



United States Department of the Interior
FISH AND WILDLIFE SERVICE
Juneau Fish & Wildlife Field Office
3000 Vintage Blvd., Suite 201
Juneau, Alaska 99801-7100
(907) 780-1160

March 7, 2008

Colonel Kevin J. Wilson
District Engineer, Alaska District
Army Corps of Engineers
P.O. Box 6898
Elmendorf AFB, Alaska 99506-6898

ATTACHMENT 17

Re: Berners Bay
POA-2008-52

MAR 10 2008

Attn: John Leeds

Dear Colonel Wilson:

The Juneau Fish and Wildlife Field Office (JFWFO) has reviewed the project plans described in the subject public notice dated February 4, 2008. The applicant, Channel Construction, requests authorization to add approximately 2,000 cubic yards of material to a partially-constructed harbor and barge ramp that will impact a footprint of approximately 2.8 acres at Cascade Point in Berner's Bay. The facility is proposed for exporting construction materials to other locations in Southeast Alaska.

These comments are submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Statute 401, as amended; 16 U.S.C. 661 et seq.) and constitute the report of the Department of Interior. These comments are for use in your determination of 404 (b) (1) Guidelines compliance (40 CFR 230), and in your public interest review (33 CFR 320.4) relating to protection of trust resources.

Berners Bay, a saltwater inlet near Juneau, is an area with very high fish and wildlife values. Without careful planning, significant fish and wildlife resources could be unnecessarily harmed. We find the public notice lacking in specific information needed to assess the effects of the proposed project on trust resources found in Berners Bay, such as fish, marine mammals, waterfowl, raptors, and shorebirds. There is no mention of the intensity of use across Berners Bay, vessel type(s) proposed for exportation of materials, and the export destination routes of barges hauling construction materials to other locations in Southeast Alaska. There is a potential for vessel traffic to negatively impact/disrupt fish and wildlife resources found in Berners Bay especially during the spring and early summer.

Large runs of the 5 species of anadromous salmon utilize Berners Bay, along with very important stocks of Pacific herring, eulachon, Pacific halibut, and Pacific sandlance. Historically, Pacific herring spawned along the project shoreline where the project site is located. Project effects on Pacific herring habitat are a major concern to the JFWFO. The Lynn Canal herring stock (petitioned for listing as endangered in 2007) has been severely depressed since the early 1980's and the commercial fishery on those stocks curtailed since 1982. In many areas, encroachment upon documented herring spawning habitat resulted in the cessation of spawning activities. Such occurred as a result of the development near Auke Nu Cove, Auke Bay, Long Island, and Port Frederick.

Pacific herring could also be affected by the proposed project due to exposure to hydrocarbons from spills and leaks associated with the road and parking lot. Pre-spawning adult herring exposed to oil experienced suppression of their immune systems and increased disease. In addition, exposure of herring eggs to weathered oil at levels as low as 0.7 ppb showed likely lethal chromosomal abnormalities (Carls et al. 1997). These studies indicate that extremely low levels of hydrocarbons may cause mortality of herring eggs and larvae.

Birds and marine mammals also use Berners Bay throughout the year. Surveys conducted by the JFWFO between May 2000 and May 2002 indicate that wildlife in general is most abundant in near shore waters during spring and early summer (report attached). During April and May, many thousands of gulls, waterfowl, other birds, seals, sea lions, and whales (humpback and orca) concentrate at the head of the bay due to the combined effects of northerly spring migrations and the rich food opportunity provided by a major eulachon spawning run. Many species of waterfowl (especially scoters and goldeneye) and gulls also winter in the Bay.

This office conducted a subtidal survey at the proposed project site in March 1998. Marine life noted in the project area includes animals from the following Phyla: Porifera (sponges), Cnidaria (Hydrozoa, Anthozoa), Bryozoa (Moss animals), Annelida (Tube worms), Echinodermata (Starfish), Mollusca (Snails, Mussels), and Arthropoda (Barnacles, Hermit crabs). Algae from the following Phyla were also noted during the site visit: Chlorophyta (Green algae), Phaeophyta (Brown algae), and Rhodophyta (Red algae). This survey along with the survey conducted by Science Applications International Corporation (SAIC) collectively documented over 40 algal and invertebrate species in the subtidal (SAIC survey attached).

Marine mammals known to use Berners Bay include the humpback whale, killer whale, harbor porpoise, harbor seal, and Steller sea lion. The humpback whale and Steller sea lion are listed as endangered and threatened species, respectively, under the Endangered Species Act.

