



FACT SHEET

NPDES Permit Number: AKG524000

Public Comment Start Date: Date of Federal Register publication

Public Comment Expiration Date: 45 days from the date of Federal Register publication

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(within Alaska, Idaho, Oregon and Washington)

The U.S. Environmental Protection Agency (EPA) proposes to reissue the National Pollutant Discharge Elimination System (NPDES) General Permit for the following activities pursuant to the provisions of the Clean Water Act, 33 U.S.C. §1251 et seq:

OFFSHORE SEAFOOD PROCESSORS IN ALASKA (AKG524000)

EPA Proposes NPDES Permit Issuance

The EPA proposes to reissue the National Pollutant Discharge Elimination System (NPDES) General Permit to Seafood Processors in Alaska discharging at least 3 nautical miles or greater from the shoreline or closure line. In order to ensure protection of water quality and human health, this Permit places limits on the types and amounts of pollutants that can be discharged from the facility.

This Fact Sheet includes:

- Information on public comment and appeal procedures;
- A description of the types of facilities, proposed discharges, and receiving waters covered by the permit;
- A description of the draft General Permit provisions;
- Technical information supporting the provisions.

Public Comment

Persons wishing to comment on the draft General Permit may do so in writing within 45 days of the date of Federal Register publication. All comments must be in writing and must include the commenter's name, address, phone number and email address (if available). Comments must

include a concise statement of their basis and any relevant facts the commenter believes the EPA should consider in making its decision regarding the conditions and limitations in the final Permit. All written comments and requests must be submitted by the end date of the public comment period to:

U.S. EPA, Region 10

Attn: Director, Office of Water and Watersheds

Subject: Offshore Seafood Processors in Alaska General Permit Reissuance

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Persons wishing to request that a public hearing be held may do so, in writing, by the end date of this public comment period. A public hearing is a formal meeting wherein EPA officials hear the public's views and concerns about an EPA action or proposal. A request for a public hearing must state the nature of the issues to be raised, reference the permit name and NPDES permit number, and include the requester's name, address, and phone number.

After the comment period closes, and all significant comments have been considered, the EPA will review and address all submitted comments. The EPA's Director for the Office of Water and Watersheds in Region 10 will make a final decision regarding the issuance of the General Permit. If no comments are received, the tentative conditions in the draft General Permit will become final. Pursuant to 40 CFR § 23.2, unless the EPA specifies a different time in the Federal Register notice, two weeks after the Federal Register publication date is the "permit issuance date." The General Permit will become effective 30 days after the permit issuance date. In accordance with Section 509(b)(1)(F) of the Clean Water Act, 33 USC § 1369(b)(1), any interested person may appeal the General Permit in the Ninth Circuit Court of Appeals within 120 days from the General Permit issuance date.

Documents are Available for Review

Pursuant to 40 CFR § 124.9, the Administrative Record for the draft General Permit is available upon request by contacting Joseph Ziobro at (206) 553-2723 or ziobro.joseph@epa.gov. The draft General Permit, Fact Sheet, and Ocean Discharge Criteria Evaluation (ODCE) are available for review by contacting the EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday.

United States Environmental Protection Agency

Region 10

1200 Sixth Avenue, Suite 155, OWW-191

Seattle, Washington 98101

(206) 553-6251 or

Toll Free 1-800-424-4372 (within Alaska, Idaho, Oregon and Washington)

The fact sheet and draft permits are also available at:

U.S. Environmental Protection Agency Region 10
Alaska Operations Office
222 West 7th Avenue, #19
Anchorage, Alaska 99513
(907) 271-6561

The draft General Permit, Fact Sheet, and other information can also be found by visiting the Region 10 NPDES website at: <https://www.epa.gov/npdes-permits/npdes-general-permit-offshore-seafood-processors-alaska>.

For technical questions regarding the draft General Permit or Fact Sheet, contact Joseph Ziobro at the phone numbers or email address at the top of this fact sheet. Additional services can be made available to person with disabilities by contacting Audrey Washington at (206) 553-0523 or Washington.Audrey@epa.gov.

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Acronyms

ADEC	Alaska Department of Environmental Quality
AI	Aleutian Islands
AML	Average Monthly Limit
BE	Biological Evaluation
BMP	Best Management Practices
BOD ₅	Biochemical oxygen demand, five-day
BS	Bering Sea
BSAI	Bering Sea/Aleutian Islands
CCC	Criteria Continuous Concentration
CFR	Code of Federal Regulations
CV	Coefficient of Variation
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved oxygen
EEZ	Exclusive economic zone
EFH	Essential Fish Habitat
ELG	Effluent Limit Guideline
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
GOA	Gulf of Alaska
lbs/day	Pounds per day
mg/L	Milligrams per liter
ml	milliliters
ML	Minimum Level
µg/L	Micrograms per liter
mgd	Million gallons per day
MDL	Maximum Daily Limit
ML	Minimum Level
MLLW	Mean lower low water
MSD	Marine sanitation device
NLAA	Not likely to adversely affect

NMFS	United States National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
ODCE	Ocean Discharge Criteria Evaluation
OWW	Office of Water and Watersheds
O&M	Operations and maintenance
POTW	Publicly owned treatment works
QAP	Quality assurance plan
RP	Reasonable Potential
s.u.	Standard Units
TMDL	Total Maximum Daily Load
TSS	Total suspended solids
USFWS	U.S. Fish and Wildlife Service
USCG	United States Coast Guard
WQBEL	Water quality-based effluent limit

I. Background

The EPA is proposing to reissue the NPDES General Permit for Offshore Seafood Processors in Alaska (EPA General Permit No. AKG524000). The existing permit, hereafter referred to as the 2009 General Permit, expired on July 31, 2015, but continues in effect for facilities that submitted notices of intent (NOI) for authorization to discharge in a timely manner (in accordance with the 2009 General Permit Part VII.B) pursuant to 40 CFR 122.6.

II. Facilities Covered by the General Permit

The General Permit will authorize discharges of seafood processing waste from facilities (also referred to as “vessels”) that (1) discharge at least 3 nautical miles (NM) or greater from the Alaska shore as delineated by mean lower low water (MLLW) or a closure line and (2) which engage in the processing of fresh, frozen, canned, smoked, salted or pickled seafood, the processing of mince, or the processing of meal, paste and other secondary by-products. Types of vessels with coverage under this Permit include catcher-processors and motherships.

There are currently fewer than 100 permitted seafood processors that discharge effluent and operate more than 3 NM from the Alaskan shore or closure line. These vessels may process any of a large number of species of fish and marine invertebrates. Annual reports from 2015 and 2016 provided a rough breakdown of species caught, where the majority of seafood processed on vessels was groundfish. Of the groundfish reported, pollock and Pacific cod are the most fished species. Additional species caught also included sablefish, arrowtooth flounder, Pacific hake, jack mackerel, Alaska plaice, Pacific Ocean perch, rockfish, sculpin, lumpsucker, skate, sole, and Greenland turbot. Non-groundfish species reported include bairdi, opilio, and king crab.

This Permit does not authorize the discharge of pollutants from any shore-based facilities, nor any pollutants from vessels transporting seafood processing waste solely for the purpose of dumping materials into ocean waters. Shore-based facilities and vessels discharging inside of the 3 NM buffer from the Alaskan shoreline are operating in State Waters and are permitted by the Alaska Department of Environmental Conservation (ADEC). The only discharges that are authorized are the discharges from the seafood processing facilities described in the previous paragraphs.

III. Summary of Proposed Changes

The EPA is proposing the following changes to the 2009 General Permit (See Fact Sheet Section referenced in parenthesis for explanation of changes):

- (1) Terminology clarifications (See Section III.A of this Fact Sheet).
- (2) Revision of the grinding requirement (See Section VII.A.1 of this Fact Sheet)
- (3) Removal of the metals monitoring requirement (See Section VIII.A.7 and Appendix A of this Fact Sheet)

- (4) A Best Management Practice (BMP) provision that “vessels should be moving while discharging in order to aid dispersion of the discharge, unless doing so would compromise the safety of the vessel” (See Section VIII.C.1 of this Fact Sheet).
- (5) An additional requirement to estimate the occurrence of endangered species during the visual, sea surface monitoring occurring daily (See Section VIII.A.5 of this Fact Sheet).
- (6) Revised Notice of Intent (NOI) in Attachment A of the General Permit (See Section VI.A of this Fact Sheet).
- (7) Revised Annual Report in Attachment B of the General Permit (See Section VIII.B of this Fact Sheet).
- (8) A BMP Plan Certification page in Attachment C of the General Permit (See Section VIII.C).

A. Terminology Clarifications

At the request of members of the seafood industry, the EPA has clarified the terminology used in several sections of the General Permit. The terms “treatment” and “waste” have been replaced with “by-product recovery” or “by-product,” where appropriate, in order to reflect that by-product is a seafood material that has commercial value and can be converted into a finished product. For clarity, waste is still used in the Fact Sheet and Permit to denote effluent discharged to waters of the United States.

The EPA replaced “stormwater runoff” with “deck runoff,” which is consistent with the terminology in the EPA’s Vessel General Permit, where “deck runoff” is defined as the precipitation, washdowns, and seawater falling on the weather deck of a vessel and discharged overboard through deck openings (40 CFR §1700.4).

IV. Discharge Characterization

Basic information about the nature of discharges covered by the draft General Permit is provided in the Sections below.

B. Types of Discharge to be Covered by the Permit

The following types of discharges are proposed to be covered by the permit. Detailed information on the nature of the effluent is provided in the revised ODCE (USEPA et. al, 2018).

1. Seafood process wastes are authorized for discharge under the permit. The quantity and character of the seafood processing wastes generated vary due to the types of fish processed, finished product, and seasonal variation in their abundance. Discharges from offshore seafood processors may be classified into solid (particulate) and dissolved (soluble) wastes. The major pollutants of concern include residues, biochemical oxygen demand (BOD), total suspended solids

(TSS), non-petroleum oil and grease, and nutrients. These pollutants come from the waste solids (shell, bones, skin, scales, flesh and organs), blood, body fluids, slime, oils and fats from cooking and rendering operations. Ammonia may be present intermittently in negligible amounts. The color, turbidity, pH and temperature of process waste effluent may also differ from that of the receiving water.

2. Process disinfectants are authorized for discharge under the permit. Sodium hypochlorite and ammonium chlorides are the primary disinfectants used in the control of microbial contamination of seafood processing equipment and containers. As a result of the periodic use of these disinfectants to sanitize equipment, free chlorine may be present in residual amounts. Other disinfectants that may be discharged under the permit are iodine disinfectants which may also be used for sanitation and may be found in trace amounts.
3. Other wastewaters, including cooling water, boiler water, freshwater pressure relief water, refrigeration condensate, refrigerated seawater, cooking water, scrubber water, water used to transfer seafood to the facility, and live tank water, are authorized for discharge under the permit. Pollutants in these miscellaneous wastewater streams may include TSS, BOD, non-petroleum oil and grease, metals, pH and temperature.

C. Discharge Characterization for Annual Report Years 2014 and 2015

The annual waste discharges from the offshore vessels submitting 2014 annual reports ranged from 0 (no discharge) to 87.8 million pounds. The annual waste discharges from the offshore vessels submitting 2015 annual reports ranged from 0 (no discharge) to 88.2 million pounds. Of the 91 vessels that reported data in 2015, 11 reported zero discharge. The frequency distribution of vessels in 2014 and 2015 is positively skewed with 60 and 65 percent of the facilities discharging less than 10 million pounds, respectively. The median annual waste discharged from vessels in 2014 and 2015 was 7.1 and 6.2 million pounds, respectively. Total discharge for all offshore vessels reporting in 2015 was approximately 1.1 billion pounds.

