UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

April 26, 2004

Colonel Timothy J. Gallagher
District Engineer
U.S. Army Corps of Engineers
P.O. Box 898
Anchorage, Alaska 99506-0898

Re: POA-2004-484-2
Tongass Narrows

Attn: Dennis Stone

Dear Colonel Gallagher:

The National Marine Fisheries Service (NMFS) has reviewed the above referenced proposal by Ms. Sharon Preston to remove approximately 30 cubic yards of rocks from an 80-foot by 50-foot by 0.2 foot area above mean lower low water (MLLW) in front of the house to construct a sea wall at the high tide line (HTL); to construct a 70-foot by 20-foot floating dock anchored by two 16-inch steel pilings; to construct a 250-foot by 8-foot walkway anchored by two 12-inch steel pilings that would rest on concrete blocks on the ground at low tide; and to construct a breakwater of 80-foot logs lashed together and secured with concrete blocks. The project is located on Pennock Island.

Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act requires Federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make conservation recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects. Juvenile salmon use the inshore area of Tongass Narrows during spring and early summer for feeding and predator avoidance prior to migration out to sea. The inshore area of the project location also provides important habitat for several marine species including arrowtooth flounder, Pacific cod, sablefish, sculpins, walleye pollock, yellow rockfish, and Pacific ocean perch.

The Corps has determined that the proposed action would not adversely affect EFH. NMFS disagrees with this determination. The applicant proposes to excavate 30 cubic yards of intertidal habitat that is important for a number of commercial species such as Dungeness crabs, pollock, juvenile rockfish, and flatfish. This habitat also provides habitat for a number of forage species. The applicant further proposes to discharge this material at the HTL which will kill flora and fauna attached to the rocks. Excavation of marine habitat is not required for construction of a floating dock and walkway and is inconsistent with the Section 404(b)(1) guidelines requirement to minimize impacts.

The applicant also proposes to allow the floating walkway to settle during low tide on concrete blocks placed on the intertidal substrate. NMFS consistently recommends against allowing the grounding of floating structures at any tidal stage to protect benthic habitat. The Corps Seattle District also recommends against the grounding of floating structures because of potential impacts to EFH (ACOE 2001, enclosed). A prohibition against the grounding of floating structures is a standard condition of most Corps permits. The ability of the concrete blocks to raise the walkway sufficiently to prevent contact with the benthos (grounding) is dependant upon the applicant being allowed to remove rocks from the project area prior to construction of the walkway. The excavation of the rocks will adversely affect EFH, as discussed above. In short, the mechanism to prevent grounding needs to be effective without itself causing adverse impacts. That is not the situation in this case.

Finally, the applicant proposes to construct a breakwater of 80-foot logs lashed together and secured by concrete blocks. The drawings accompanying the application show this breakwater extending well into the intertidal zone indicating that the logs will ground during low tides. As discussed above, both NMFS and the Corps recommend against the grounding of floating structures at any tidal stage.

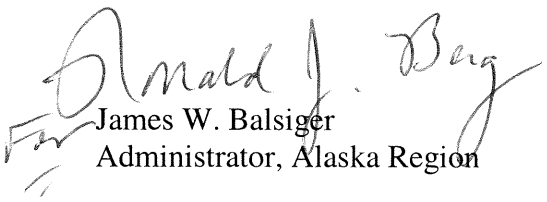
In accordance with Section 305(b)(4)(A) of the Magnuson-Stevens Act, we offer the following conservation recommendations.

1. The request to excavate approximately 30 cubic yards of intertidal substrate and use it to construct a seawall should be denied based on 1) the availability of less damaging alternatives, and 2) failure to demonstrate proper avoidance and minimization of impacts in developing project alternatives.
2. The request to allow the floating walkway to ground during low tides should be denied. NMFS recommends that the applicant investigate alternatives such as a pile supported walkway, or the use of stops that would suspend the walkway several feet above the substrate and prevent the walkway from coming into contact with the ground during low tidal stages.
3. The request to construct a breakwater of 80-foot logs lashed together and secured by concrete blocks should be denied unless the applicant can demonstrate that the breakwater will not ground during any tidal stage.
4. No grounding of any floating structures should occur at any tidal stage.
5. No docks, ramps or other structures should be placed in or over eelgrass beds.
6. All work below the high tide line should be limited to low tidal stages to reduce turbidity.
7. No in-water work should be permitted from March 1 through June 15 of any year to protect out migrating salmon.

Under section 305(b)(4) of the Magnuson-Stevens Act, the Corps is required to respond to NMFS EFH recommendations in writing within 30 days. If the Corps will not make a decision within 30 days of receiving NMFS EFH Conservation Recommendations, the Corps should provide NMFS with a letter within 30 days to that effect, and indicate when a full response will be provided.

