey lines, sub-bottom profilers are operating, and/or when-over-the-side work is being conducted;
- 2) A watch schedule showing the number of PSOs on duty required to effectively monitor the affected area for the project (e.g., surveys) and record the required data must be included (see Reporting Requirements below). PSOs must not be on watch for more than four consecutive hours, with at least a 1-hour break between watches. PSOs must not be on active duty observing for more than 12 hours in any 24-hour period;
- 3) Visual monitoring must occur from the most appropriate vantage point on the associated operational platform that allows for 360-degree visual coverage around the vessel. If 360-degree visual coverage is not possible from a single vantage point, multiple PSOs must be on watch to ensure such coverage; and
- 4) Suitable equipment must be available to each PSO to adequately observe the full extent of the minimum separation distance and shutdown zones during all vessel operations and meet all reporting requirements.
  - a) Visual observations must be conducted using binoculars and the naked eye while free from distractions and in a consistent, systematic, and diligent manner.
  - b) Rangefinders (at least one per PSO, plus backups) or reticle binoculars of appropriate quality (at least one per PSO, plus backups) to estimate distances to listed species located in proximity to the vessel and clearance and shutdown zone(s).

### **1.1.2 Minimize Collisions with Vessels**

If PSOs observe ESA-listed marine mammals, sea turtles, or fishes, vessel operators and crew must slow down or stop the vessel or alter course if animals are within the distances described below, to avoid striking such animals. These requirements apply when the vessel is in transit and while conducting acoustic sonar survey lines, but do not apply when compliance will create an imminent and serious threat to a person or vessel or when a vessel is restricted in its ability to maneuver.

- 1) When ESA-listed marine mammals, sea turtles, or fishes are sighted while a vessel is underway, the vessel shall take action as necessary to avoid violating the relevant separation distances noted below (e.g., attempt to remain parallel to the animal's course, avoid excessive speed or abrupt changes in direction until the animal has left the area). If ESA-listed species are sighted within the relevant separation distance, the vessel must reduce speed and shift the engine to neutral. Engines will not resume until it is observed that the relevant separation distance is clear of any ESA-listed marine mammals, sea turtles, or fishes for at least 15 minutes. This does not apply to any vessel towing gear or any vessel that is navigationally constrained. Navigationally constrained means areas that are not considered open oceans such as ports, narrow passage areas, and any concerning traffic situation where halting engine operations puts the lives of those on board or the vessel's integrity in jeopardy;
- 2) If a large whale is identified within 457.2 meters (500 yards) of the forward path of a vessel, the vessel operator must steer a course away from the whale at 10 knots or less until the 457.2-meter (500 yards) minimum separation distance has been established. Vessel operators may also shift engines to neutral if feasible;
- 3) If a large whale is sighted within 91.44 meters (100 yards) of the forward path of a vessel, the vessel operator must reduce speed and shift the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 457.2 meters (500 yards). If stationary, the vessel must not engage engines until the large whale has moved beyond 457.2 meters (500 yards); and
- 4) When ESA-listed small marine mammals (e.g. pinnipeds), sea turtles, or fishes are sighted, attempt to maintain a distance of 91.44 meters (100 yards) for in-water pinnipeds and 45.72 meters (50 yards) for sea turtles and fishes whenever possible.
- 5) In the event of a vessel collision, OER will follow reporting PDCs in Section 1.1.9.

### **1.1.3 Species' Specific PDCs**

- 1) Vessels entering North Atlantic right whale critical habitat are required to report into the Mandatory Ship Reporting System;
- 2) While conducting marine operation activities in the Atlantic, mariners shall check with various communication media for general information regarding avoiding ship strikes and specific information regarding North Atlantic right whale sighting locations. These include NOAA weather radio, U.S. Coast Guard (USCG) NAVTEX broadcasts, and Notices to

Mariners; Commercial mariners calling on U.S. ports should view the most recent version of the NOAA/USCG-produced training CD entitled “A Prudent Mariner’s Guide to Right Whale Protection” (contact the NMFS Southeast Region, Protected Resources Division for more information regarding the CD);

- 3) Injured, dead, or entangled North Atlantic right whales should be immediately reported to the USCG via VHF Channel 16. Injured, dead, or entangled North Pacific right whales should be immediately reported to NMFS’ Alaska Marine Mammal Stranding Network at 877-925-7773;
- 4) Adherence to seasonal vessel speed restrictions of 10 knots or less as designated locations along the U.S. East Coast;
- 5) Adherence to NOAA Compliance Guide for Right Whale Ship Strike Reduction Rule (NMFS, 2013);
- 6) When in Washington inland waters, all vessels (including NOAA ships, R/Vs, ROVs, AUVs, and ASVs) approaching Southern Resident killer whales within 182.9 meters (200 yards) is prohibited (76 FR 20870);
- 7) All vessels (including NOAA ships, R/Vs, ROVs, AUVs, and ASVs) approaching North Atlantic right whales within 457.2 meters (500 yards) is prohibited (69 FR 69536 and 62 FR 6729);
- 8) Avoid transit through North Pacific right whale critical habitat;
- 9) Vessel transit and research activities (e.g., mapping) in the Rice’s [formerly Bryde’s] whale core habitat distribution area is restricted. If unavoidable, maintain a vessel speed of 10 knots or less during research activities and when transiting through the area. Vessel transit and non-stationary research activities must occur during daylight hours only (no nighttime transit or other non-stationary research activities to occur overnight in this area);
- 10) Vessel transit and research activities are also restricted within the boundaries of the currently known distribution of Rice’s whales in the western and central Gulf of Mexico, between the 100 to 400 meter (328 to 1,312 foot) isobaths. If unavoidable, maintain a vessel speed of 10 knots or less during research activities and when transiting through the distribution area. Vessel transit and non-stationary research activities must occur only during daylight hours (no nighttime transit or other research activities to occur overnight in this area);
- 11) Avoid the use of High-Resolution Geophysical (HRG) sound sources (e.g., echosounders and sub-bottom profilers) in all areas north of the Forelands in Cook Inlet, Alaska;
- 12) Avoid the use of HRG sound sources that are <24 kHz in humpback whale feeding areas for the months of March through June. These include nearshore areas around Kodiak Island, Portlock Bank, Prince William Sound, Sitka Sound, Hoonah Sound, Tenakee Inlet, Craig, Ernest Sound, and Seymour Canal, Frederick Sound, Chatham Strait, Point Adolphus, Stephens Passage, and the Shumagin Islands;
- 13) Maintain a vessel separation distance 5.6 kilometers (three nautical miles) from Steller sea lion haulouts/critical habitat; and

- 14) To avoid disruption of bowhead whale foraging, while in the Beaufort and Chukchi Seas, avoid the use of HRG sound sources in areas where bowheads may be feeding (e.g., krill traps in Barrow Canyon)

#### **1.1.4 Minimize Temporary Disturbance from Human Activity**

- 1) All in-water work will be postponed when North Atlantic right whales are detected within 457.2 meters (500 yards), other ESA-listed cetaceans are detected within 91.44 meters (100 yards), or other ESA-listed species are detected within 45.72 meters (50 yards); and
- 2) No attempt will be made to feed, touch, ride, or otherwise intentionally interact with any marine ESA-listed species.