Figure 1: Discharge Quantity per Vessel Based on 2014 Annual Reports

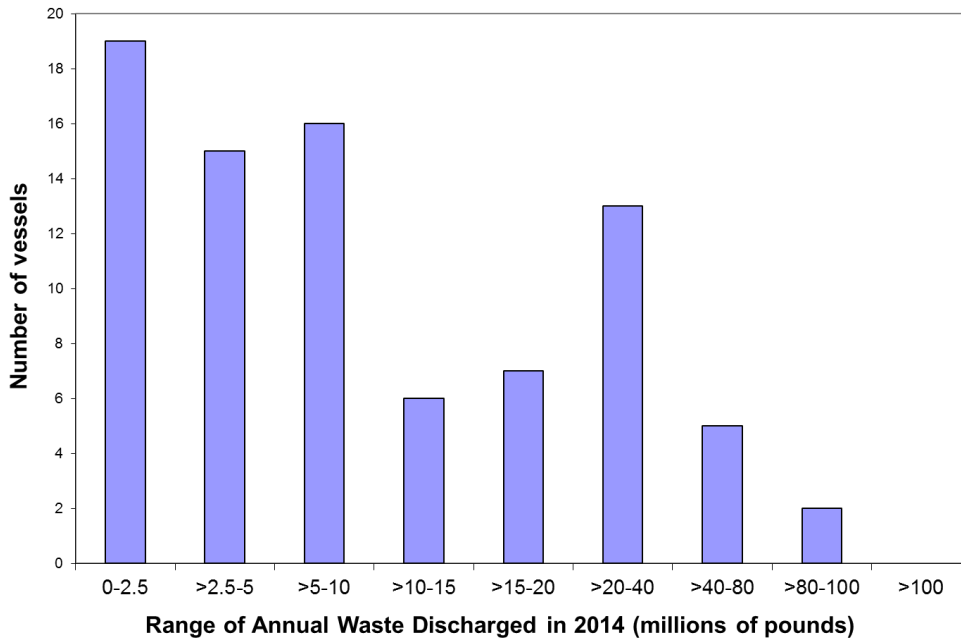
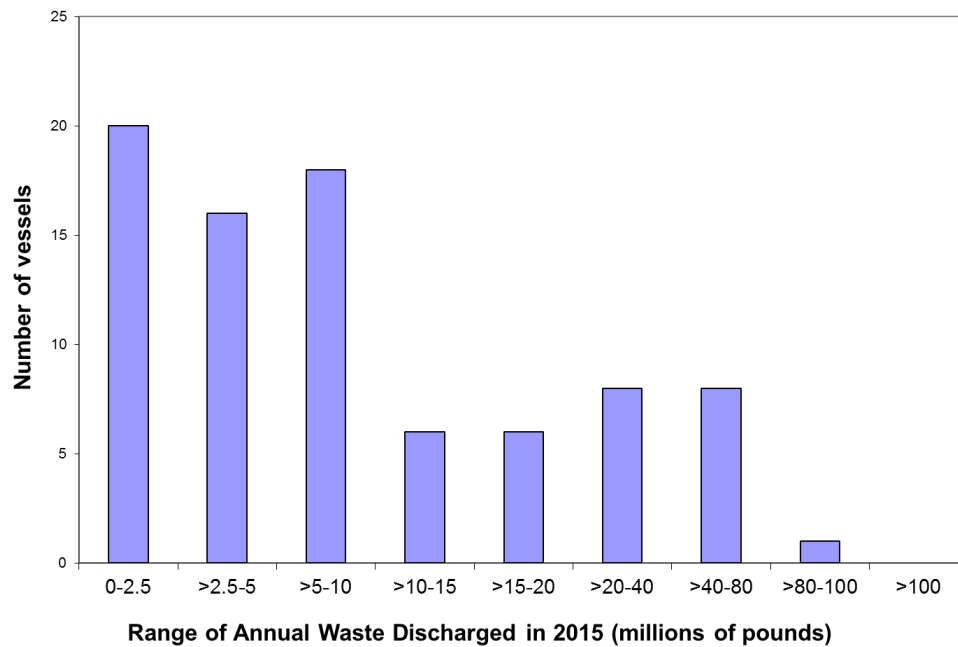


Figure 2: Discharge Quantity per Vessel Based on 2015 Annual Reports



Additional information regarding the Alaskan groundfish fishery and the composition of its discharge, is described in the ODCE, as well as documents referenced therein (USEPA et. al, 2018).

V. Receiving Waters Covered by the Permit

The draft General Permit authorizes seafood processing discharges to federal marine waters between 3 and 200 NM seaward of the Alaskan MLLW or closure line.

A. Receiving waters not authorized by the draft General Permit

Discharges are explicitly not authorized under the draft General Permit to receiving waters that have been identified as protected water resources, at-risk resources and water bodies, and certain waters that overlap with NMFS-designated critical habitat areas. A seafood processor who wants to obtain authorization to discharge in the "excluded areas" must apply for an individual NPDES permit. A detailed discussion of what constitutes protected, special, and at-risk water resources is included below and in Appendix B of this Fact Sheet.

Protected water resources and critical habitats.

- Waters within 1 NM of the boundary of a State Game Sanctuary, State Game Refuge, State Park, State Marine Park, or State Critical Habitat are excluded from coverage by the Permit.

The Alaska State Legislature has classified certain areas, designated as a State Game Sanctuary, State Game Refuge (5 AAC 95 Article 5), or critical habitat (5 AAC 95 Article 6), as being essential to the protection of fish and wildlife habitat.

- Waters within 1 NM of the boundary of a National Park, Monument or Preserve or within any bay, fjord or harbor enclosed by a National Park, Monument or Preserve are excluded from coverage by the permit.

Congressional mandates and Presidential proclamations have provided that federal parks, monuments and preserves be maintained to provide the scenic beauty and quality of landscapes in their natural state, to protect environmental integrity and habitat for and populations of fish and wildlife, including marine mammals, seabirds and waterfowl, and to provide continued opportunities for wilderness recreational activities [16 U.S.C. 1 et seq.].

- Waters within 1 NM of the boundary of a National Wildlife Refuge are excluded from coverage by the draft General Permit.

National Wildlife Refuges are maintained to protect environmental integrity and populations of fish and wildlife and their habitats, as well as to provide the scenic beauty and quality of landscapes in their natural state and opportunities for wilderness recreational activities [16 U.S.C. 661 et seq.].

- Waters within 3 NM of a rookery or major haulout of the Steller sea lion are excluded from coverage by the draft General Permit. Rookeries and major

haulout areas can be found in 50 CFR § 226.202 and Tables 1 and 2 to Part 226. See Figures 5 and 6 and Table 5 in Appendix B of this Fact Sheet.

Pinniped rookeries and haulouts are vulnerable to disturbance and degradation by seafood processor discharges and should be protected [Marine Mammal Protection Act, 16 U.S.C. 1361 *et seq.*; 50 CFR 226]. Rookeries are unique habitats where pinnipeds mate, birth and raise their progeny on a consistent annual basis. Haulouts are areas used for rest and refuge by pinnipeds of all ages and both sexes during the non-breeding season and non-breeding adults and subadults during the breeding season (NMFS 1993; NOAA 1993; 58 Fed. Reg. 45269-45285).

For regulatory purposes, the waterward boundary of rookeries and haulouts has been defined as MLLW. However, biologically, the boundaries are not easily delineated, because the surrounding nearshore waters are an integral component of these habitats, especially for foraging by post-parturient females and by young animals which are developing swimming and hunting behaviors. Conservation of rookeries and haulouts appears essential to the maintenance of pinniped populations in general, and to the recovery of the "endangered" population of Steller sea lions in particular.

- Waters within 1 NM of designated critical habitat for the Steller's eider or spectacled eider, including nesting, molting and wintering units. During breeding season (May through August) Steller's and spectacled eider nesting critical habitat units are located on the Yukon-Kuskokwim Delta and North Slope. Molting habitat (July through October) for Steller's eiders includes Izembek Lagoon, Nelson Lagoon and Seal Islands. Molting habitat for spectacled eider includes Ledyard Bay and Norton Sound. Wintering habitat (October through March) for Steller's eider includes Nelson Lagoon, Izembek Lagoon, Cold Bay, Chignik Lagoon and several other locations along the Aleutian Islands. Wintering habitat for spectacled eider is in the Bering sea between St. Lawrence and St. Matthews Islands. Details regarding the critical habitat for the Alaska-breeding population of the Steller's Eider are listed and depicted in 50 CFR Part 17, 66 FR 8850 8884.

At-risk resources and waterbodies.

Areas with water depth of less than 10 fathoms (60 feet) at MLLW that have poor flushing, including but not limited to sheltered waterbodies such as bays, harbors, inlets, coves and lagoons and semi-enclosed water basins bordered by sills of less than 10 fathom depths are excluded from coverage under the draft General Permit. For the purposes of this section, "poor flushing" means average water currents of less than one third of a knot within 300 feet of the outfall. Currents of one third knot and greater offer significant dispersion and

re-suspension of seafood process waste residues (ADEC, EPA and Tetra Tech 2018).

Waters covered by other general NPDES permits.

The permit does not authorize the discharge of pollutants in state waters (0 to 3 nm) and areas covered by other general NPDES permits. The following general permits are currently in effect: AKG527000 (Pribilof Islands), AKG528000 (Kodiak Island), AKG520000 (shore-based), AKG521000 (shore-based), and AKG523000 (near-shore).

VI. Applying for Coverage under the Draft General Permit

A. Notice of Intent for Authorization to Discharge

40 CFR § 122.28(b)(2)(i) requires applicants seeking coverage under a general permit to submit a written NOI to be covered by the general permit. The specific requirements for the NOI are outlined in Part IV of the permit.

40 CFR § 122.28(b)(2)(ii) requires the contents of the NOI to contain information necessary for adequate program implementation, including at a minimum, the legal name and address of the owner or operator, the facility name and address, the type of facility or discharges, and the receiving water(s). The EPA has made the following revisions to the NOI for consistency with the NOI requirements contained in the Offshore Seafood Processing Permit for waters offshore of the Oregon and Washington Coasts, and for clarification:

- Clarifications of intent and terminology.
- Projected maximum quantity in pounds of process waste solids discharged annually *by species*.
- For vessels required to grind in Steller sea lion critical habitat areas in accordance with Part V.A.3 of the Permit:
 - Type and name of grinder(s)
 - Size in inches the grinder(s) is designed to grind seafood wastes

Deadlines for Submitting Notice of Intent.

40 CFR § 122.28(b)(2)(iii) require general permits to specify the deadlines for submitting NOIs. 40 CFR § 122.28(b)(2)(iii) requires general permits to specify the date when a discharger is authorized to discharge under a general permit. The date when an applicant is authorized to discharge under the General Permit is the date the EPA notifies the applicant in writing of authorization to discharge and assigns the applicant a permit number (if not already assigned under the 2009 General Permit). In addition, coverage under the previous permit will terminate on this date.

- a) For a New Permittee (without current permit coverage)

New facilities seeking authorization to discharge under the permit must submit a timely and complete NOI along with all supplementary documents to the EPA no later than 90 days after the effective date of this General Permit, or at least 90 days prior to the desired date of coverage. This time period will allow the EPA adequate time to review the application and inform the applicant of its permit determination.

b) For an Existing Permittee (with current coverage)

Any Permittee currently covered by the 2009 General Permit and who submitted an NOI at least 90 days prior to the expiration of the 2009 General Permit must submit a new NOI to the EPA no later than 90 days after the effective date of this Permit. The updated NOI will provide the EPA with the necessary data to determine eligibility under the reissued General Permit. The EPA will inform the applicant when the facility has been authorized to discharge under the reissued General Permit.

c) Where a process or operational change that will result in a change to the discharge is planned to occur, facilities must submit an updated NOI to the EPA at least 90 days prior to discharge.

d) In addition, if a permittee intends to continue discharge activities after the expiration date of this general permit, that permittee must either submit an NOI to continue coverage at least 90 days prior to the expiration date of this General Permit or apply for and obtain an individual permit. The draft General Permit contains specific conditions for reapplication under the Duty to Reapply provision.

B. Requiring an Individual Permit

40 CFR § 122.28(b)(3) provides situations where the Director may require any discharger authorized by a general permit to apply for and obtain an individual NPDES permit.