The JFWFO has previously expressed concern about the potential effects of development at Cascade Point (JFWFO comment letter on Berners Bay 4, POA-1997-245, dated August 3, 2004) and the permanent loss of habitat. Efforts to mitigate for habitat loss are not described in the public notice. If the U.S. Army Corps of Engineers proceeds further toward authorization of this permit, mitigation for the loss of habitat for aquatic dependent fish, mammals, and other species should be required to offset the irretrievable loss and degradation of productive intertidal and subtidal habitat due to project construction and operations.

In-kind mitigation (restoration) is preferred to replace the habitat values that would be permanently lost to fill. Suitable actions could include the construction of an artificial reef barrier anywhere along the coast from Yankee Cove to Point Bridget. The functional values of the intertidal habitat that would be lost could also be mitigated through protection of other high-value, nearshore habitat such as eel-grass, along the Juneau road system. Out-of-kind enhancement might also be appropriate. We suggest actions such as restoration or enhancement of fish passage problems in the Juneau, Haines, Skagway area using bridges or over-sized culverts, or the removal of vacant fills with subsequent wetland restoration. If no such opportunities can be identified, we recommend that the applicant provide in-lieu fees in an amount adequate to purchase 4 acres of shoreline habitat in the Juneau area for each acre of habitat lost at the project site. High-value sites in the vicinity of Point Bridget State Park and Echo Cove (Williams property) would make excellent additions to the conservation lands in and around the Juneau community.

Mitigation needs can be minimized by constructing the barge ramp and associated facilities with the minimum necessary fill. We recommend that piling-supported structures be used for that portion of the project that must be built in the intertidal and subtidal zones. Although much of the existing plant life is likely to be shaded and thereby lost, a piling-supported structure will allow continued use of the project site by many invertebrates, fish, birds, and small mammals. Such a structure would also retain future options for restoration of the site, whereas fill would result in a permanent loss of habitat. A piling-supported structure, therefore, represents a less-damaging alternative. Steel or concrete pilings are recommended over creosote-treated wood, because either alternative is less toxic. Longer lifespan, less maintenance, and greater load capacity (and therefore wider spacing) may help offset higher initial costs. We note that many piling-supported facilities have been constructed in Southeast Alaska, both historically and recently.

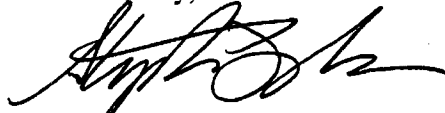
Other Recommendations

1. Silt curtains shall be installed around the perimeter of all in-water work, to contain any silt plume generated by dredging and filling.
2. Wooden surfaces of the structures that come into contact with the water shall not be painted or otherwise surface-treated with creosote and may not be treated with a preservative that contains pentachlorophenol. Creosote and pentachlorophenol are toxic to juvenile fish and other organisms in marine waters.
3. Reasonable precautions and controls must be used to prevent incidental and accidental discharge of petroleum products.
4. Material such as sorbent pads must be available on-site, and must be used to contain and clean up any petroleum product spilled as a result of construction activities and operation.
5. Work below the extreme high water line should be conducted when the area is dewatered, when possible.

We recommend that the above be incorporated through project modifications or permit conditions, and recommend that the proposal be modified to reduce intertidal and subtidal fill. If you choose not to follow these recommendations, please notify this office in accordance with the local procedures agreed to by our respective agencies. If you have any questions, please contact Richard Enriquez at (907) 780-1162 or email Richard_Enriquez@fws.gov.

Thank you for the opportunity to comment on this permit application. Please notify this office of your decision on this project.

Sincerely,

for 
Bill Hanson
Acting Field Supervisor

Attachments (2)

cc: NMFS, Juneau, AK
ADF&G, Douglas, AK
John Leeds, COE, Juneau, AK
EPA, Juneau, AK
DEC, Juneau, AK
USDA Forest Service, Juneau Ranger District, Juneau, AK
CBJ, Juneau, AK
DNR, Division of Coastal and Ocean Management, Juneau, AK

Literature Cited

Carls, M.G., S.W. Johnson, R.E. Thomas, and S.D. Rice. 1997. Health and reproductive Implications of exposure of Pacific herring (*Clupea pallasii*) adults and eggs to weathered crude oil, and reproductive condition of herring stock in Prince William Sound six years after the Exxon Valdez oil spill, Exxon Valdez Oil Spill Restoration Final Report (Restoration Project 95074), National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Auke Bay Laboratory, Juneau, Alaska.