



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

August 17, 2005

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

Re: POA-2005-1208-1
Clarence Strait

Attn: Mr. Carlos Paez

Dear Colonel Gallagher;

The National Marine Fisheries Service (NMFS) reviewed the August 9, 2005, public notice of application for permit for the proposal by Mr. J. Steven Rice to construct a 6-foot wide by 60-foot long approach dock (walkway); a 4-foot wide by 60-foot long aluminum ramp; and a 16-foot wide by 36-foot long float. Pressure treated wood will be used for the approach dock and float. The ramp decking will be open-grid fiberglass material. The walkway will have four pairs of salvaged creosote pilings resting on concrete pads. The float will have two 55-foot long by 12-inch wide galvanized steel pilings. The pilings will be set with a vibrating hammer. The float will be placed beyond extreme low tide and not ground. No in-water work will be performed from March 15th through May 31st. The purpose of the dock, ramp, and float is to provide access to a future private residence.

We offer the following comments specific to the essential fish habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA).

Essential Fish Habitat

Section 305(b) of the MSFCMA 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.

The Alaska Department of Fish and Game (ADF&G) anadromous waters catalogue lists one catalogued anadromous fish stream that enters Back Chuck. This stream is Myers Stream, catalogue number 102-80-10050. In addition, pink salmon also spawn in the Back Chuck estuary. Myers Stream has pink, chum and coho salmon. Other anadromous fish streams in the vicinity of Meyers Chuck include Black Bear Creek number 107-10-10300, and another stream number 107-10-10290. Both of these streams enter Union Bay immediately north of Myers Chuck. These streams have pink, chum and coho salmon. Catalogued anadromous streams also



enter Clarence Strait south of Myers Chuck. Near shore habitats are particularly important to juvenile salmon migrating as fry or smolts from fresh water to salt water in the spring and summer. Juvenile salmon use the inshore area of Back Chuck during spring and early summer for feeding and predator avoidance prior to migration out to sea. The inshore area of the project location may provide important habitat for several marine groundfish species including dusky, shortraker, yelloweye, and roughey rockfish; arrowtooth flounder; Pacific cod; sablefish; walleye Pollock; rex sole; Pacific ocean perch; skates; sculpins; and various forage fish.

NMFS is also concerned with the proposal to use pressure treated wood and creosote pilings. Creosote is a wood preservative typically composed of 85% polycyclic aromatic hydrocarbons (PAH), 10% phenolics, and 5% heterocyclic compounds (Munro, K.A. 2001). Creosote can be a significant source of PAH to marine water. Diffusion of PAH from creosote treated wood is a long-term process that may last the life of the product (Poston, 2001). Pilings over 50 years old still contain sufficient amounts of creosote to kill herring embryos (Vines, et. al., 2000). NMFS research has shown that herring and salmon embryos are sensitive to PAH contamination with morphological defects occurring at PAH concentrations of 3 parts per billion and lower. Based on these findings, NMFS has concluded that use of creosote would adversely affect EFH species.

The following EFH Conservation Recommendations are made pursuant to Section 305(b)(4)(A) of the Magnuson-Stevens Act:

1. The use of any wood that has been surface or pressure-treated with creosote or treated with pentachlorophenol should be prohibited. Alternatives to treated wood that have no or reduced toxicity should be used wherever practicable. We recommend steel or concrete pilings be used instead of creosote pilings.
2. If treated pilings or timbers must be used, any wood that comes in contact with marine or aquatic environments should be treated with waterborne preservatives approved for use in aquatic and/or marine environments. These include, but are not limited to: Chromated Copper Arsenic (CCA) Type C, Ammoniacal Copper Zinc Arsenate (ACZA), Alkaline Copper Quat (ACQ), Copper Boron Azole (CBA) or Copper Azole (CA). The applicant should only use wood that has been treated in accordance with best management practices developed by the Western Wood Preservers Institute. Treated wood should be inspected before installation to ensure that no superficial deposits of preservative material occur on the wood.
3. All cutting and boring of treated wood should take place in upland areas; all waste materials must be kept out of the aquatic environment and be properly disposed of upland. Treated wood materials should not be stored in-water. Any cut wood, chips or sawdust from treated wood that enters the aquatic environment should be collected promptly and disposed of at an acceptable upland site.
4. Pile-driving can disrupt migration and cause physical damage to fish. To the extent possible, drive piles during low tide periods in intertidal and shallow subtidal areas to

prevent injuries to fish. NMFS supports the use of a vibratory hammer to minimize potential underwater sound pressure waves generated by pile driving.

5. The float should be elevated at least 5-feet above the substrate at the lowest tides. This would allow for light penetration from both sides of the 16-foot wide float. If this can not be accomplished then metal or plastic grating should be used as a surface for the float, rather than solid planking.
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 15 through June 15 of any year to protect out migrating salmon and spawning herring.
8. NMFS recommends that reasonable precautions be taken to prevent incidental and accidental discharge of petroleum products and other contaminants. An emergency oil spill response kit or other appropriate equipment such as absorbent pads should be available on site to allow fast response to small oil spills and accidental discharge of hydrocarbon contaminated bilge waters.

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.

Provided the above EFH Conservation Recommendations are incorporated through project modifications or permit conditions, NMFS does not object to the issuance of this permit.

If you have any questions regarding our comments and conservation recommendations for this project please contact Cindy Hartmann at (907) 586-7643.

Sincerely,



Sue Salveson
Acting Administrator, Alaska Region

cc: Applicant: Mr. J. Steven Rice, 12221 Corliss Avenue North, Seattle, WA 98133
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Records

References:

Munro, K.A. 2002. Population-level and suborganismal responses in fish due to chronic creosote exposure in aquatic microcosms (*Pimephases promelas*, *Carassius auratus*). Masters Abst. Int. Vol. 40, no. 2, p. 444.

Poston, Ted. 2001. *Treated Wood Issues Associated with Overwater Structures in Marine and Freshwater Environments*. White Paper, Washington Department of Fish and Wildlife. <http://wdfw.wa.gov/hab/ahg/overwatr.htm>

Vines, Carol A. et. al. 2000. The effects of diffusible creosote-derived compounds on development in Pacific herring (*Clupea pallasii*). *Aquatic Toxicology* 51 (2000) 225–239