Pursuant to 40 CFR § 122.28(b)(3)(G)(iii), any operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The operator shall submit an application, with reasons supporting the request, to the EPA no later than 90 days after the publication by the EPA of the general permit in the Federal Register or prior to the desired date of coverage. This application shall include NPDES permit application Forms 1 and 2C, together with the same information as in Part IV.C of the draft General Permit.

VII. Basis for Effluent Limitations

Section 301(a) of the CWA, 33 U.S.C. § 1311(a), prohibits the discharge of pollutants to waters of the U.S. unless authorized pursuant to a NPDES permit. CWA Section 402, 33 U.S.C. § 1342, authorizes the EPA to issue NPDES permits for discharges subject to the limitations and requirements imposed pursuant to Sections 101, 301(b), 304, 308, 401 and 403 of the Act, 33

U.S.C. §§ 1251, 1311(b), 1314, 1318, 1341, and 1343. The EPA evaluates discharges with respect to these sections of the Act and the relevant NPDES regulations in determining which conditions to include in the permit. Pursuant to these statutory provisions, the EPA is required to include effluent limitations that (1) meet standards reflecting levels of technological capability, (2) comply with EPA-approved State water quality standards, (3) comply with other State requirements adopted pursuant to CWA Section 510, 33 U.S.C. § 1370, and (4) cause no unreasonable degradation to the territorial seas, contiguous zone, or oceans. Moreover, many NPDES permits include reporting/information gathering requirements pursuant to CWA Section 308, 33 U.S.C. § 1318.

In general, the EPA first determines if there are any applicable technology-based effluent limits that apply to the discharge. In addition, the EPA must also determine whether there are any water quality based effluent limits that must be applied to the discharge. The EPA is required to impose the limit that is most stringent in the permit.

A. Technology-based Effluent Limitations

Section 301(b) of the CWA, 33 USC § 1311(b), requires technology-based controls on discharges from point sources. All permits must contain effluent limitations which: (a) control toxic pollutants and nonconventional pollutants through the use of “best available technology economically achievable” (BAT), and (b) control conventional pollutants through the use of “best conventional pollutant control technology” (BCT). In no case may BAT or BCT be less stringent than “best practical control technology currently achievable” (BPT), which is the minimum level of control required by Section 301(b)(1)(A) of the CWA, 33 USC § 1311(b)(1)(A).

There are two general approaches for developing technology-based effluent limits: (a) using applicable national effluent limitations guidelines (ELGs), and (b) using Best Professional Judgment (BPJ) on a case-by-case basis. The intent of a technology-based effluent limitation is to require a minimum level of treatment for point sources based on currently available treatment technologies while allowing the discharger to use any available control technique to meet the limitations.

ELGs are developed on a national scale and reflect a reasonable level of treatment that is within the economic means of specific categories of facilities. Where national ELGs have not been developed or did not consider specific pollutant parameters in discharges, the same performance-based approach is applied to a specific facility based on the permit writer’s BPJ. In some cases, technology-based effluent limits based on ELGs and BPJ may be included in a single permit.

B. Water Quality-based Effluent Limitations

Section 301(b)(1)(C) of the CWA, 33 USC § 1311(b)(1)(C), requires that NPDES permits include any effluent limitations necessary to meet the EPA-approved state water quality standards in state waters. State water quality standards do not apply to waters

beyond the territorial seas (i.e., the contiguous zone and oceans), therefore Alaska State Water Quality Standards are not applicable to these waters.

C. Ocean Discharge Criteria

Section 403 of the CWA, 33 USC § 1343, prohibits issuing a NPDES permit for discharges into the territorial seas, the contiguous zones, and the oceans except in compliance with the ocean discharge guidelines that are set forth in 40 CFR Part 125, Subpart M. The guidelines set out criteria that the EPA must evaluate to ensure that point source discharges do not cause unreasonable degradation to the marine environment. The criteria are set out in 40 CFR § 125.122.

The EPA prepared an ODCE report for this permit and determined that the discharges authorized under this Permit will not cause unreasonable degradation to the marine environment (USEPA, et. al., 2018). Discharges to water resources which are protected, special, at-risk or impaired are not authorized under the permit. The processing operations covered under the permit are expected to have little environmental effect, provided appropriate discharge buffer and dispersing practices in accordance with this permit are implemented.

D. Reevaluation of the Grinding Requirement

In the 2009 General Permit, the EPA applied the Seafood Processing ELGs described in 40 CFR Part 408 for "remote" Alaskan locations to the offshore Alaskan seafood processors. This requirement is to "grind solid seafood processing wastes to 0.5 inch or smaller in any dimension prior to discharge." The ELGs were promulgated in 1975 (see 40 CFR Part 408).

In 2013, the Freezer Longline Coalition petitioned the EPA regarding the grinding requirement which prompted the EPA to review the administrative record for the development of the remote Alaska Seafood Processing ELGs. After the review of the record, the EPA found that at the time the ELGs were promulgated, the offshore seafood processing industry was in its infancy. Thus, this part of the sector was not included when determining what was technologically and economically feasible. The EPA concluded that the remote Alaska shore-based seafood processing ELGs, which include the half inch size requirement, was not applicable to offshore seafood processors. As such, there are no applicable ELGs for the offshore seafood processing sector in Alaska. The EPA was additionally asked by some Permittees under the 2009 General Permit to evaluate whether the grinding condition is technologically feasible as written for the offshore industry. Specifically, the Permittees had compliance concerns with regard to meeting the part of the permit limit that required them to grind the seafood waste to 0.5 inch "*in any dimension*".

In March 2018, Congress passed the Omnibus Agreement for Remainder of Fiscal Year 2018 (FY18 Omnibus) which contained the following recommendation regarding the implementation of the Alaska Seafood Processing ELGs in onshore and offshore Alaskan waters:

Under a Clean Water Act general permit, onshore seafood processors in Alaska are allowed to grind and discharge seafood waste. The permit requires that all seafood waste be ground to a size of no more than one-half inch in any dimension. Unfortunately, in some instances, the best available technology is unable to achieve a half inch grind dimension on a consistent basis due to the malleable nature of fish waste. The Agency should develop a policy to ensure that fish processors using the best available technology and/or best conventional practice will be considered in compliance. Additionally, processing vessels operating in waters offshore of Alaska are subject to the same one-half inch grinding requirement even though there are no documented water quality issues that require such grinding. The Agency should exempt offshore processing vessels from the requirement.

In response, the EPA has investigated whether the half inch grind requirement could be removed to allow for the discharge of whole (unground) fish waste. This investigation evaluated the potential ecological effects of discontinuing the grinding requirement in offshore Alaskan waters through a literature review and interviewing subject matter experts. Results of the investigation tentatively concluded that impacts to the seafloor and water quality from the discharge of whole or ground fish are expected to be fairly minimal (ODCE, USEPA, et. al., 2018). The EPA currently lacks the resources to monitor the ecological and environmental impacts of ground versus unground discharge on the sea floor. The discharges occur at least three NM offshore and in waters with depths typically near 35 fathoms (210 feet). Deep-sea monitoring is difficult and expensive and would likely require the employment of a specialized research vessel. While grinding has been shown to increase the rate of settling and dispersion, the overall effects of discontinuing the grinding requirement in the Alaskan Ocean may be minimal for the following reasons:

- The offshore waters of the Bering Sea and Gulf of Alaska provide for highly turbulent and rapid mixing of the effluent. The combination of wind, tide and water depth greatly increases mixing and dispersion of discharges both whole and ground. This also minimizes concentrated oxygen consumption, sedimentation of solids, and potential impact on sea life and water quality.
- There is expected to be some removal of material from the water column by consumption or transformation (decay or loss).
- This Permit includes a BMP requiring vessels to be moving while discharging unless doing so would compromise the safety of the vessel. This BMP is expected to promote the dispersion of wastes and minimize accumulation on the sea floor.
- The 2009 ODCE included a modeling study which estimated the depth of accumulation at the sea floor from discharging ground effluent to be 0.5 centimeters deep.

In accordance with Section 7 of the Endangered Species Act, the EPA also engaged National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS) to understand the impact of removing the grinding requirement on ESA-listed species. Literature and subject matter experts at NMFS expressed concern to listed species if the grinding requirement were removed. NMFS believed that larger pieces of seafood waste are more attractive to the Steller sea lion. NMFS suspected that Steller sea lion foraging behavior would be disrupted if large pieces of its primary prey species were discharged by vessels. In contrast, USFWS expressed that the larger pieces of seafood waste may be less attractive to the short-tailed albatross, in other words, removing the grinding requirement may lessen the impact of the discharge on the short-tailed albatross.

As a result of the concerns raised by NMFS regarding potential impacts on Steller sea lion foraging behaviors, the EPA considered including a provision in the Permit that would require grinding only in cases where vessels discharge within the Steller sea lion critical habitat areas described in 50 CFR § 226.202. However, the EPA recognizes that the imposition of any grinding requirement could result in operational, economic, and safety challenges for the smaller vessels. In response, the EPA is providing an exemption to the grinding requirement in Steller sea lion critical habitat for the smaller vessels, using a discharge volume threshold of less than 10 million pounds per reporting year to delineate smaller vessels.

Additional discussion on consultation under Section 7 of the Endangered Species Act is provided in Section X of this Fact Sheet, including NMFS' suggested mitigation measures for vessels exempt from grinding in Steller sea lion critical habitat.

In summary, the EPA is proposing to remove the effluent grinding requirements for all vessels if discharge occurs outside of Steller sea lion critical habitat areas. Within Steller sea lion critical habitat areas, vessels that discharge less than 10 million pounds annually¹ will not be required to grind seafood waste prior to discharge, while vessels that discharge greater than 10 million pounds annually¹ will be required to grind seafood waste prior to discharge. Further, recognizing the performance limitations of commercial grinders expressed by the sector, the draft General Permit specifies that in cases where grinding is required prior to discharge, permittees must use grinding equipment that is designed to grind seafood wastes to 0.5 inches or smaller, rather than applying a requirement to grind to 0.5 inch in any dimension. This change in wording allows pieces of seafood that are more difficult to grind, such as skin, to exceed the 0.5 inches in size as long as the grinder and grinding blades are operating in accordance with manufacturer recommendations and designed to grind pieces to 0.5 inches or smaller. This revised language is the same language that was used in the recently issued 2019 OR/WA Seafood GP. Section V.A.3 of the draft Permit states:

¹ A Permittee is determined to discharge greater than 10 million pounds according to their annual discharge as reported in their NOI. This applies across all Alaska waters where discharges are authorized by the Permit.

Table 1: Revised Grind Requirement Language

Existing General Permit (2009 Permit)		Draft General Permit	
Permit §II.A.1.a:	“Permittees must grind solid seafood processing wastes to 0.5 inch or smaller in any dimension prior to discharge.”	Permit §V.A.3:	If discharging in Steller sea lion critical habitat, permittees that discharge greater than 10 million pounds of seafood processing waste per annual report year must send all solid seafood processing wastes through a properly maintained and operating grinder system. The grinding system must be designed and operated to grind solids to 0.5 inch or smaller prior to discharge. A Permittee is determined to discharge greater than 10 million pounds according to their annual discharge as reported in their NOI. Critical habitat areas are designated by NMFS and identified in 50 CFR Part 226.202 and Tables 1 and 2 to Part 226.

E. Anti-backsliding

Section 402(o) of the Clean Water Act and 40 CFR §122.44 (l) generally prohibit the renewal, reissuance or modification of an existing NPDES permit that contains effluent limits, permit conditions or standards that are less stringent than those established in the previous permit (i.e., anti-backsliding) but provides limited exceptions in CWA Section 402(o)(2).

The EPA evaluated whether backsliding of the grinding requirement complies with the anti-backsliding provisions. As discussed above, the EPA reviewed the administrative record for the development of the remote shore-based Alaska seafood processing ELGs and found that the offshore sector in federal waters was not included when determining what was technologically and economically feasible. In the previous permit, the “0.5-inch grind” provision was mistakenly applied as a TBEL in accordance with the grinding ELG. Since the TBEL was misapplied due to a mistaken interpretation of the law, the EPA may remove the grinding provision under the antibacksliding exception found at CWA Section 402(a)(1)(b).