If you have any further questions, please contact Katharine Miller at 907-586-7643.

Sincerely,



James W. Balsiger
Administrator, Alaska Region

Enclosure
cc: Applicant
EPA Juneau, Chris Meade
ADF&G, Janet Schempf
ADEC, AADGC, ADNR, USFWS, Juneau

US Army Corps
Of Engineers
Seattle District

Information Paper

Date: October 25, 2001

ESA/EFH Concerns & Over-water Structures in Marine Waters

The Endangered Species Act and Department of the Army Permits

Almost thirty years ago, the U.S. Congress determined that due to economic growth and development without adequate conservation, many species of fish, wildlife, and plants had been rendered extinct and many others had been so depleted in numbers that they were, and are, in danger of or threatened with extinction. Congress also found that these species of fish, wildlife, and plants are of aesthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people. (Section 2 of ESA)

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended, all federal agencies must "insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species." Issuance of a Department of the Army permit is a federal action. For the U.S. Army Corps of Engineers, Regulatory Branch (Corps), this means that we must assess potential impacts to federally listed or proposed species associated with most applications for a Department of the Army permit. Section 7 of the ESA also outlines specific procedures for coordinating with National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (FWS) when there is a potential impact to a listed or proposed species and associated habitat.

In 1999, Puget Sound chinook salmon, Hood Canal chum salmon and Coastal/Puget Sound bull trout were listed as threatened under the ESA. Under the ESA, NMFS protects the Puget Sound chinook salmon and Hood Canal chum salmon and FWS protects the Coastal/Puget Sound bull trout. The chinook and bull trout occur in Coastal waters throughout Puget Sound and the Straits of Juan de Fuca and Georgia.

Essential Fish Habitat and Department of the Army Permits

In 1996, Congress found many of the commercially harvested fisheries managed by the federal government were decreasing in numbers and that habitat essential for their livelihood was being adversely impacted. It was determined that these habitat areas need to be conserved and protected so that these fisheries can continue to be harvested in the future. In order to address this concern, the Magnuson-Stevens Fishery Conservation and Management Act (MSA) was amended so that all federal agencies must, in consultation with NMFS, ensure that their actions conserve and enhance designated Essential Fish Habitat (EFH) for species regulated by a federal fisheries management plan. As with ESA, issuance of a Department of the Army permit is a federal action. The coordination process with NMFS can be done concurrently with the Section 7 ESA Consultation process and much of the information necessary is similar to that already required under the ESA.

For Washington State, EFH has been designated for 83 species of groundfish, 5 coastal pelagic species, and 3 species of Pacific salmon. The majority of these species spend part of their life in the waters of Puget Sound and the Straits of Juan de Fuca and Georgia.

How Do These Fish Use the Nearshore?

Each of these species, whether chinook salmon, bull trout, or groundfish, are dependent upon the habitat of the marine/estuarine nearshore at some point in their life. However, each species has its own specific needs and concerns.

- Chinook salmon enter the small estuaries of Puget Sound while they are juveniles, using the estuaries for forage and refuge as they make their transition from freshwater to marine waters. As they start to grow, they migrate out of these small estuaries and along the shores of Puget Sound, continuing to forage on small species and staying in shallow waters and eelgrass beds to avoid large fish predators in the deeper areas. As sub-adults (bigger than juveniles but not yet fully grown) and adults, the chinook will feed on many fish that spawn and rear in shallow intertidal areas such as herring, sand lance, and surf smelt.

- Bull trout enter the waters of Puget Sound as sub-adults. Where possible, they will stay in water that is as shallow as their size allows in order to feed on many of the same species as the chinook.

- Many groundfish species with designated EFH also spend time in the relatively shallow waters of Puget Sound and the Straits, feeding on many of the small fish that spawn and rear in the shallow intertidal areas. Depending on the species of groundfish, they may live in kelp forests, eelgrass beds, rocky shelf reaches, or areas with sandy or muddy sea floors.

- The 5 coastal pelagic species (e.g. Pacific mackerel, Jack mackerel, Pacific sardine, Northern anchovy, and Market squid) with designated EFH often school near shallow water areas.

With all these varying dependencies on the nearshore areas, any work in the nearshore - such as piers, ramps or floats as well as bank protection - has the potential to impact these species at some level.

How Can You Reduce the Impact of Your Over-water Structure?

In addition to reducing impacts to help protect fish, a "fish friendly" project will go through the review process quicker than a traditionally designed project. In some cases, an impact may be so great to ESA-listed species or designated EFH, the Corps, NMFS, and/or FWS may determine the permit should not be issued and may deny the application. So how can you reduce the impacts of your proposed project?