#### **1.1.5 Minimize Entanglement**

- 1) OER will postpone work when ESA-listed species are within the distances noted in #1 of Section 1.1.4 above; and
- 2) Individuals participating in the activity will closely monitor the instrument cables at all times while they are deployed.

#### **1.1.6 Minimize Vessel Waste and Discharge & Prevent Invasive Species**

- 1) All vessels operating in areas where ESA-listed species are known to be present in the region will continue to follow the International Convention for the Prevention of Pollution from Ships (MARPOL) discharge protocols, but will postpone any authorized discharge if any ESA-listed species are within 91.44 meters (100 yards) of the vessel;
- 2) Vessel crews will meet all Environmental Protection Agency (EPA) Vessel General Permits and USCG requirements;
- 3) Avoid discharge of ballast water in designated critical habitat;
- 4) All vessels will use anti-fouling coatings;
- 5) Clean hull regularly to remove aquatic nuisance species;
- 6) Avoid cleaning of hull in critical habitat; and
- 7) Avoid use of cleaners with nonylphenols.

#### **1.1.7 Avoid or Minimize Impacts to Habitat and Species During In-Water Work**

- 1) Instruments deployed to collect water samples and current data (except for expendable instruments) will not contact the seafloor;
- 2) ROVs/AUVs will be operated in a manner to avoid seafloor disturbance, and setting the ROV/AUV on the seafloor will be held to a minimum. For those situations when the ROV/AUV does make contact with the seafloor, visual observations will be made to confirm that the area where the ROV/AUV is set down does not include corals or other fragile animals that can reasonably be avoided;
- 3) ROVs/AUVs/ASV in operation will use onboard cameras and detection devices to avoid possible interactions with animals. This includes when operating all sonar sound sources.

- 4) Sample collections will be limited to typically four to six total rocks and primary biological specimens per dive that represent new species, new records, the dominant morphotype animal in a community, or species to support connectivity studies. Whenever possible, sample collections will be made using the cutting implementation tool on the ROV, and only portions of organisms (<50 centimeters [19.7 inches])) will be collected to avoid mortality. Clonal biological specimens (corals, sponges) will be subsampled;
- 5) When possible, rock samples will be selected in a way to minimize disturbance to the surrounding environment and to minimize the take of attached organisms;
- 6) After each ROV/AUV/ASV use, the vehicles are brought back onboard and thoroughly sprayed with freshwater and allowed to air dry before the next dive. Though marine organisms should not survive this process, the ROV/AUV/ASV is thoroughly inspected prior to every dive and checked for the presence of biological organisms to prevent the spread of invasive or non-endemic species from one location to another. In areas where Stony Coral Tissue Loss Disease (SCTLD) is present, the vehicles will be decontaminated following the procedures documented in NOAA's Office of National Marine Sanctuaries' [Coral Disease Decontamination Protocol](#);
- 7) Instruments deployed to collect water samples and current data (except for expendable instruments) will not be allowed to contact the seafloor;
- 8) The use of detergents and other pollutants that may be washed from the ship or vehicle into the marine environment will be avoided or held to a minimum; and
- 9) Except in an emergency, the vessel will not anchor while at sea.
- 10) In the event of an ROV/AUV/ASV collision with an ESA-listed species, OER will follow reporting PDCs in Section 1.1.9.

#### **1.1.8 Avoid Live Bottom Features**

- 1) All vessels in coastal waters will operate in a manner to minimize propeller wash and seafloor disturbance, and transiting vessels should follow deep water routes (e.g., marked channels and shipping lanes), as practicable;
- 2) Avoid anchoring in hard-bottom and coral habitat
- 3) Avoid anchoring in black abalone critical habitat; and
- 4) Avoid anchoring in areas containing seagrass or eelgrass.

#### **1.1.9 Program Reporting/Review Requirements**

- 1) Report sightings of critically endangered cetaceans including North Atlantic right whale, North Pacific right whale, Southern Resident killer whale, Main Hawaiian Islands Insular false killer whale, Cook Inlet beluga whale, and Rice's whale.
  - a) If a critically endangered species is observed at any time by a PSO or project personnel during surveys or vessel transit, sightings will be reported to OPR within two hours of occurrence when practicable and no later than 24 hours after occurrence
- 2) In the event of a strike of an ESA-listed species by any survey vessel or vehicle (ROV, AUV, ASV), OER must immediately report the incident to the appropriate NMFS contact listed

below, and to Cathy Tortorici, Chief, ESA Interagency Cooperation Division by e-mail at [cathy.tortorici@noaa.gov](mailto:cathy.tortorici@noaa.gov):