VIII. Monitoring and Reporting Requirements

A. Monitoring Requirements

The EPA must also include monitoring requirements in the permit to monitor compliance with effluent limitations pursuant to 40 CFR 122.44(i). Ambient monitoring may also be required to gather data for future effluent limitations or monitor effluent impacts on receiving water quality and the integrity of the water resource.

The following monitoring is required to ensure that the facility's systems are working properly and to ensure that effluent limitations and conditions are met. Changes to monitoring requirements include:

- Removal of metals monitoring.
- Daily inspection logs and representative pictures of the grinder system will only be required when grinding is required under Section V.A.3 of the Permit.
- Daily sea surface monitoring has been modified to include ESA-listed species monitoring to inform whether the discharge of whole fish affects attraction to the discharge.

Waste Conveyance system:

The waste conveyance and waste treatment system must be inspected daily whenever seafood processing occurs. This inspection is necessary to ensure that miscellaneous items (e.g., earplugs, rubber bands, etc.) are not entrained within the conveyance system and discharged through the outfall. A daily log must be maintained on site, and the results of the inspection must be submitted at the request of the EPA.

Outfall System

A pre-operational check of the outfall system must be performed at the beginning of each processing season to ensure that the outfall system is operable. Any failure of the outfall system must be reported to the EPA in accordance with Part VII.G.

Representative Pictures

For each outfall location, the Permittee must take at least four pictures quarterly while processing is occurring. Each quarter the four pictures must include at least one of each of the following:

- a) The receiving water in the immediate vicinity of where the outfall system is discharging;
- b) An extended view of the receiving water showing processing waste (if any) on the sea surface behind the vessel;
- c) An extended view from the sides of/or behind the vessel showing any interactions with seabirds or marine mammals (if any); and
- d) The effluent sample (showing residues size), in cases where grinding of seafood waste is required under Section V.A.3 of the Permit.

Each picture must be labelled with date, time, name of person taking the picture, and a description of what the picture represents.

Sea Surface monitoring

The draft General Permit includes a new provision intended to ensure compliance with marine water quality criteria and to monitor potential interactions with ESA-listed species. The requirements of the sea surface monitoring program are detailed in Part VI.C. of the draft General Permit. Logs of this monitoring must be kept on-board the vessel and submitted to the EPA with the Annual Report.

The sea surface monitoring must estimate the occurrence and number of the following ESA-listed species attracted to the discharge identified within the survey area: short-tailed albatross (*Phoebastria albatrus*), spectacled eider (*Somateria fischeri*), Steller's eider (*Polysticta stelleri*), and Steller sea lion (*Eumetopias jubatus*) (Permit Section VI.C.3.b.(1)). This condition will collect information on endangered species interactions with the offshore processing industry.

Sanitary wastewaters

The Permittee must route all sanitary wastes through a sanitary waste system that meets the applicable U.S. Coast Guard pollution control standards then in effect [33 CFR 159: "Marine sanitation devices"]. Nonfunctioning and undersized systems are prohibited.

Grinder system

Where grinding is required under Section V.A.3 of the Permit, the Permittee must conduct a daily inspection of the grinder system during the processing season to confirm that the grinder(s) is (are) operating properly as designed to reduce the size of the seafood residues to 0.5 inch. This will require inspecting the size of the ground residues reduced in grinding by taking a representative sample of the ground discharge and ensuring the pieces are being ground appropriately. Logs of this daily inspection must be kept on-board the vessel until the end of the calendar year and then maintained at the business office thereafter. Logs must be submitted at the request of the EPA.

Removal of Metals Monitoring Requirements

The 2009 General Permit required each processor to conduct, at a minimum, quarterly influent and effluent metals monitoring for at least two years. The monitoring requirement was established to evaluate the effluent impacts on the receiving water in contrast to ambient levels, to ensure marine water quality criteria are being met, and to determine if additional effluent conditions are required.

After reviewing the metals monitoring information that was submitted during the last permit term, the EPA has determined that the total metals discharged in accordance with the requirements of the permit will not cause unreasonable degradation of the receiving waters. The supporting analysis for this conclusion is included in Appendix A of this Fact Sheet.

Table 2: Summary of Metals Monitoring Changes

Existing General Permit (2009 permit)		Proposed General Permit	
Permit §V.I.D:	Two years of influent and effluent metals monitoring	None	No metals monitoring required

B. Annual Report

The EPA is requiring some additional information in the Annual Report to better understand the nature and distribution of discharges covered by this Permit. These reporting requirements are expected to have minimal impacts on current recordkeeping practices and will allow the EPA to conduct more accurate environmental assessments during future permitting actions.

Changes to the Annual Report attachment include:

- Clarifications of intent and terminology.
- References to influent and effluent quarterly reports removed.
- Additional specificity related to percentage by-product recovered.
- Additional specificity related to distance traveled and average vessel speed.
- Additional specificity related to the daily location of the vessel while discharging.
- Additional specificity related to the number of processing days where discharges occurred in Steller sea lion critical habitat areas.
- Total pounds of stickwater discharged per month.

C. Best Management Practices (BMP) Plan

The CWA and 40 CFR §122.44(k) allow for requirements to implement best management practices (BMPs) in NPDES permits to control or abate the discharge of pollutants whenever necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. BMPs are important tools for waste minimization and pollution prevention.

The draft General Permit requires all dischargers to adhere to specific operating limitations and BMPs and requires existing dischargers to develop and implement a BMP Plan within 60 days of becoming authorized to discharge under its terms. Dischargers must identify and assess potential impacts of pollutant discharges and identify specific management practices and operating procedures to prevent or minimize the generation and discharge of pollutants including the specific operating limitations and BMPs listed in the General Permit.

The BMP Plan is an enforceable condition of the permit and must be amended whenever there is a change in the facility or its operation which materially increases the potential for discharges of pollutants.

Refer to Section VI.A of the General Permit to review the BMP Plan requirements. For convenience, the draft General Permit includes a BMP Plan Certification page with standard language that Permittees may use to submit to the EPA (Attachment C).

Moving While Discharging

The draft General Permit adds a condition that requires vessels to be moving while discharging, unless doing so would compromise vessel safety (Permit Section VI.A.5.j). In general, the Alaskan continental shelf is hydrodynamically energetic, where the combination of wind, tide and water depth greatly increases mixing and the dispersion of discharges. Even so, due to the difficulty of in-situ monitoring there remains uncertainty over the protection of benthic and essential fish habitats from smothering at the seafloor. The EPA believes this is a reasonable best management practice in order to minimize the potential accumulation of waste on the seafloor. The EPA does not expect permittees to undergo operational changes to meet this condition as vessels generally move continuously already due to wave and tidal actions. Additionally, this condition was public noticed and included in WA/OR General Permit.

IX. Other Requirements

A. National Environmental Policy Act [42 U.S.C. 4321 et seq.]

Under the National Environmental Policy Act of 1969 (NEPA), major federal actions that could significantly affect the quality of the environment must undergo an environmental review. The Council on Environmental Quality (CEQ) established regulations for implementing NEPA in 40 CFR 1500. The EPA established regulations to govern its compliance with NEPA in 40 CFR 6. The EPA's NEPA compliance responsibilities include the "cross-cutting" statutes, i.e., Endangered Species Act, National Historic Preservation Act, the Executive Order on Environmental Justice, and Executive Orders

on wetlands, floodplains, farmland, and biodiversity. The NEPA compliance program requires analysis of information regarding potential impacts, development and analysis of options to avoid or minimize impacts; and development and analysis of measures to mitigate adverse impacts. The EPA is required to conduct a NEPA analysis when issuing NPDES permits to “new sources” as defined in 40 CFR 122.29. As discussed above, there are no ELGs that are applicable to this sector. Therefore, a NEPA analysis is not required for this permit.

B. Standard Permit Provisions

Parts VIII and IX of the draft General Permit contains standard regulatory language that must be included in all NPDES permits. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

C. Coastal Zone Management Act [16 U.S.C. 1451 et seq.]

As of July 1, 2011, there is no longer a Coastal Zone Management Act (CZMA) program in Alaska. Since the CZMA Federal consistency provisions no longer apply in Alaska, consistency determinations from Federal agencies no longer require a response from the Alaska Coastal Management Program (ACMP) and may proceed in accordance with other applicable law and procedures.

D. Environmental Justice

Executive Order 12898 titled, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities.” The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permits. “Overburdened” communities can include minority, low-income, tribal, and indigenous populations or communities that potentially experience disproportionate environmental harms and risks. As part of the General Permit development process, the EPA conducted a screening analysis to determine whether this permit action could affect overburdened communities. This tool is used to identify permits for which enhanced outreach may be warranted. The General Permit only covers federal waters and does not cover any communities or places where people live. However, coastal communities could theoretically be affected by the offshore seafood processing sector. Additional information regarding the environmental justice process is located at: <https://www.epa.gov/environmentaljustice>. The General Permit implements existing water pollution prevention and control requirements, including best management practices, to ensure compliance with CWA requirements, including preventing unreasonable degradation of the marine environment. As discussed in the ODCE, the EPA evaluated the potential for significant adverse changes in ecosystem diversity, productivity, and stability of the biological communities within the area of coverage. The ODCE also evaluates the threat to human health through the direct

physical exposure to discharged pollutants and indirectly through consumption of exposed aquatic organisms in the food chain. Additionally, the EPA has the authority to make modifications or revoke permit coverage if unreasonable degradation results from the wastewater discharges.

E. Tribal Coordination and Consultation

Consistent with the EPA Policy on Consultation and Coordination with Indian Tribes, EPA staff and Region 10 Tribal Coordinators engaged with coastal Alaskan tribes that could be interested in the draft General Permit. The EPA will continue to work with Alaskan tribes during the permit issuance process. The EPA specifically solicits additional comment on this proposed action from tribal officials.

X. Endangered Species Act [16 U.S.C. 1531 et al.]

Section 7 of the Endangered Species Act requires Federal agencies to consult with NOAA (NMFS) and the USFWS if their actions have the potential to either beneficially or adversely affect any threatened or endangered species. The EPA prepared a draft Biological Evaluation (BE) for the Permit. Consultations between the EPA and NOAA and NMFS are ongoing. As part of the consultation, NMFS suggested potential mitigation measures for vessels exempted from grinding in Steller sea lion critical habitat to help quantify and reduce the effects of the action. The EPA is requesting comments on these mitigation measures. The EPA will request concurrence from NMFS and USFWS on the draft General Permit and will consider their comments in the final permit decision.

Mitigation Measures Suggested by NMFS:

- Require that in waters west of 144 degrees W longitude (Cape Suckling), discharges of unground waste must cease whenever Steller sea lions occur within 250 m of vessels operating under the permit until no Steller sea lions have been observed within 250 m of the vessel for at least 15 consecutive minutes following the cessation of discharge of unground waste.
- Require vessels to use marine mammal observers to watch for and report on sea lions within 250 m of a vessel when discharging unground waste. Observers will have the ability and authority to order the cessation of unground discharge.

Written reporting must include:

- For each discharge of unground waste, the discharge date, discharge starting and stopping time and geographic coordinates,
- For all sea lion sightings,
 - the date, time, and location at which any sea lion was observed within 250 m of a discharging vessel, and the number of sea lions observed if more than one at a time,
 - the duration of time each sea lion was within 250 m of the vessel,
 - behaviors of the sea lion(s) within that zone,

- the time at which release of unground seafood waste ceased and resumed relative to the presence of sea lions observed within 250 m of the discharging vessel.
- For sea lion sightings that include interaction with gear, accounts of all lethal and non-lethal sea lion interactions with fishing gear, indicating:
 - the nature of the interaction, the date, time and location of the interaction with gear,
 - the number of animals interacting with the gear,
 - whether the animal fed upon whole discards, discharged seafood waste, unprocessed catch, or other food sources,
 - sea lion behavior during and following gear interaction and whether entanglement or entrapment of sea lions in gear occurred or was suspected to have occurred,
 - All instances of aggressive behavior of sea lions towards vessels or humans, noting the date, time, location, number of animals involved, and the nature and outcome of the aggressive interaction.
- Require reporting of daily (or perhaps weekly) volumes of ground and unground waste that are discharged, and the geographic locations of these discharges, along with an indication of the vessel's fishery and gear type.
- Require vessels to prepare and submit annual monitoring reports containing all of the information detailed above.

