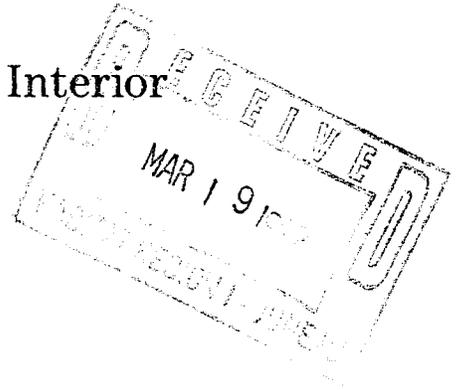




United States Department of the Interior

FISH AND WILDLIFE SERVICE
Fish and Wildlife Enhancement
Ecological Services Juneau
Southeast Alaska Ecological Services
P.O. Box 021287
Juneau, Alaska 99802-1287
(907) 586-7240



IN REPLY REFER TO:

Colonel John W. Pierce
District Engineer, Alaska District
Corps of Engineers
Pouch 898
Anchorage, Alaska 99506

March 18, 1992

RE: Gastineau Channel 435
2-920022

Dear Colonel Pierce:

The U.S. Fish and Wildlife Service (Service) has reviewed the request by A.J. Associates, Inc. for a Department of the Army permit to construct a public boat harbor on Gastineau Channel near Juneau, Alaska.

The applicant proposes to construct the harbor by dredging a basin from approximately 4.6 acres of existing tidelands. Dredged or fill material would be used to construct a breakwater covering approximately 3.7 acres of tidelands and to fill approximately 3.2 acres of adjacent tidelands for marine commercial and industrial uses.

Specifically, the proposed site is located on and adjacent to what is locally known as the "rock dump", an historic intertidal fill created with waste rock and tailings from the Alaska-Juneau gold mine. The State of Alaska is investigating the area for inclusion in national listing under CERCLA ("Superfund").

On March 6, 1992 a subtidal survey was conducted by biologists from the Service and the National Marine Fisheries Service to determine qualitatively the nature of the biotic community at the project site. Two 100 meter transects were examined and barnacles, blue mussels, urchins, starfish, tanner crabs, and sea pens were observed. A large amount of debris (cables, a car, boat, toilet, bathtub, etc.) littered the bottom. While aquatic organisms had to a degree reestablished themselves on the tailings, a large proportion of both the barnacles and blue mussels appeared to be dead or in poor condition. Actual cause of this phenomenon is unknown.

Heavy metal contamination of these tailings has long been a concern. Uncontained contaminated material would not be suitable for use in the proposed breakwater, and would have to be

deposited elsewhere, contained, stabilized, etc. A.J. Associates provided us with two studies of heavy metal concentrations found in materials proposed for dredging, and each showed elevated levels of contamination, some of which exceed environmentally acceptable levels for sediment. This determination is based on Washington State's new regulations (Washington State Sediment Management Standards, Chpt. 173-204 WAC, 1991) which, while not applicable here, indicate an officially recognized concern for which there is no Alaskan analog. Metal levels present in the samples analyzed are elevated and could be toxic to marine organisms if sediments are released into the water column. They are possibly toxic to burrowing organisms.

It would be useful to take subsurface soil samples (i.e. core samples) to determine if contaminants distribution in the mine tailings is homogeneous. The significance of this issue is that the handling of contaminated versus non-contaminated material is sufficiently different that it would behoove the project sponsor to know in some detail how much, if any, material will require special handling.

A suggested sampling scheme could include the collection of core soil samples from incremental depths within the area to be dredged. Samples could be taken along a transect or grid to a depth below the limit of dredging, e.g., -20 MLLW, to delineate any contamination in the area. The samples should be analyzed for heavy metals, especially cadmium and zinc. In addition, elutriate tests of samples that have elevated metal levels would show if sediments are releasing heavy metals into the aquatic environment. Then, plans can be adjusted, if necessary, to remedy any problems if found to exist. If the applicant desires, we can work with them in designing a contaminant sampling scheme for the site.

The Service believes that the proposed project site is an ideal location for construction of water dependent facilities, such as a harbor, due to its physically altered state and its potential for minimal impact on fish and wildlife. Our principal concern in this matter is the minimization of additional introduction of contaminants into the marine environment over and above that which now occurs.

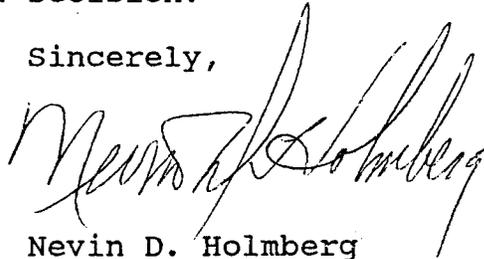
The public notice is mute on the details of harbor shoreline stabilization, however the accompanying drawings indicate that riprap would be used (2:1 side slopes). To reduce to the extent possible the reintroduction of pollutants to the waters of Gastineau Channel, the Service recommends the use of sheet pile bulkhead or employment of non-permeable barrier material to contain exposed tailings/waste rock both along the harbor shoreline and in the breakwater.

While the Service is not opposed to the construction of the boat harbor or its location, that portion of the plan that calls for the filling of 3.2 acres of tidelands within lot 4 for "marine

related facilities and services" should be deleted. The entire project is adjacent to a large vacant fill, much of which is owned by the applicants, and a portion of which could be so used. Based on the above, the Service recommends that the requested permit be modified as described.

Should you propose not to accept these recommendations, please advise us in accordance with "local procedures" and the 1985 Memorandum of Agreement agreed to by our respective agencies, and provide us a copy of the Record of Decision.

Sincerely,

A handwritten signature in cursive script, appearing to read "Nevin D. Holmberg". The signature is written in dark ink and is positioned above the typed name.

Nevin D. Holmberg
Field Supervisor

cc: DEC, DGC, DNR, NMFS, Juneau
ADF&G, Douglas
EPA, Anchorage