- a) For operations in the Gulf of Mexico and Atlantic Ocean: 727-824-5312 or via email to [takereport.nmfs@noaa.gov](mailto:takereport.nmfs@noaa.gov), and a hotline 1-877-WHALE HELP (942-5343).
  - b) For operations on the west coast/Pacific Ocean: 562-506-4315 or via email to [Justin.Viezbicke@noaa.gov](mailto:Justin.Viezbicke@noaa.gov), and a hotline for whales in distress 877-767-9245.
  - c) For operations near Alaska, statewide hotline: 877-925-7773.
  - d) Additional regionally organized contact information is here:  
<https://www.fisheries.noaa.gov/report>.
  - e) Report information will include the following:
    - (1) Name, telephone, and email of the person providing the report;
    - (2) The vessel or vehicle's name;
    - (3) Time, date, and location (latitude/longitude) of the incident;
    - (4) Species identification (if known) or description of the animal(s) involved;
    - (5) Vessel's or vehicle's speed during and leading up to the incident;
    - (6) Vessel's or vehicle's course/heading and what operations were being conducted (if applicable);
    - (7) Status of all sound sources in use;
    - (8) Description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike;
    - (9) Environmental conditions (wave height, wind speed, light, cloud cover, weather, water depth);
    - (10) Estimated size and length of animal that was struck;
    - (11) Description of the behavior of the species immediately preceding and following the strike;
    - (12) If available, description of the presence and behavior of any other protected species immediately preceding the strike;
    - (13) Disposition of the animal (e.g., dead, injured but alive, injured and moving, blood or tissue observed in the water, last sighted direction of travel, status unknown, disappeared); and
    - (14) To the extent practicable, photographs or video footage of the animal(s).
- 3) In the event of a sighting of a whale that is dead, injured, or entangled reports must occur immediately as possible to the appropriate [regional NOAA stranding hotline](#). Right whale sightings in any location may also be reported to the USCG via channel 16 and through the WhaleAlert App (<http://www.whalealert.org/>).
- a) Sightings of any injured or dead listed species must be immediately reported, regardless of whether the injury or death is related to survey operations, to NMFS and the appropriate regional NOAA stranding hotline. If the project proponent's activity is responsible for the injury or death, they must ensure that the vessel assists in any salvage

effort as requested by NMFS. When reporting sightings of injured or dead listed species, the following information must be included:

- i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
  - ii) Species identification (if known) or description of the animal(s) involved;
  - iii) Condition of the animal(s) (including carcass condition if the animal is dead);
  - iv) Observed behaviors of the animal(s), if alive;
  - v) If available, photographs or video footage of the animal(s); and
  - vi) General circumstances under which the animal was discovered.
- 4) Record the date, time, location, species, number of animals, distance and bearing from the vessel, and direction of travel for all sightings of ESA-listed species.

## 1.2 Project-Specific Review

Project-specific reviews for this programmatic consultation for OER's marine operation activities are not required as long as the activities are within the scope of the *Proposed Action*, within the action area, and comply with the PDCs. If operations are proposed that are not a part of the *Proposed Action* and/or are not in the *Action Area*, an individual consultation will be needed. If operations in the future include the use of new vessel platforms outside of the scope of those detailed in **Error! Reference source not found.**, mooring systems, active acoustics outside the scope of those detailed in **Error! Reference source not found.**, additional types of remotely operated or autonomous vehicles that are substantially different from those described in Section **Error! Reference source not found.** and Section **Error! Reference source not found.**, novel sampling methods, or other substantial changes in technology and operations, an individual consultation or reinitiation of this programmatic consultation may be required. OER should submit a request for project-specific review for projects that do not fully meet the requirements listed above, including being unable to implement the PDCs or being able to only partially implement the measures appropriate to the project, to the NMFS OPR ESA Interagency Cooperation Division. The request should be sent by email to [cathy.tortorici@noaa.gov](mailto:cathy.tortorici@noaa.gov) with the subject line "Project Specific Review Request, OPR-2021-03453, Programmatic Concurrence for OER Marine Operation Activities" and include the following information: a project description that details the operations, where and when they will occur, any criteria or measures that may not be fully implemented, and determination of effects to ESA-listed species and critical habitat that could result from the project.

NMFS will review the request to determine if the scope of the project is within this programmatic consultation, if a supplemental effects analysis is needed, or if an individual consultation is required. Requests for project-specific review should be submitted at least six months in advance of the proposed activity to allow time for completion of a formal ESA section 7 consultation if one is required.

### **1.3 Annual Review/Reporting**

OER and NMFS will conduct an annual review of OER's marine operation activities. This review will evaluate, among other things, whether the scope of the activities are consistent with the description of the proposed action and action area, and whether the nature and scale of the effects predicted continue to be valid. An annual review meeting will be held consisting of an annual comprehensive review of the action agency's program.

At least one month before the Annual Review Meeting, the ESA Interagency Cooperation Division will send out a notice to the participants with the topics for discussion.

Participants would include members from the ESA Interagency Cooperation Division, representatives from OER, and other interested parties (if requested). The topics would include the following:

- New species, critical habitat (proposed, final rules)
- Evaluation of the effectiveness of the programmatic processes (e.g., PDCs, areas for improvement, etc.);
- Identification and discussion of "lessons learned" (e.g., if any new procedures/mitigation were undertaken, etc.);
- Topics where more data/information is needed (e.g., future research);
- Identification of any new literature, studies, etc. that change or support previous understandings of the degree of effects to ESA species, fish, habitat, prey species; does the analysis in the consultation still hold, does it need to be reviewed or revised?; and Topics noted in OER's annual report mentioned below.

In advance of the annual review meeting, OER will provide an annual report to NMFS to discuss and assess during the meeting. This report will include:

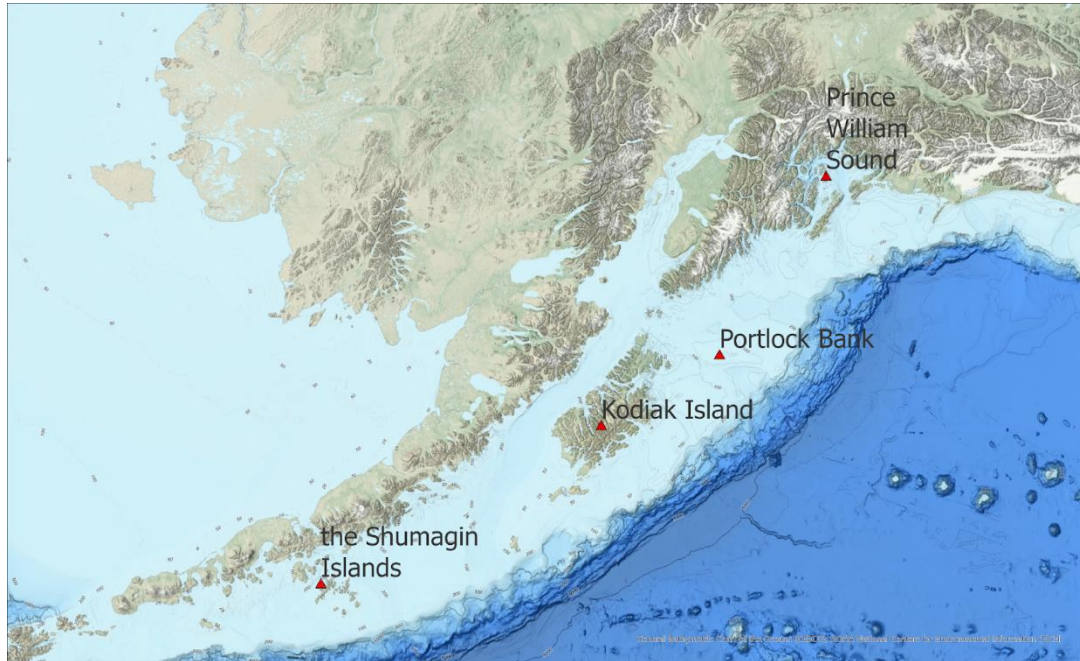
- Summary/description of the activities conducted during the year (regions, amount of survey days, etc.)
- Sighting logs with observations of ESA-listed species with date, time, location, species (if possible to identify), number of animals, distance and bearing from the vessel, and direction of travel.
- New or upcoming initiatives, technology demonstrations, equipment, policy directives, tech memos (and revisions to any such existing documents); potential implications to the programmatic analysis, framework, etc.