A. ESA Seabirds

ESA-listed seabirds that may interact with this project area include the short-tailed albatross, spectacled eider and Steller's eider. Seabirds can be attracted to seafood processing waste discharge, which can result in injury and/or mortality due to ship strike and cable interactions (Zador and Fitzgerald, 2008 and Melvin, et al., 2004). Birds also dive after baited hooks as they are being set, get hooked, and drown while being dragged below the water's surface with the sinking line (USFWS, 2015). Seabird avoidance measures reduce the incidental mortality of seabirds in the fisheries off Alaska.

Trawl gear is the predominant gear used in the BSAI fisheries and accounts for the greatest amount of groundfish caught. Seabird interactions with trawls may occur when seabirds fly behind vessels or float in offal plumes that trail behind vessels. Individuals can strike the trawl cables (warp cables) or the transmission cable (third wire) attached to the net or become entangled on the outside of nets towed at or near the surface; the former in particular are unlikely to be detected as they do not show up on the vessels' deck to be sampled (USFWS 2008). The attraction to trawl vessels combined with the overlap of the pelagic trawl fleet with the range of the short-tailed albatross makes for potential interactions with the fleet.

Currently, the only gear with mandatory seabird avoidance requirements is the use of hook-and-line in the Gulf of Alaska. Seabird avoidance regulations are detailed in 50

CFR 679.24(e)(2) and 679.42(b)(2) and provide specific gear limitations and requirements applicable to vessels fishing with hook-and-line gear.

The draft General Permit continues the discharge prohibition in waters within 1 NM of designated Steller's and spectacled eider's critical habitat, including nesting, molting and wintering units (See Section V.A.1 and Appendix B of this Fact Sheet).

The EPA concluded that the buffer of critical habitats and dispersion of discharge wastes by the receiving waters and continuously moving vessels will mitigate seabird interactions and therefore this Permit is NLAA ESA-listed seabirds.

B. Marine Mammal Protection Act [16 U.S.C. 1361 et seq.]

ESA-listed mammals that may interact with this project area include the Steller sea lion, blue whale, bowhead whale, fin whale, humpback whale, North Pacific right whale, sei whale, sperm whale, beluga whale, gray whale, polar bear, Northern sea otter, ringed seal, and bearded seal. Section 2 of the Marine Mammal Protection Act finds that marine mammals are resources of great international significance, aesthetic, recreational and economic, and should be protected, conserved and encouraged to develop optimum populations. In particular, efforts should be made to protect the rookeries, mating grounds and areas of similar significance for each species of marine mammal from the adverse effect of man's actions. With the exception of subsistence use for Alaskan natives, a moratorium has been placed on the taking (harass, capture or kill) of marine mammals.

The draft General Permit continues the provision for "buffer zones" around the rookeries and haulouts of Steller sea lions (See Section V.A.1 and Appendix B of this Fact Sheet).

The EPA concluded that the buffer of critical habitats and dispersion of discharge wastes by the receiving waters and continuously moving vessels will mitigate marine mammal interactions and therefore the discharge authorizations from this Permit are NLAA ESA-listed mammals.

C. Other ESA Species

In addition to those listed above, the EPA evaluated the ESA-listed green turtle, leatherback sea turtle, loggerhead sea turtle and Olive Ridley sea turtle. Consistent with seabirds and mammals, the EPA concluded with a NLAA determination (USEPA and Aqua Terra Consultants. 2018).

I. Essential Fish Habitat (EFH)

The Magnuson-Stevens Fishery Management and Conservation Act requires the EPA to consult with NOAA Fisheries when a proposed discharge has the potential to adversely affect an EFH. The EFH regulations define an adverse effect as "any impact which reduces quality and/or quantity of EFH...[and] may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions." NOAA Fisheries may recommend measures for attachment to

the federal action to protect EFH; such recommendations are advisory, not proscriptive, in nature.

The EPA has tentatively determined that the issuance of the draft General Permit will cause minimal effects upon EFH species and habitat in the vicinity of seafood processor discharges of processing wastewater and waste solids. The EPA is requesting that NMFS issue a "general concurrence" for this permit issuance.

II. Other Information

A. State Certification

Section 401 of the Act, 33 USC 1341, requires the EPA to seek a certification from the State that the conditions of the draft General Permit are stringent enough to comply with State water quality standards. The provisions of this permit only apply to Federal waters; therefore, State certification is not required from Alaska.

B. Paperwork Reduction Act [44 U.S.C. 3501 et seq.]

The EPA has reviewed the requirements imposed on regulated facilities in the draft General Permit under the Paperwork Reduction Act. Most of the information collection requirements have already been approved by the OMB in submissions made for the NPDES permit program and the previous general NPDES permit for seafood processors in Alaska.

C. Impact on Small Businesses

While this is a permit covered by the EPA's permitting procedures and not a rulemaking, the EPA did analyze the potential impact of today's permit on small entities and concludes that this permit reissuance will not have a significant impact on a substantial number of small entities. As discussed in Section III, Summary of Proposed Changes, all changes from the 2009 Permit results in either no or negligible incremental cost and no or negligible operational and/or economical burdens to offshore seafood processors. Changes to the Proposed Permit include the removal of the metals monitoring requirement and the grinding provision, except as described in V.A.3 of the Permit, which is expected to reduce operator burdens. In addition, there are not a substantial number of small entities affected by this permit as the EPA understands that there are few, if any, small businesses that are owners or operators of facilities subject to this permit. The EPA did not conduct a quantitative analysis of impacts for this Permit, as that would only be appropriate if the Permit may affect a substantial number of small entities.

Additionally, the EPA previously found that the promulgation of the Offshore Subcategory guidelines on which many of the permit's effluent limitations are based did not have a significant impact on a substantial number of small entities. (58 FR 12492, 1993). The permit also contains limits based on CWA 403(c) Ocean Discharge Criteria evaluation, but these limits did not change from the 2009 permit limits based on that analysis.

III. References

- Bechtel, Peter J., and Blum, Bodil A. 2003. The Potential Fate and Effects of Seafood Processing Wastes Dumped at Sea: A Review. Alaska Sea Grant College Program. AK-SG-03-01. 2003.
- Ismond, Alan. 1994. Water and wastewater audits. In "Proceedings, Wastewater Technology Conference and Exhibition for Seafood Processors", convened by the Fisheries Council of British Columbia in Vancouver, Canada. February 21-22, 1994.
- Jordan. 1979. Reassessment of effluent limitations guidelines and new source performance standards for the canned and preserved seafood processing point source category. Prepared by Edward C. Jordan Company for the U.S. Environmental Protection Agency, Effluent Guidelines Division. December 1979.
- NMFS. 2002. Final Environmental Impact Statement for American Fisheries Act Amendments 61/61/13/8. National Marine Fisheries Service, NOAA. February 2002.
- NMFS. 1993. Final recovery plan for Steller sea lions. National Marine Fisheries Service, NOAA. January 1993.
- NOAA. 1993. Designated critical habitat; Steller sea lion. National Oceanographic and Atmospheric Administration, U.S. Department of Commerce. Federal Register, 58(165):45269-45285, August 27, 1993.
- USEPA. 1980. Seafood processing study: Executive summary. U.S. Environmental Protection Agency, Office of Water. EPA 440/1-80/020. September 1980.
- USEPA. 1993. Guidance manual for developing best management practices (BMP). U.S. Environmental Protection Agency, Office of Water. EPA 833-B-93-004. October 1993.
- USEPA. 1994. CWA Section 403: Procedural and monitoring guidance. U.S. Environmental Protection Agency, Office of Water. EPA 842-B-94-003. March 1994.
- USEPA. 2008b. Alaska Coastal Management Program Consistency Document for AKG524000 Facilities Related to Offshore Seafood Processing. June 2008.
- USEPA and Bottomline Resources. 1994. "Seafood processing: Draft handbook for materials accounting and best management practices."
- USEPA, and Limno Tech. 2008. Environmental Assessment for the General NPDES Permit for Offshore Seafood Processors in Alaska: U.S. Environmental Protection Agency, Region 10, Seattle. June, 2008.

USEPA, Aqua Terra Consultants, and Tetra Tech (USEPA, et. al.). Revised 2018. Ocean Discharge Criteria Evaluation for the General NPDES Permit for Offshore Seafood Processing in Alaska. Permit No. AKG524000. EPA Region 10, Seattle, WA.

USFWS, Anchorage Fish and Wildlife Office. 2015. Biological Opinion for the Effects of the Fishery Management Plans for the Gulf of Alaska and Bering Sea/Aleutian Islands Groundfish Fisheries and the State of Alaska Parallel Groundfish Fisheries. December 23, 2015.

Appendix A: Metals Monitoring Evaluation

Table 3 lists the EPA's recommended aquatic life criteria for marine waters, published pursuant to Section 304(a) of the Clean Water Act (CWA). The criteria continuous concentration (CCC or chronic) values were used for comparison as they best describe the potential long-term effects from environmental exposure to the pollutants after dilution in the receiving water.

Table 3: 304(a) Marine Criteria for Aquatic Life

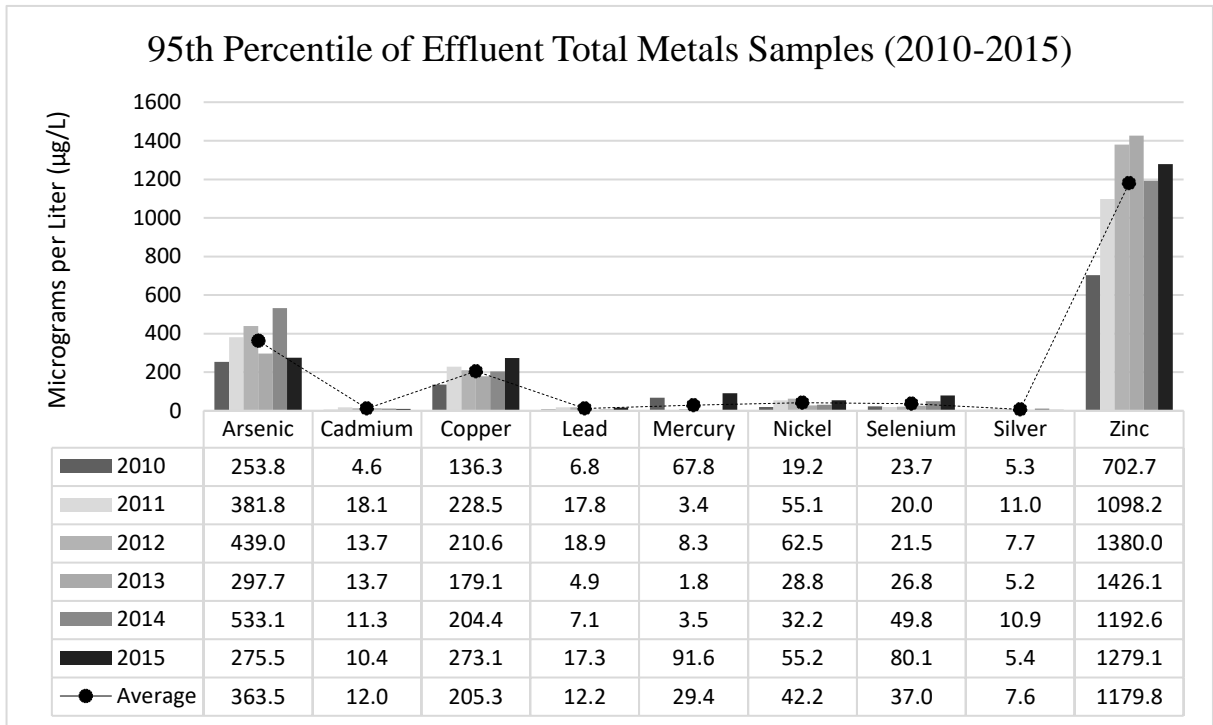
Pollutant	304(a) Marine Criteria for Aquatic Life	
	(acute)	(chronic)
	(µg/L)	
Arsenic	69	36
Cadmium	33	7.9
Copper	4.8	3.1
Lead	210	8.1
Mercury	1.8	0.94
Nickel	74	8.2
Selenium	290	71
Silver ¹	1.9	—
Zinc	90	81

¹The acute value was used for silver in the absence of a chronic criteria.