- **Avoid**. The best way to reduce the impact of any work proposed in the marine nearshore area is to avoid working in the nearshore as much as possible. This includes both work associated with the construction of a project as well as the project itself.

- **Minimize.** If you have avoided as much work in the nearshore as possible, the next goal is to minimize the work you need to do as much as possible.

- What is the smallest structure that you need to serve your intended purpose - i.e. private boat moorage?
- How can you construct that project with the smallest amount of disturbance to the area around it?

- **Reduce Impacts.** For whatever you are building, how can you lessen the impact of the structure as much as possible on the nearshore?

  - How can you make it as similar as possible to the natural environment, mimicking natural processes?
  - How can you make it as innocuous as possible - so that the fish or other species of concern hardly know that it is there?

Impact Reduction Measures to Consider

Here are some specific options you may want to consider to help reduce the impact of your proposed over-water structure:

- *Avoid Work In or Near Eelgrass or Macroalgae Beds.* All of the species mentioned above are dependent upon eelgrass or macroalgae beds (i.e. kelp beds) in one way or another. Some directly utilize these areas as refuge areas or nurseries, others are dependent upon the forage fish that spawn and rear in the eelgrass and macroalgae beds. Eelgrass and macroalgae beds are delicate systems with specific lighting, wave energy, salinity, substrate and nutrient requirements.

- *Mooring Buoys.* Mooring buoys are less impacting than over-water structures such as piers or floats.

- *Joint-Use Piers.* Joint-use piers reduce the impact of two piers to the impact of one.

- *Temporary Floats.* Temporary floats installed only during the summer months (stored on the uplands during the rest of the year) leaving the water/habitat free of any structures during the winter and spring when salmon and other fish species may be most actively using the nearshore.

- *Avoid Grounding of Floats.* Every time a float grounds out on a beach, it disturbs the beach substrate, harming small animals living in the beach or destroying eggs from small forage fish spawning on the beach. Floats can also block passage for small fish, forcing the fish to deeper waters and increasing their chance of predation. A few extra piling or installation of a stopper may stop the float from grounding.

- *Avoid Use of Styrofoam Floats.* Styrofoam floats break apart, litter the water and shoreline, and may harm fish and other wildlife. Use materials that are durable such as hard plastic or wood.

- *More Pier - Less Float.* By making your pier longer and your float shorter, the pier can span the shallow intertidal area, having much less impact than a larger float that would ground out along the beach.

- *Smaller Width - More Grating*. By minimizing the width of the pier, ramp or float to the smallest necessary and grating that surface, the structure becomes more "innocuous" and potential impacts associated with shading are reduced.

- *Elevate the Pier*. The more you can elevate your pier above the beach, the more opportunity there is for natural light to reach the beach and the water.

- *Wider Spanned Piling.* If you increase the span between your piling, fewer piling are required to support your structure and therefore there are less impacts associated with the piling.

- *Avoid Treated Wood.* Many wood treatments leach chemicals harmful to both fish, shellfish and humans into the water through the life of the wood.
  - Do not use wood treated with creosote or pentachlorophenol.
  - Steel piling, concrete piling and plastic coated piling are highly recommended.
  - If using ACZA or CCA treatments, make sure the piling have been properly soaked or steamed by the manufacturer so that they won't leach copper or zinc.

- *Avoid Skirting on Piers.* When piers are skirted, no sunlight can reach the area under the pier and the fish treat the pier as if it was one solid structure. They will swim around it, putting them in deeper water and increasing their chance of predation.

- *Avoid Sheds or Buildings on Piers*. Sheds and buildings on piers make it necessary to have the pier wide enough to support these structures. If you move the sheds and buildings to the upland areas, the pier can be reduced in width.

- *Retain and Plant Overhanging Woody Vegetation.* Overhanging woody vegetation plays an important role in the food web of the fish by providing insects and leaf litter into the shallow nearshore area. In addition, as trees grow, die and fall onto the shoreline, they provide natural bank stabilization, shelter for many fish from forage species and just the right amount of shading of spawning beaches for many forage fish.

- *Avoid Bank Armoring*. Armored shorelines lower the beach in front of them (decreasing shallow intertidal habitat); block natural erosion processes that feed the beach with sand; and, remove overhanging vegetation important to the fish food web.
  - If you must stabilize your bank, consider natural alternatives such as addressing upland drainage problems, planting native vegetation, and/or using large woody debris at the toe of the bank.

Contacting the Corps

For more information on Department of the Army permit applications and ESA and EFH requirements, please contact us at:

U.S. Army Corps of Engineers
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(206) 764-3495
website: http://www.nws.usace.army.mil/reg/reg.htm