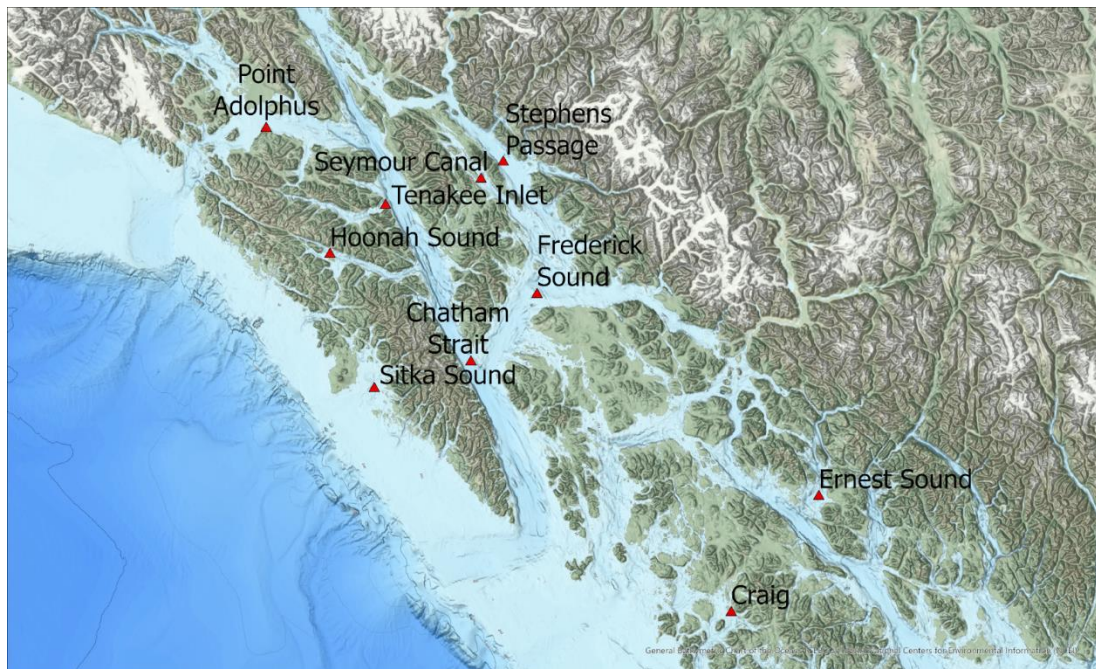
## 1.4 Maps

Maps:

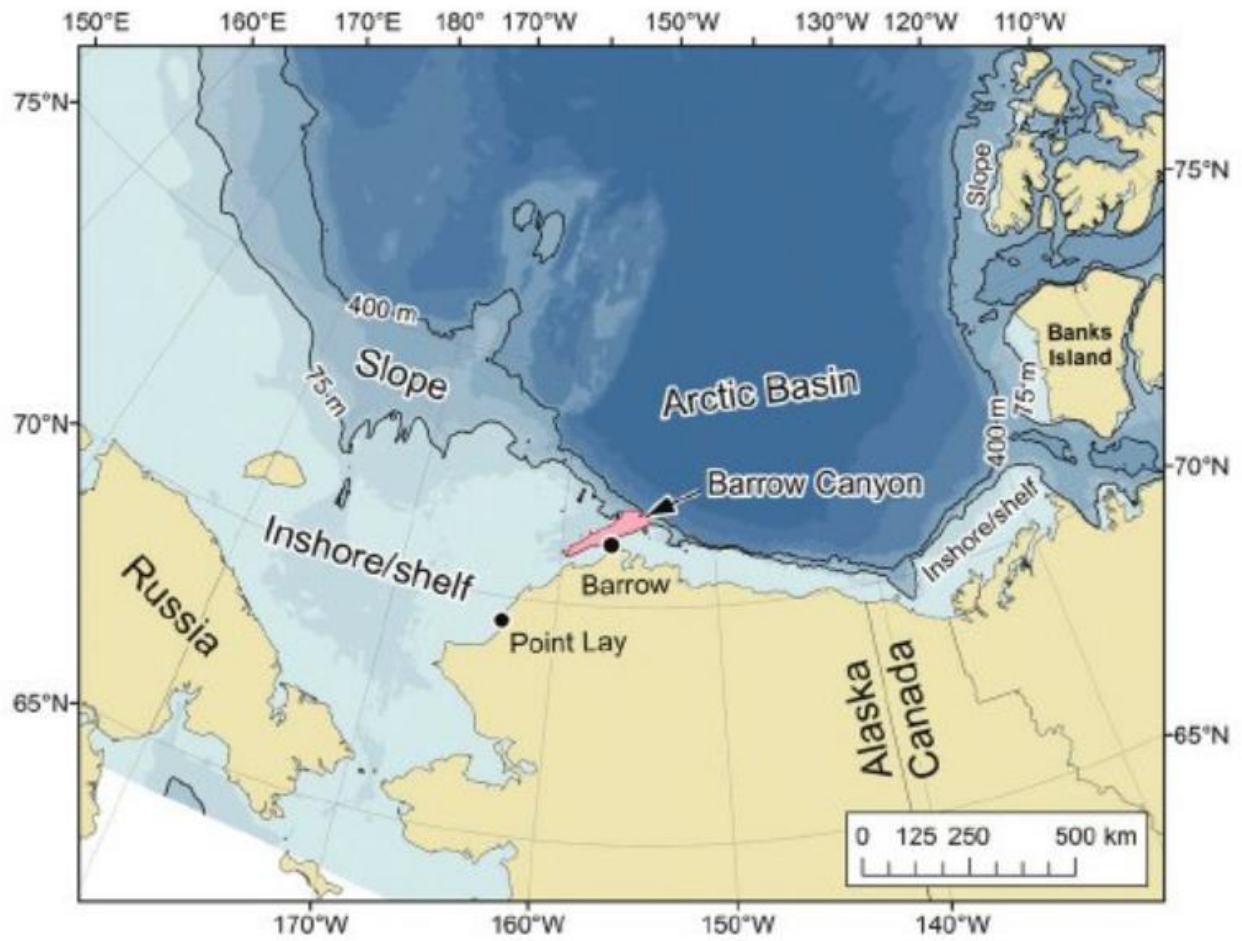
### Humpback Whale Feeding Areas in Western Alaska