The EPA evaluated metals monitoring data submitted by Permittees between 2010 and 2015. The average, effluent metals concentrations were compared to the chronic criteria for each pollutant to determine whether water quality standards are met at the point of discharge (end-or-pipe). This comparison indicates that total arsenic, copper, and zinc are more likely than the other pollutants to contribute to exceedances of water quality criteria. On average and over the five-year period, over 72 and 57 percent of the sampled discharges exceeded 304(a) criteria for copper and zinc, respectively.

In reference to the guidance provided in the Technical Support Document for Water Quality-based Toxics Control (TSD), the EPA calculated the 95th percentile value for all effluent samples reported between 2010 and 2015, shown in Figure 2. In determining reasonable degradation, the TSD demonstrates the statistical approach of taking the projected effluent concentration after dilution in the receiving water and then comparing the value to an appropriate water quality criterion. The EPA used the 95th percentile of all reported concentrations as a conservative estimate of pollutant concentrations that could be expected in offshore seafood processing effluent.

Figure 3: 95th Percentile of Effluent Total Metals Samples (2010-2015)



The 95th percentile effluent values shown represent the net effluent, where the reported influent concentration was subtracted from the effluent.

The Ocean Discharge Criteria Evaluation (ODCE) details the analysis used to determine reasonable potential for total suspended solids (TSS) (USEPA, et. al., 2018). The analysis calculated a dilution factor of 1,171 for the receiving water in a conservative processing scenario. To calculate reasonable potential for total metals, the highest pollutant concentrations in Figure 3 are compared to the amount of dilution available in the receiving water, shown in Table 4, below. Column two of Table 4 shows the highest 95th percentile value between sampling years 2010 and 2015. These values were divided by the chronic criterion values in column three to calculate the approximate dilution factor that would be required to dilute the effluent concentration to meet the water quality criteria. The minimum required dilution factor for the discharge to fall below the toxic, chronic criteria is 97.4. Because the available dilution is greater than 10 times what would be required to dilute the 95th percentile concentration, the EPA has determined that discharges authorized by the permit and discharged in accordance with the requirements of the permit will not cause unreasonable degradation of the receiving waters.

Table 4: Dilution Factors Required to Meet Marine 304(a) Criteria

Parameter	Highest 95th Percentile Value (µg/L)	Marine 304(a) Chronic* Criteria (µg/L)	Dilution Factor Required ¹ to Meet 304(a) Criteria	Calculated Dilution Factor for Receiving Water
Arsenic	533.1	36	14.8	1,171
Cadmium	18.1	7.9	2.3	
Copper	273.1	3.1	88.1	
Lead	18.9	8.1	2.3	
Mercury	91.6	0.94	97.4	
Nickel	55.2	8.2	6.7	
Selenium	80.1	71	1.1	
Silver	11	1.9*	5.8	
Zinc	1,426.10	81	17.6	

*No chronic criteria available for silver so acute criteria used

Bold = Highest dilution factor required to meet criteria

Further review for whether there is a basis for unreasonable degradation of the marine environment ([40 CFR 125.122](#)) is described in detail in Section 10 of the ODCE. The EPA determined that the toxic effects of the discharge are not expected to cause significant deleterious effects to the marine environment so further metals monitoring is not required in the draft General Permit.

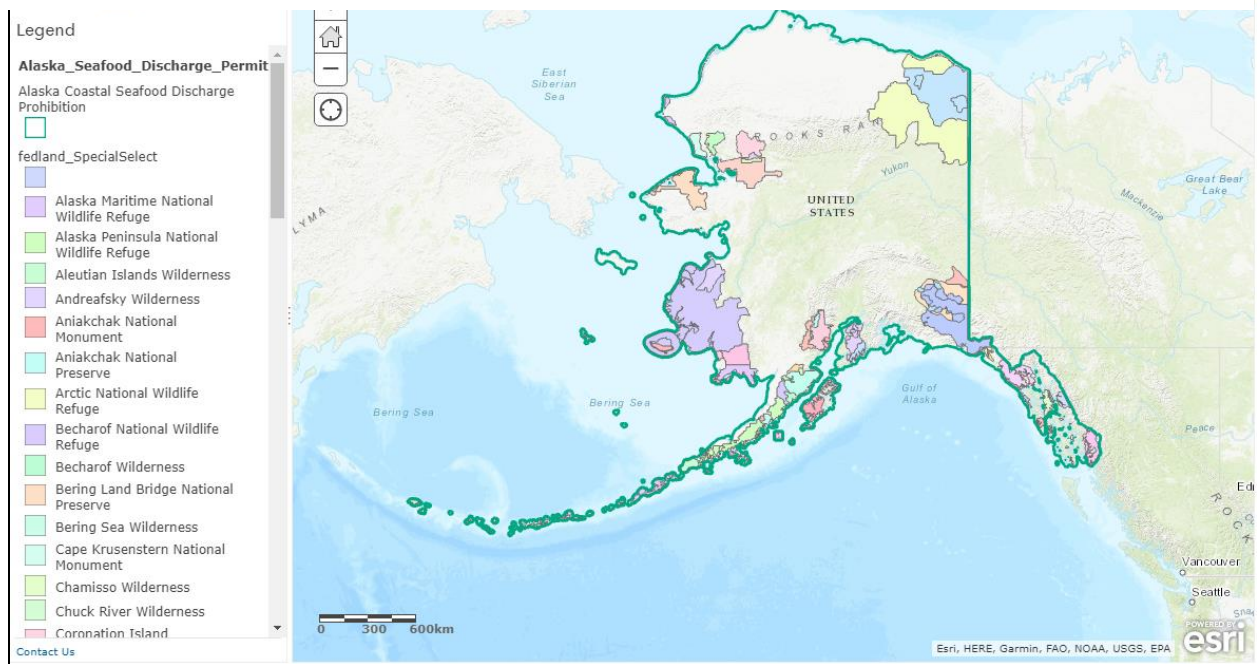
*Appendix B: Receiving Waters Excluded from Coverage***Figure 4: ArcGIS Online Map of Excluded Areas**

Figure 4 is a screenshot and example of the ArcGIS Online mapping tool for the Alaska Seafood Discharge Permit. The legend on the left side of the figure indicates the filterable selections that are selected and shown in the map. This map does not include excluded areas for listed species and critical habitat. For exclusion areas related to listed species and their habitat; the EPA defers to the appropriate regulating agencies and has included relevant Figures 5 through 8 and Table 5 below.

The ArcGIS Online mapping tool and layers are available for public use. For this Permit and associated map, "Alaska_Seafood_Discharge_Permit," The mapped layers include 1 nautical buffer lines around national wildlife refuges, national parks and preserves, state game refuges, critical habitat areas and other sensitive areas. The data in this service is from a variety of sources including NOAA, NMFS, USFWS, and the Alaska Division of Natural Resources and should be used for general reference only. Each responsible agency should be contacted for final determination of any boundary lines or other depictions in this map service.

Permittees may access the ArcGIS mapping tool at the link below.

<https://gis.r10.epa.gov/arcgis/home/webmap/viewer.html?layers=a1d96ac0efbd4b6a922fc067fd6af0f7>

Additionally, the previous general permit and appendices, including lists and maps of areas excluded from coverage are archived on the EPA webpage below:

<https://www.epa.gov/npdes-permits/npdes-general-permit-offshore-seafood-processors-alaska>

