United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
Southern Alaska Fish and Wildlife Field Office
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Anchorage, Alaska 99507

In Reply Refer to:
FWS/R7/SAFWFO

Kayla Campbell
Biologist, National Environmental Policy Act Coordinator
U.S. Army Corps of Engineers
P.O. Box 6898
Joint Base Elmendorf-Richardson, Alaska 99506

Subject: Homer Harbor Modification Study, Homer, Alaska (Consultation Number 2023-0092316)

Dear Kayla Campbell:

Thank you for inviting the U.S. Fish and Wildlife Service (Service) to participate under the Fish and Wildlife Coordination Act in the Homer Harbor Modification study, preconstruction planning, and project development. The U.S. Army Corps of Engineers (Corps) aims to determine a feasible alternative for meeting the navigational needs of Homer, Alaska, by expanding harbor capacity. The Service has jurisdiction over trust resources in the study area. These include Steller's eiders (*Polysticta stelleri*) listed under the Endangered Species Act (ESA) and their designated Critical Habitat, birds protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, and northern sea otters (*Enhydra lutris kenyoni*) protected under the Marine Mammal Protection Act.

Harbor development and operations have the potential to impact Service trust resources through disturbance (noise, visual, vibration); habitat loss; habitat degradation and food web changes (including through changes in currents and sedimentation); and increased risk of oil spills, vessel collision (sea otters and migratory birds, including listed eiders), light attraction and collision (migratory birds); and introduction and spread of invasive species. At this stage of the planning process, there are insufficient details to allow a thorough evaluation of the proposed harbor project in terms of impacts to trust resources. The Service's concerns and recommendations are based on known wildlife presence and habitat use in the project area.

Kachemak Bay

Kachemak Bay is considered one of the most productive estuaries in Alaska[1], hosting some of the richest marine invertebrate communities in Cook Inlet[2] and providing important rearing habitat for several species of forage fish[3]. It is recognized for its ecological importance through several designations, including as a National Estuarine Research Reserve, a State Critical Habitat Area, an Important Bird

[1] https://coast.noaa.gov/nerrs/reserves/kachemak-bay.html
[2] https://www.adfg.alaska.gov/index.cfm?adfg=kachemakbay.main
[3] https://coast.noaa.gov/data/docs/nerrs/Reserves_KBA_SiteProfile.pdf

Area (IBA) of Global Significance, and a Western Hemisphere Shorebird Reserve Network (WHSRN) Site of International Importance.

Northern Sea Otters

Sea otters belonging to the Southcentral Alaska Stock reside year-round in Kachemak Bay, including in the area of the existing harbor. A recent population survey (which took place in May 2017) revealed the harbor area is frequently used by large groups of sea otters, including numerous mom and pup pairs[4]. An Incidental Take Authorization under the Marine Mammal Protection Act may be warranted for the project development phase to provide coverage of incidental take (e.g., disturbance or injury related to pile driving and construction activities) of sea otters in the area. The Corps should coordinate with the Service early in project planning to determine whether an Incidental Take Authorization is needed and identify measures to mitigate impacts on sea otters. Although there is no Critical Habitat in the study area, Kachemak Bay hosts large expanses of kelp forest[3], and harbor expansion has the potential to impact sea otter foraging habitat. Sedimentation and in-water noise during pile driving and changes in current circulation patterns caused by harbor modifications may impact benthic invertebrates and affect sea otter prey availability.

Threatened Steller's Eider

Individual Steller's eiders belonging to the threatened Alaska-breeding population winter in Kachemak Bay, and a small population regularly uses the waters offshore of Homer Spit, near the existing harbor[5]. The Corps will need to make an effects determination for this project, and depending on the determination may need to consult with the Service under section 7 of the ESA.