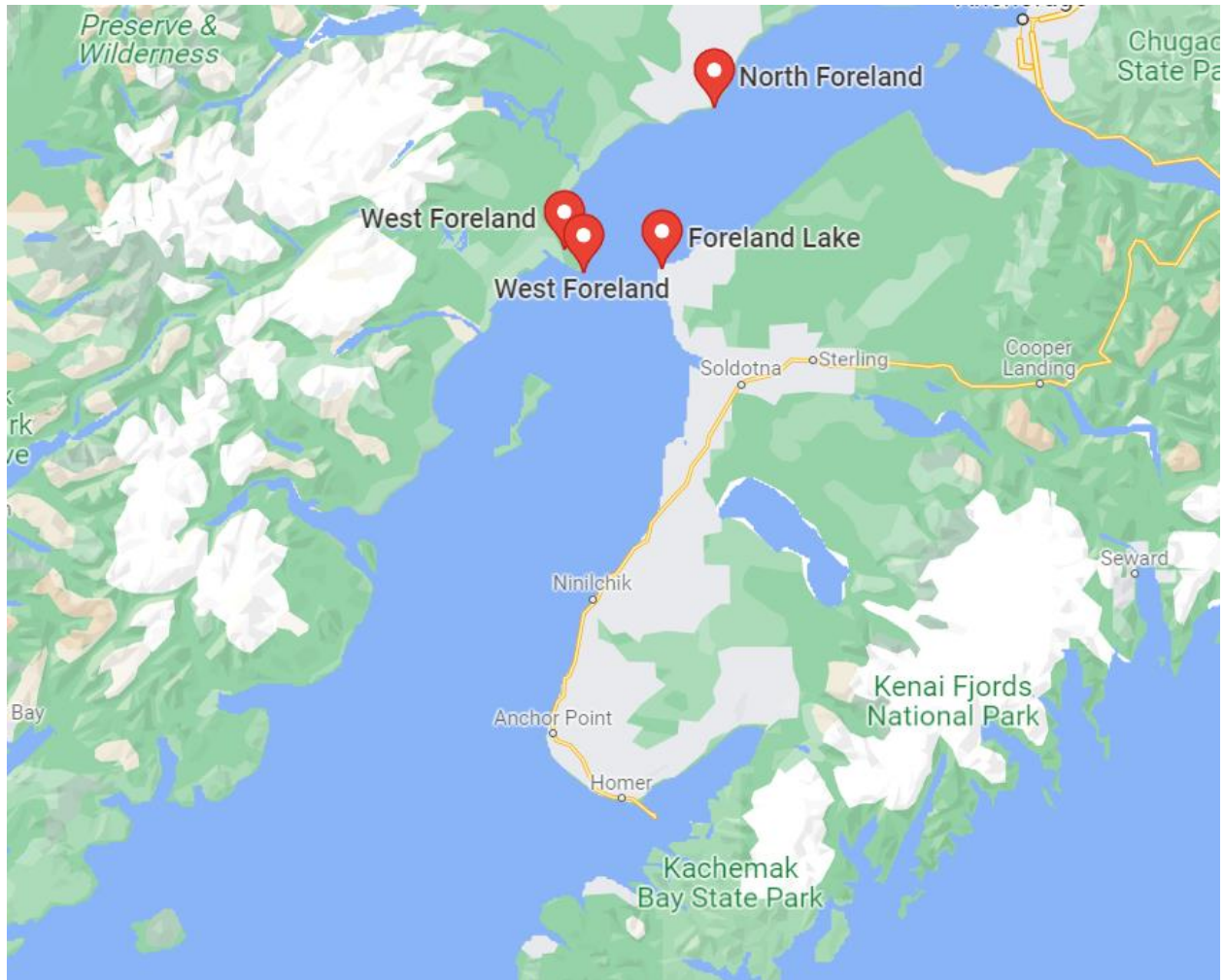
### Humpback Whale Feeding Areas in Southeast Alaska