Prohibited Discharge Areas for ESA-listed Species and Critical Habitats

Figure 5: Steller Sea Lion Designated Critical Habitat

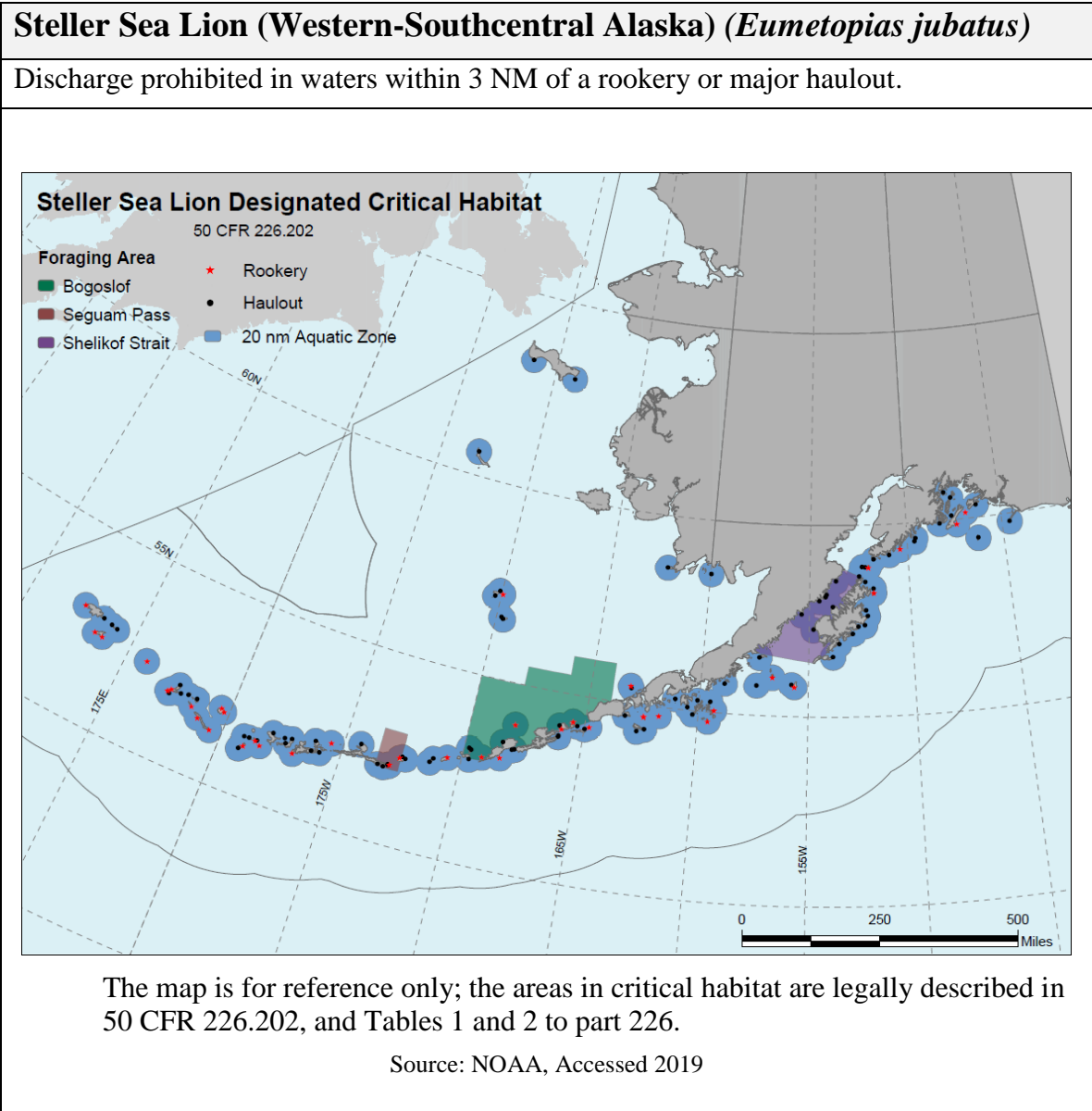


Figure 6: Steller Sea Lion Designated Critical Habitat

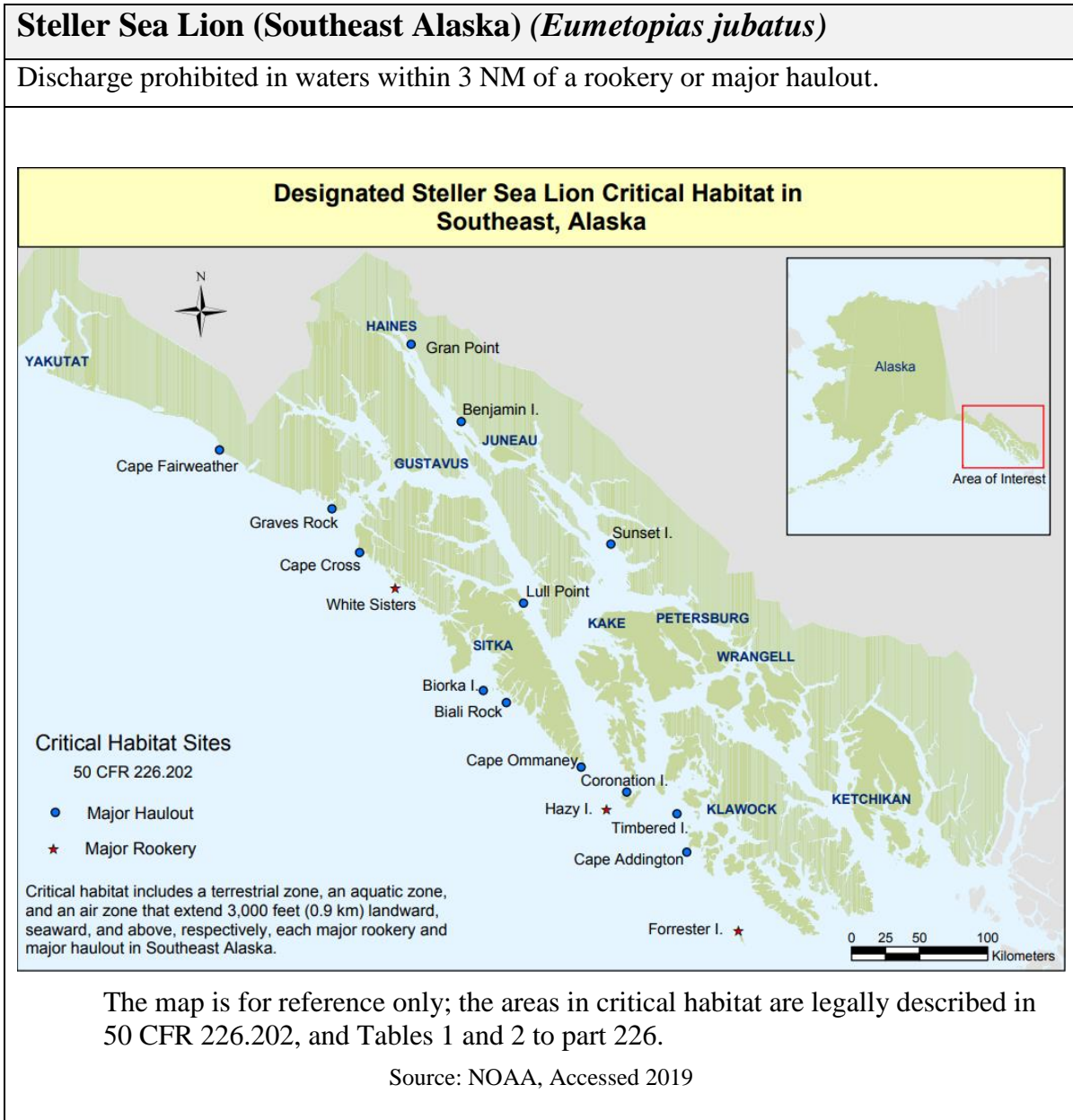


Table 5: Critical Habitat for Steller Sea Lions - 50 CFR Part 226.202 and Tables 1 and 2 to Part 226

50 CFR Part 226.202
<p>(a) <i>Alaska rookeries, haulouts, and associated areas.</i> In Alaska, all major Steller sea lion rookeries identified in Table 1 and major haulouts identified in Table 2 and associated terrestrial, air, and aquatic zones. Critical habitat includes a terrestrial zone that extends 3,000 feet (0.9 km) landward from the baseline or base point of each major rookery and major haulout in Alaska. Critical habitat includes an air zone that extends 3,000 feet (0.9 km) above the terrestrial zone of each major rookery and major haulout in Alaska, measured vertically from sea level. Critical habitat includes an aquatic zone that extends 3,000 feet (0.9 km) seaward in State and Federally managed waters from the baseline or basepoint of each major rookery and major haulout in Alaska that is east of 144° W. longitude. Critical habitat includes an aquatic zone that extends 20 nm (37 km) seaward in State and Federally managed waters from the baseline or basepoint of each major rookery and major haulout in Alaska that is west of 144° W. longitude.”</p>
<p>(c) <i>Three special aquatic foraging areas in Alaska.</i> Three special aquatic foraging areas in Alaska, including the Shelikof Strait area, the Bogoslof area, and the Seguam Pass area.</p>
<p>(1) Critical habitat includes the Shelikof Strait area in the Gulf of Alaska and consists of the area between the Alaska Peninsula and Tugidak, Sitkinak, Aiaktilik, Kodiak, Raspberry, Afognak and Shuyak Islands (connected by the shortest lines); bounded on the west by a line connecting Cape Kumlik (56°38' N/157°27' W) and the southwestern tip of Tugidak Island (56°24' N/154°41' W) and bounded in the east by a line connecting Cape Douglas (58°51' N/153°15' W) and the northernmost tip of Shuyak Island (58°37' N/152°22' W).</p>
<p>(2) Critical habitat includes the Bogoslof area in the Bering Sea shelf and consists of the area between 170°00' W and 164°00' W, south of straight lines connecting 55°00' N/170°00' W and 55°00' N/168°00' W; 55°30' N/168°00' W and 55°30' N/166°00' W; 56°00' N/166°00' W and 56°00' N/164°00' W and north of the Aleutian Islands and straight lines between the islands connecting the following coordinates in the order listed:</p> <p style="margin-left: 40px;">52°49.2' N/169°40.4' W 52°49.8' N/169°06.3' W 53°23.8' N/167°50.1' W 53°18.7' N/167°51.4' W 53°59.0' N/166°17.2' W 54°02.9' N/166°03.0' W 54°07.7' N/165°40.6' W 54°08.9' N/165°38.8' W 54°11.9' N/165°23.3' W 54°23.9' N/164°44.0' W</p>
<p>(3) Critical habitat includes the Seguam Pass area and consists of the area between 52°00' N and 53°00' N and between 173°30' W and 172°30' W.</p>

Table 1 to Part 226—Major Steller Sea Lion Rookery Sites

Major Steller sea lion rookery sites are identified in the following table. Where two sets of coordinates are given, the baseline extends in a clockwise direction from the first set of geographic coordinates along the shoreline at mean lower-low water to the second set of coordinates. Where only one set of coordinates is listed, that location is the base point.

State/region/site	Boundaries to—			
	Latitude	Longitude	Latitude	Longitude
Alaska:				
Western Aleutians:				
Agattu I.:				
Cape Sabak ¹	52 23.5N	173 43.5E	52 22.0N	173 41.0E
Gillon Point ¹	52 24.0N	173 21.5E		
Attu I. ¹	52 54.5N	172 28.5E	52 57.5N	172 31.5E
Buldir I. ¹	52 20.5N	175 57.0E	52 23.5N	172 51.0E
Central Aleutians:				
Adak I. ¹	51 36.5N	176 59.0W	51 38.0N	176 59.5W
Agligadak I. ¹	52 06.5N	172 54.0W		
Amchitka I.: ¹				
Column Rock ¹	51 32.5N	178 49.5E		
East Cape ¹	51 22.5N	179 28.0E	51 21.5N	179 25.0E
Ayugadak I. ¹	51 45.5N	178 24.5E		
Gramp Rock ¹	51 29.0N	178 20.5W		
Kasatochi I. ¹	52 10.0N	175 31.5W	52 10.5N	175 29.0W
Kiska I.:				
Lief Cove ¹	51 57.5N	177 21.0E	51 56.5N	177 20.0E
Cape St. Stephen ¹	51 52.5N	177 13.0E	51 53.5N	177 12.0E
Seguam I./Saddleridge ¹	52 21.0N	172 35.0W	52 21.0N	172 33.0W
Semisopochnoi I.:				
Pochnoi Pt ¹	51 58.5N	179 45.5E	51 57.0N	179 46.0E
Petrel Pt ¹	52 01.5N	179 37.5E	52 01.5E	179 39.0E
Tag I. ¹	51 33.5N	178 34.5W		
Ulak I. ¹	51 20.0N	178 57.0W	51 18.5N	178 59.5W
Yunaska I. ¹	52 42.0N	170 38.5W	52 41.0N	170 34.5W
Eastern Aleutian:				
Adugak I. ¹	52 55.0N	169 10.5W		

Akun I./Billings Head ¹	54 18.0N	165 32.5W	54 18.0N	165 31.5W
Akutan I./Cape Morgan ¹	54 03.5N	166 00.0W	54 05.5N	166 05.0W
Bogoslof I. ^{1,2}	53 56.0N	168 02.0W		
Ogchul I. ¹	53 00.0N	168 24.0W		
Sea Lion Rocks. (Amak) ¹	55 28.0N	163 12.0W		
Ugamak I. ¹	54 14.0N	164 48.0W	54 13.0N	164 48.0W
Bering Sea:				
Walrus I. ¹	57 11.0N	169 56.0W		
Western Gulf of Alaska:				
Atkins I. ¹	55 03.5N	159 18.5W		
Chernabura I. ¹	54 47.5N	159 31.0W	54 45.5N	159 33.5W
Clubbing Rocks (N) ¹	54 43.0N	162 26.5W		
Clubbing Rocks (S) ¹	54 42.0N	162 26.5W		
Pinnacle Rock ¹	54 46.0N	161 46.0W		
Central Gulf of Alaska:				
Chirikof I. ¹	55 46.5N	155 39.5W	55 46.5N	155 43.0W
Chowiet I. ¹	56 00.5N	156 41.5W	56 00.5N	156 42.0W
Marmot I. ¹	58 14.5N	151 47.5W	58 10.0N	151 51.0W
Outer I. ¹	59 20.5N	150 23.0W	59 21.0N	150 24.5W
Sugarloaf I. ¹	58 53.0N	152 02.0W		
Eastern Gulf of Alaska:				
Seal Rocks ¹	60 10.0N	146 50.0W		
Fish I. ¹	59 53.0N	147 20.5W		
Southeast Alaska:				
Forrester I.	54 51.0N	133 32.0W	54 52.5N	133 35.5W
Hazy I	55 52.0N	134 34.0W	55 51.5N	134 35.0W
White Sisters	57 38.0N	136 15.5W		
Oregon:				
Rogue Reef: Pyramid Rock	42 26.4N	124 28.1W		
Orford Reef:				
Long Brown Rock	42 47.3N	124 36.2W		
Seal Rock	42 47.1N	124 35.4W		
California:				
Ano Nuevo I.	37 06.3N	122 20.3W		

Southeast Farallon I.	37 41.3N	123 00.1W		
Sugarloaf I. & Cape Mendocino	40 26.0N	124 24.0W		

¹Includes an associated 20 NM aquatic zone.

²Associated 20 NM aquatic zone lies entirely within one of the three special foraging areas.

[58 FR 45278, Aug. 27, 1993]

Table 2 to Part 226—Major Steller Sea Lion Haulout Sites in Alaska

Major Steller sea lion haulout sites in Alaska are identified in the following table. Where two sets of coordinates are given, the baseline extends in a clockwise direction from the first set of geographic coordinates along the shoreline at mean lower-low water to the second set of coordinates. Where only one set of coordinates is listed, that location is the basepoint.