Non-Listed Migratory Birds

Kachemak Bay provides important year-round habitat for diverse migratory bird species. The Homer Spit IBA supports a significant assemblage of rock sandpipers during the non-breeding season[4], and Kachemak Bay hosts 90 percent of the seabirds and seaducks overwintering in Cook Inlet[2], including species such as pelagic cormorant (*Phalacrocorax pelagicus*) and white-winged and black scoters (*Melannita deglandi* and *M. americana*)[5]. Kachemak Bay also supports the highest seabird densities in Cook Inlet during the spring and summer months[2] and is an important breeding area for Kittlitz's and marbled murrelets (*Brachyramphus brevirostris*)[6]. Black-legged kittiwakes (*Rissa tridactyla*) are known to regularly nest in the harbor, on the piers of the deepwater dock. The shoreline and mudflats of Kachemak Bay provide migration stopover habitat for approximately 36 species of shorebirds[7], including surfbirds (*Aphriza virgata*), dowitchers (*Limnodromus* spp.), godwits (*Limosa* spp.), black-bellied plovers (*Pluvialus squatarola*), dunlin (*Calidris alpina*), and hundreds of thousands western sandpipers (*Calidris mauri*). The WHSRN recognizes Mud Bay as especially critical foraging habitat, providing abundant and diverse benthic macroinvertebrates.

Invasive Species

Increased harbor capacity could result in increased marine traffic, heightening the risk of introducing and spreading invasive species in Kachemak Bay and beyond. Species of concern include marine invasives

[4] Garlich-Miller, J. L., G. G. Esslinger, and B. P. Weitzman. 2018. Aerial surveys of sea otters (*Enhydra lutris*) in Lower Cook Inlet, Alaska, May 2017. Marine Mammals Management Technical Report MMM 2018-01, U.S. Fish and Wildlife Service, Anchorage, Alaska, USA.
[5] https://netapp.audubon.org/iba/Reports/1089
[6] https://netapp.audubon.org/iba/Reports/4419
[7] https://whsrn.org/whsrn_sites/kachemak-bay/

such as European green crab (*Carcinus maenas*) and non-native tunicates, and rodents such Norway rat (*Rattus norvegicus*).

Recommendations

- Consider a study to test sediment in the harbor area and determine the level of contaminants that may be released in the water column during harbor expansion activities.
- Consider a study to determine the composition (i.e., diversity and abundance) of the benthic invertebrate community in Kachemak Bay, including in the tidal flats of Mud Bay and in deeper water areas used by sea ducks.
- Use model-based predictions to consider how changes to baseline circulation and patterns of sediment transport and deposition could affect: kelp forests and sea otter foraging habitat; the abundance and diversity of benthic food resources for overwintering sea ducks; the abundance and diversity of invertebrate food resources in Mud Bay.
- Develop Early Detection and Rapid Response plans for marine invasive species and rats.

This Planning Aid Letter is based on preliminary information provided by the Corps during an inter-Agency meeting on June 9, 2023, during which seven conceptual alternatives were introduced. The Service does not anticipate providing the Corps with a full Coordination Act Report at this time but could become more actively engaged, should subsequent information reveal likely changes in environmental conditions so that impacts to the Service's trust resources will be more severe than currently anticipated. The Corps plans to model potential changes in Kachemak Bay currents and sediment transport and deposition to Mud Bay, and the Service will be especially interested in these results.

These comments are offered under the authority of the Fish and Wildlife Coordination Act, Endangered Species Act, Migratory Bird Treaty Act, Marine Mammal Protection Act, Clean Water Act, and the National Environmental Policy Act.

For questions regarding the Service's comments relative to sea otters or to request technical assistance under the Marine Mammal Protection Act, please contact Service Biologist Shauna McBride-Kebert (shauna_mcbride-kebert@fws.gov). For all other questions or technical assistance requests, please contact Service Biologist Megan Boldenow (megan_boldenow@fws.gov). Thank you for coordinating on this project, and we look forward to working together.

Sincerely,

DOUGLASS COOPER

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Douglass M. Cooper
Ecological Services Branch Chief