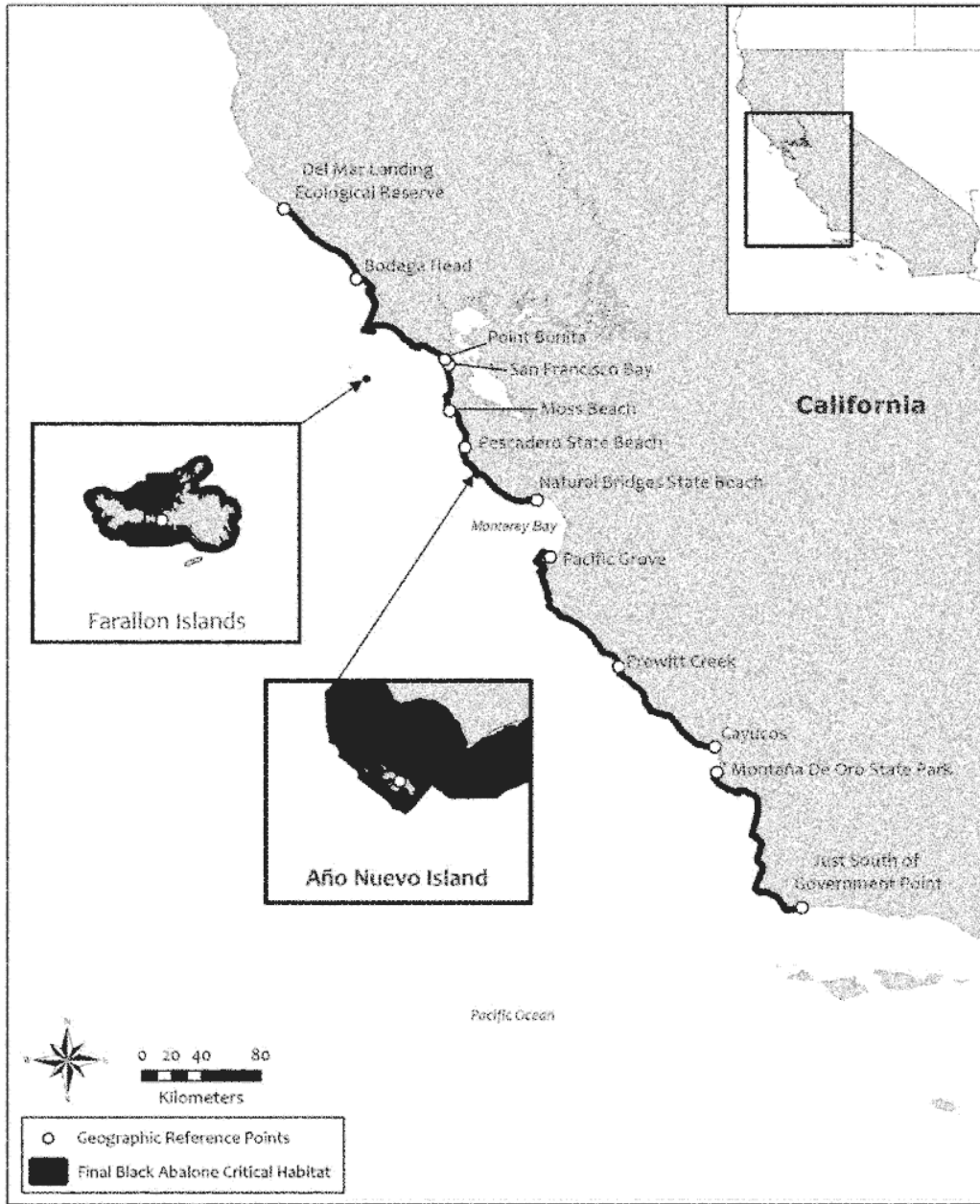
**Map of Barrow Canyon (bowhead whale feeding area) in the Beaufort and Chukchi Seas in Alaska**



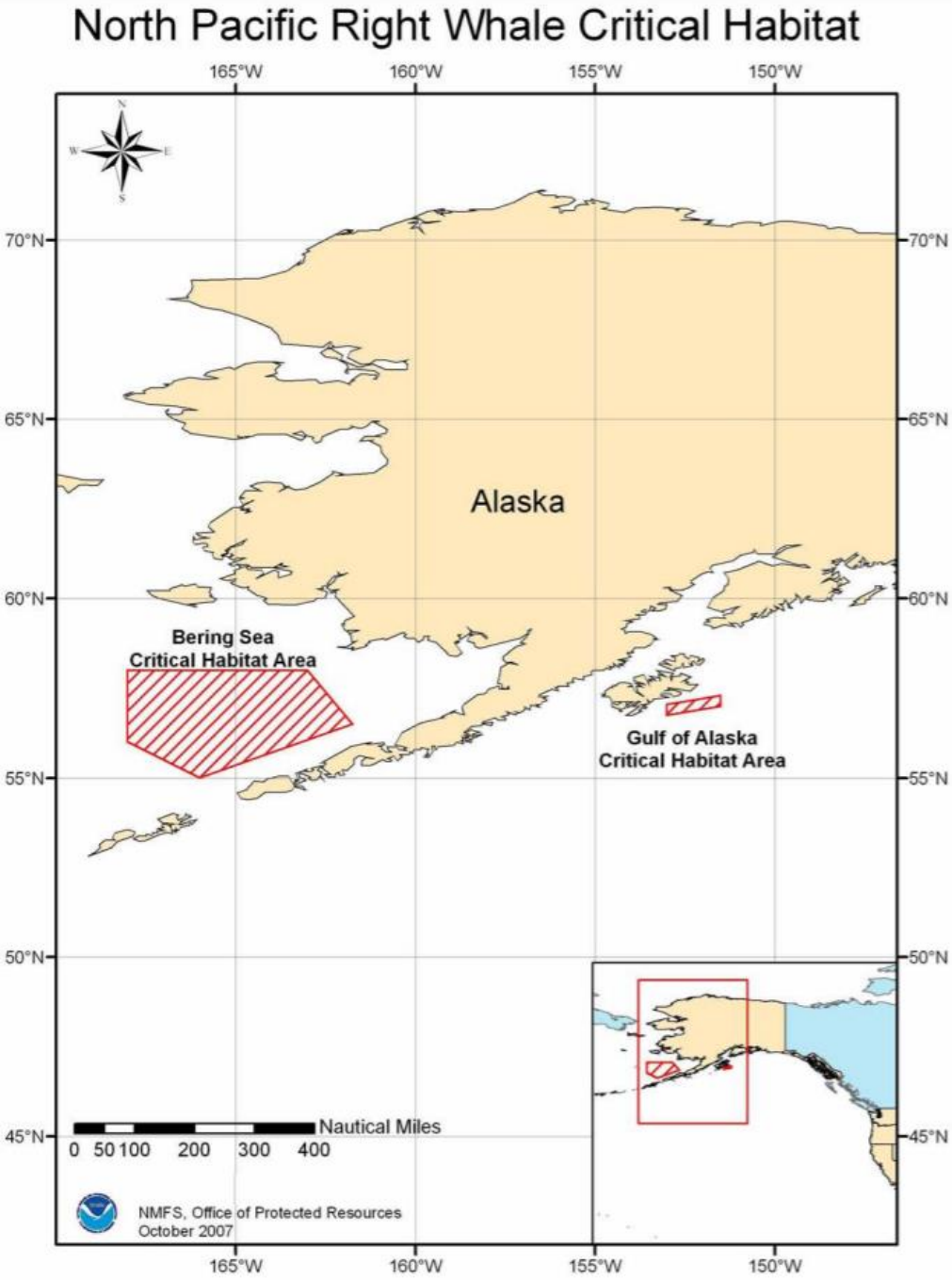
## Map of the Forelands in Cook Inlet, Alaska