State/region/site	Boundaries to—			
	Latitude	Longitude	Latitude	Longitude
Alaska:				
Western Aleutians:				
Alaid I. ¹	52 45.0N	173 56.5E	52 46.5N	173 51.5E
Attu/Chirikof Pt. ¹	52 30.0N	173 26.7E		
Shemya I. ¹	52 44.0N	174 09.0E		
Central Aleutians:				
Amatignak I. ¹	51 13.0N	179 08.0E		
Amlia I:				
East ¹	52 05.0N	172 58.5W	52 06.0N	172 57.0W
Sviech. Harbor ¹	52 02.0N	173 23.0W		
Amukta I. & Rocks ¹	52 31.5N	171 16.5W	52 26.5N	171 16.5W
Anagaksik I. ¹	51 51.0N	175 53.5W		
Atka I. ¹	52 23.5N	174 17.0W	52 24.5N	174 07.5W
Bobrof I. ¹	51 54.0N	177 27.0W		
Chagulak I. ¹	52 34.0N	171 10.5W		
Chuginadak I. ¹	52 46.5N	169 44.5W	52 46.5N	169 42.0W
Great Sitkin I. ¹	52 06.0N	176 10.5W	52 07.0N	176 08.5W
Kagamil I. ¹	53 02.5N	169 41.0W		
Kanaga I:				
North Cape ¹	51 56.5N	177 09.0W		
Ship Rock ¹	51 47.0N	177 22.5W		
Kavalga I. ¹	51 34.5N	178 51.5W	51 34.5N	178 49.5W

Kiska I./Sirius Pt. ¹	52 08.5N	177 36.5E		
Kiska I./Sobaka & Vega ¹	51 50.0N	177 20.0E	51 48.5N	177 20.5E
Little Sitkin I. ¹	51 59.5N	178 30.0E		
Little Tanaga I. ¹	51 50.5N	176 13.0W	51 49.0N	176 13.0W
Sagigik I. ¹	52 00.5N	173 08.0W		
Seguam I:				
South ¹	52 19.5N	172 18.0W	52 15.0N	172 37.0W
Finch Pt. ¹	52 23.5N	172 25.5W	52 23.5N	172 24.0W
Segula I. ¹	52 00.0N	178 06.5E	52 03.5N	178 09.0E
Tanaga I. ¹	51 55.0N	177 58.5W	51 55.0N	177 57.0W
Tanadak I. (Amlia) ¹	52 04.5N	172 57.0W		
Tanadak I. (Kiska) ¹	51 57.0N	177 47.0E		
Ugidak I. ¹	51 35.0N	178 30.5W		
Uliaga I. ¹	53 04.0N	169 47.0W	53 05.0N	169 46.0W
Unalga & Dinkum Rocks ¹	51 34.0N	179 04.0W	51 34.5N	179 03.0W
Eastern Aleutians:				
Akutan I./Reef-Lava ¹	54 10.5N	166 04.5W	54 07.5N	166 06.5W
Amak I. ¹	55 24.0N	163 07.0W	55 26.0N	163 10.0W
Cape Sedanka & Island ¹	53 50.5N	166 05.0W		
Emerald I. ¹	53 17.5N	167 51.5W		
Old Man Rocks ¹	53 52.0N	166 05.0W		
Polivnoi Rock ¹	53 16.0N	167 58.0W		
Tanginak I. ¹	54 13.0N	165 19.5W		
Tigalda I. ¹	54 08.5N	164 58.5W		
Umnak I./Cape Aslik ¹	53 25.0N	168 24.5W		
Bering Sea:				
Cape Newenham ¹	58 39.0N	162 10.5W		
Hall I. ¹	60 37.0N	173 00.0W		
Round I. ¹	58 36.0N	159 58.0W		
St. Paul I:				
Northeast Point ¹	57 15.0N	170 06.5W		
Sea Lion Rock ¹	57 06.0N	170 17.5W		
St. George I:				
S Rookery ¹	56 33.5N	169 40.0W		

Dalnoi Point ¹	56 36.0N	169 46.0W		
St. Lawrence I:				
S Penuk I. ¹	64 04.0N	168 51.0W		
SW Cape ¹	63 18.0N	171 26.0W		
Western Gulf of Alaska:				
Bird I. ¹	54 40.5N	163 18.0W		
Castle Rock ¹	55 17.0N	159 30.0W		
Caton I. ¹	54 23.5N	162 25.5W		
Jude I. ¹	55 16.0N	161 06.0W		
Lighthouse Rocks ¹	55 47.5N	157 24.0W		
Nagai I. ¹	54 52.5N	160 14.0W	54 56.0N	160 15.0W
Nagai Rocks ¹	55 50.0N	155 46.0W		
Sea Lion Rocks (Unga) ¹	55 04.5N	160 31.0W		
South Rock ¹	54 18.0N	162 43.5W		
Spitz I. ¹	55 47.0N	158 54.0W		
The Whaleback ¹	55 16.5N	160 06.0W		
Central Gulf of Alaska:				
Cape Barnabas ¹	57 10.0N	152 55.0W	57 07.5N	152 55.0W
Cape Chiniak ¹	57 35.0N	152 09.0W	57 37.5N	152 09.0W
Cape Gull ^{1 2}	58 13.5N	154 09.5W	58 12.5N	154 10.5W
Cape Ikolik ^{1 2}	57 17.0N	154 47.5W		
Cape Kuliak ^{1 2}	58 08.0N	154 12.5W		
Cape Sitkinak ¹	56 32.0N	153 52.0W		
Cape Ugat ^{1 2}	57 52.0N	153 51.0W		
Gore Point ¹	59 12.0N	150 58.0W		
Gull Point ¹	57 21.5N	152 36.5W	57 24.5N	152 39.0W
Latax Rocks ¹	58 42.0N	152 28.5W	58 40.5N	152 30.0W
Long I. ¹	57 45.5N	152 16.0W		
Nagahut Rocks ¹	59 06.0N	151 46.0W		
Puale Bay ^{1 2}	57 41.0N	155 23.0W		
Sea Lion Rocks (Marmot) ¹	58 21.0N	151 48.5W		
Sea Otter I. ¹	58 31.5N	152 13.0W		
Shakun Rock ^{1 2}	58 33.0N	153 41.5W		
Sud I. ¹	58 54.0N	152 12.5W		

Sutwik I. ¹	56 32.0N	157 14.0W	56 32.0N	157 20.0W
Takli I. ^{1 2}	58 03.0N	154 27.5W	58 03.0N	154 30.0W
Two-headed I. ¹	56 54.5N	153 33.0W	56 53.5N	153 35.5W
Ugak I. ¹	57 23.0N	152 15.5W	57 22.0N	152 19.0W
Ushagat I. ¹	58 55.0N	152 22.0W		
Eastern Gulf of Alaska:				
Cape Fairweather	58 47.5N	137 56.3W		
Cape St. Elias ¹	59 48.0N	144 36.0W		
Chiswell Islands ¹	59 36.0N	149 34.0W		
Graves Rock	58 14.5N	136 45.5W		
Hook Point ¹	60 20.0N	146 15.5W		
Middleton I. ¹	59 26.5N	146 20.0W		
Perry I. ¹	60 39.5N	147 56.0W		
Point Eleanor ¹	60 35.0N	147 34.0W		
Point Elrington ¹	59 56.0N	148 13.5W		
Seal Rocks ¹	60 10.0N	146 50.0W		
The Needle ¹	60 07.0N	147 37.0W		
Southeast Alaska:				
Benjamin I.	58 33.5N	134 54.5W		
Biali Rock	56 43.0N	135 20.5W		
Biorca I.	56 50.0N	135 34.0W		
Cape Addington	55 26.5N	133 49.5W		
Cape Cross	57 55.0N	136 34.0W		
Cape Ommaney	56 10.5N	134 42.5W		
Coronation I.	55 56.0N	134 17.0W		
Gran Point	59 08.0N	135 14.5W		
Lull Point	57 18.5N	134 48.5W		
Sunset I.	57 30.5N	133 35.0W		
Timbered I.	55 42.0N	133 48.0W		

¹Includes an associated 20 NM aquatic zone.

²Associated 20 nm aquatic zone lies entirely within one of the three special foraging areas.

[58 FR 45279, Aug. 27, 1993, as amended at 59 FR 30716, June 15, 1994]

Figure 7: Steller's Eider critical habitat units are depicted for the Yukon—Kuskokwim Delta, Kuskokwim Shoals, Seal Islands, Nelson Lagoon, and Izembek Lagoon

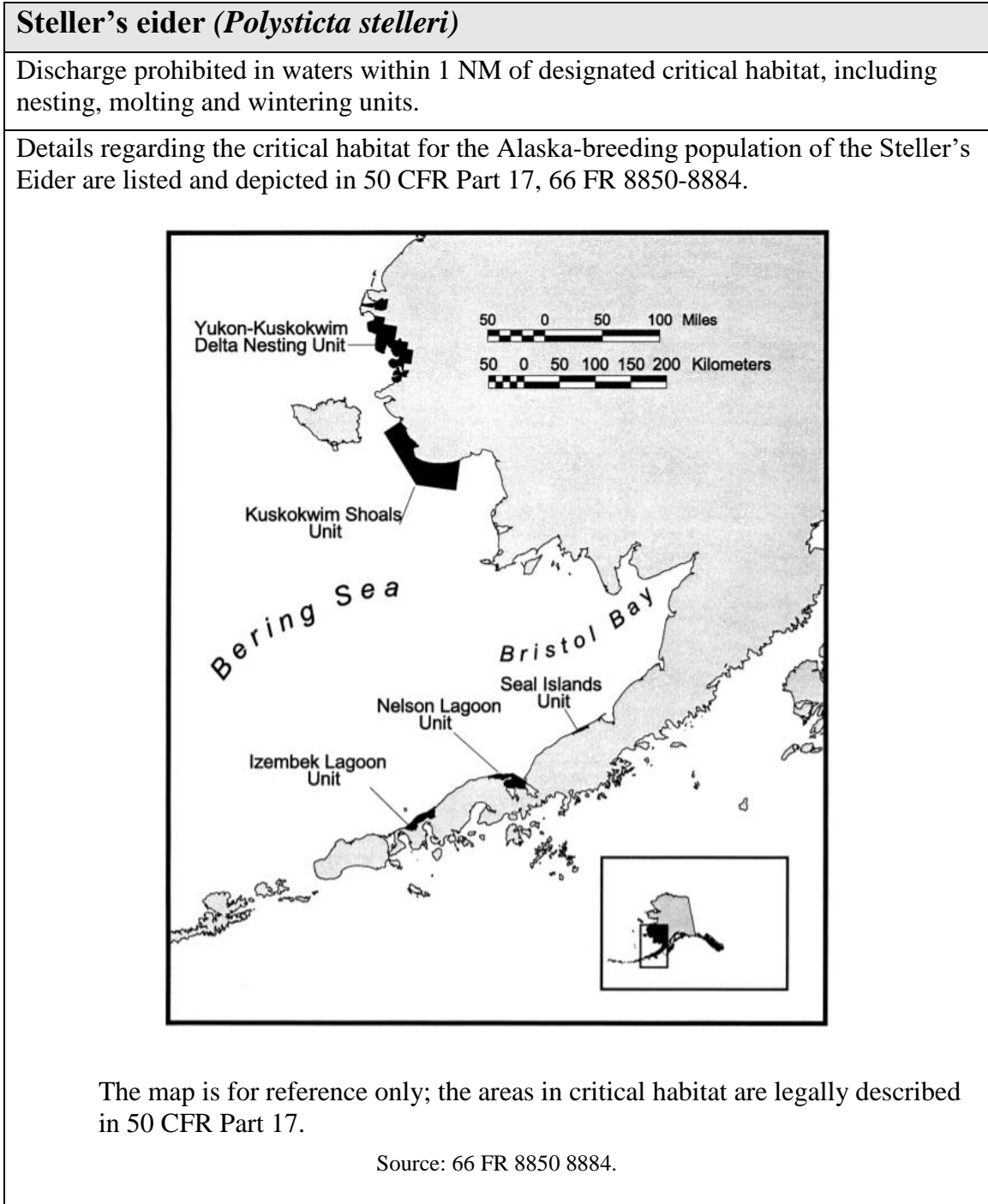


Figure 8: Spectacled eiders critical habitat depicted for Yukon-Kuskokwim Delta, Norton Sound, Ledyard Bay, and the Bering Sea between St. Lawrence and St. Matthews Islands