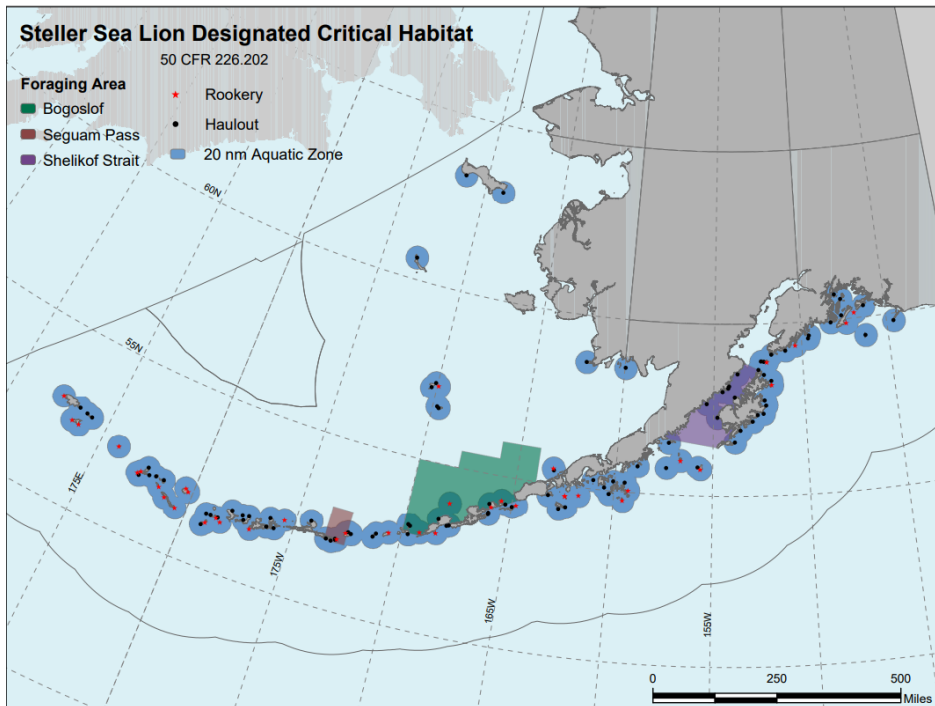
# Black Abalone Critical Habitat:



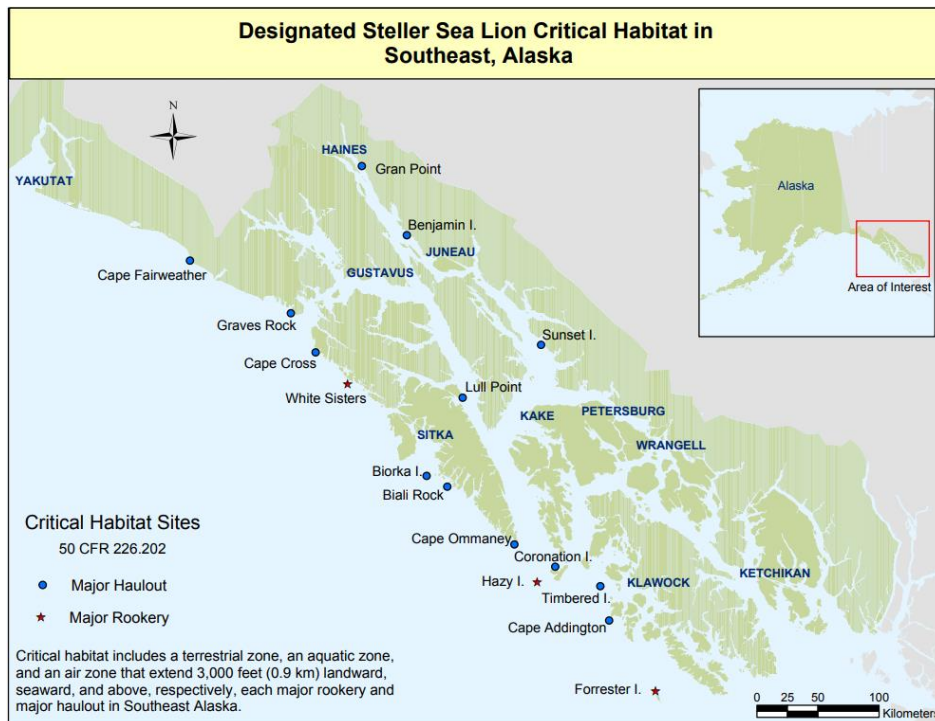
# North Pacific right whale critical habitat



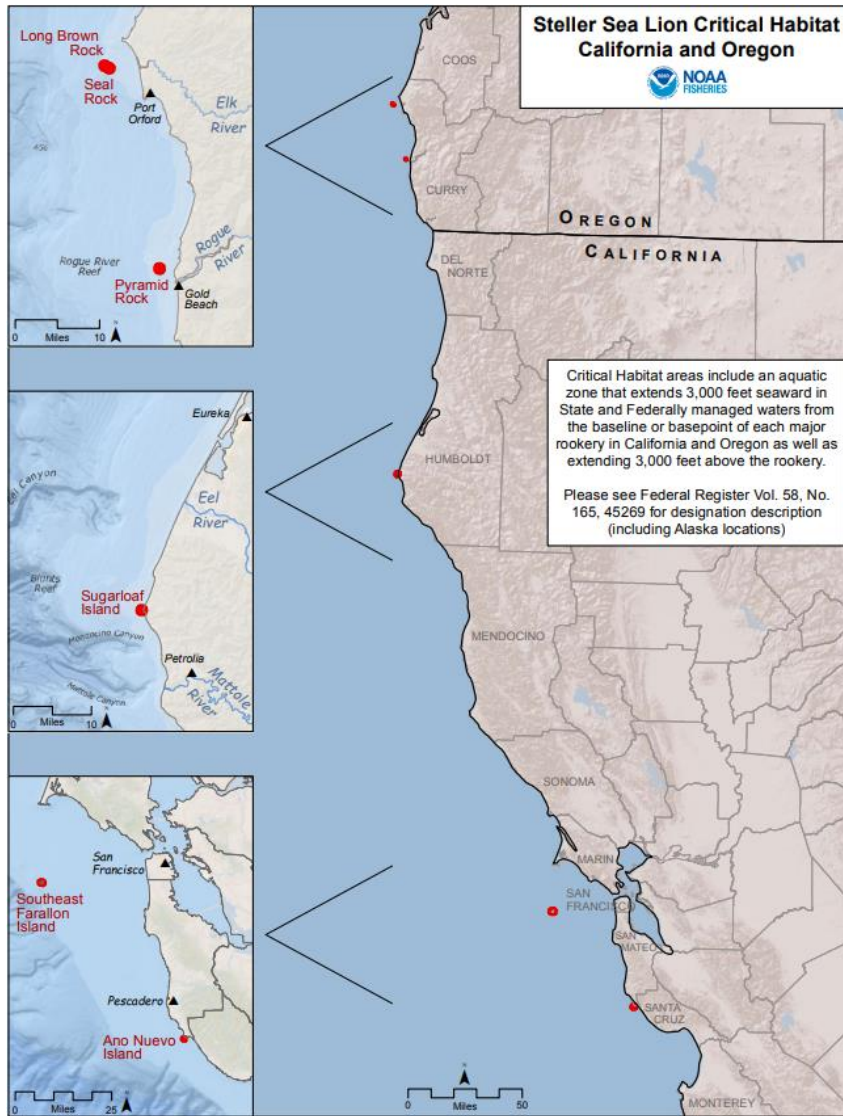
## Steller sea lion critical habitat in Western Alaska



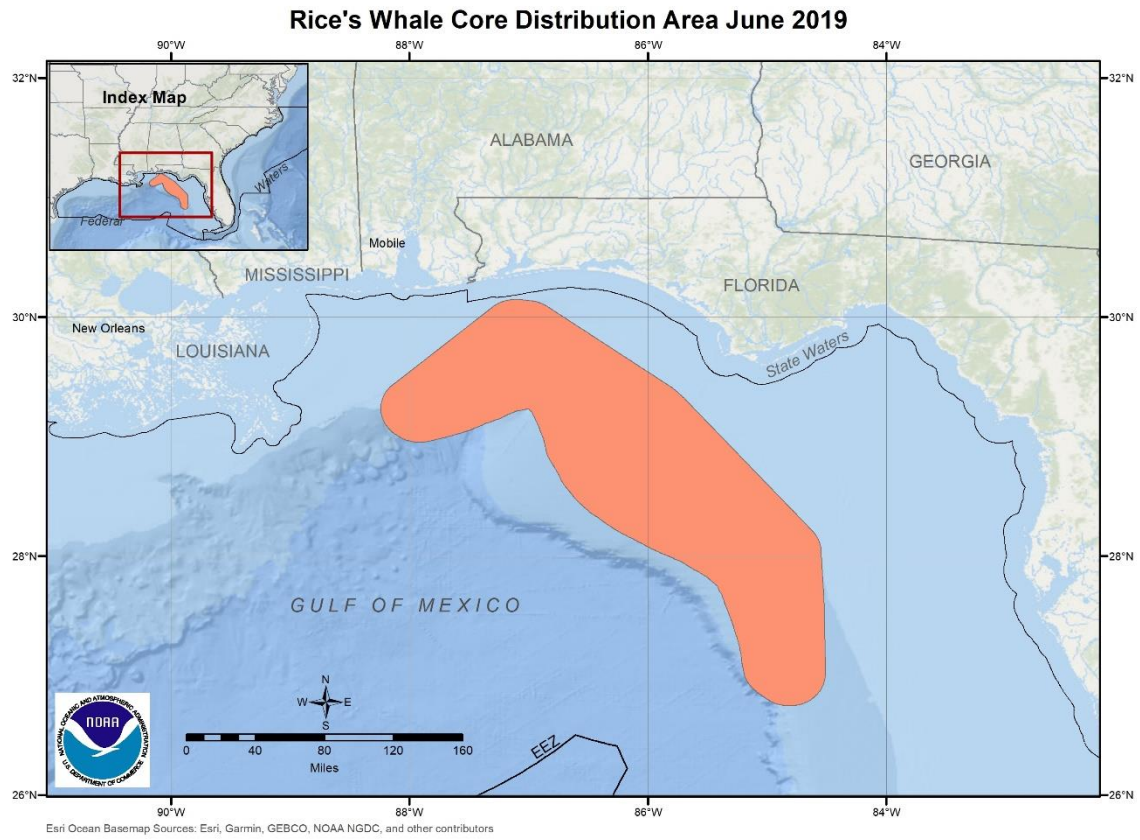
## Steller sea lion critical habitat in Southeast Alaska



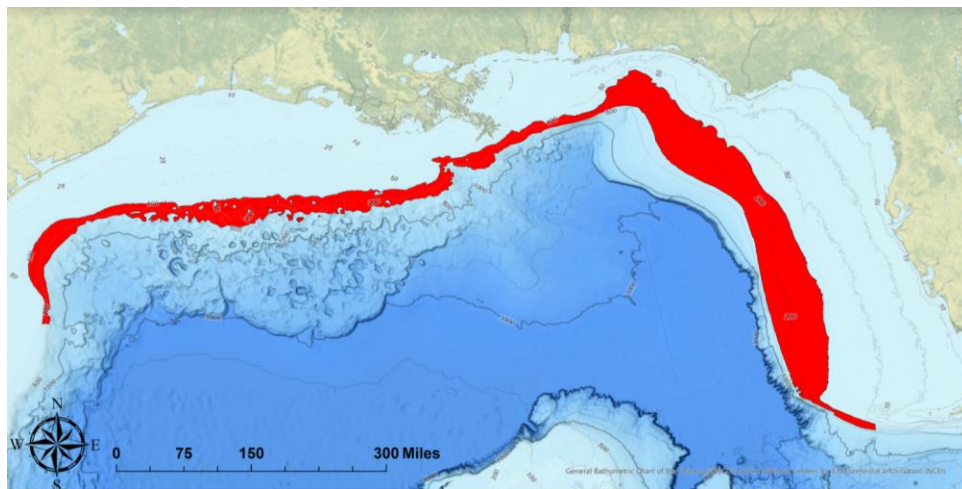
# Steller sea lion critical habitat in Oregon and California




# Rice's Whale Core Distribution Area



# Rice's Whale Suitable Habitat



 Rice's Whale Gulf of Mexico Suitable Habitat (100 to 400 Meter Depth Contours in the Gulf of Mexico within the U.S. EEZ)