



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

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

February 27, 2009

E1-17869

David Navecky
Surface Transportation Board
395 E Street, SW
Washington DC 20423-0001
ATTN: STB Financial Docket No. 34658

RE: Draft Environmental Impact Statement, Alaska Railroad Corporation, Construction and Operation of a Rail Line between North Pole and Delta Junction, Alaska

Dear Mr. Navecky:

The National Marine Fisheries Service (NMFS) reviewed the Draft Environmental Impact Statement (DEIS) and associated Essential Fish Habitat (EFH) Assessment distributed by the Surface Transportation Board (STB), regarding the proposed construction and operation of approximately 80 miles of new rail line from North Pole to Delta Junction, Alaska.

Project Description

The Northern Rail Extension (NRE) would extend Alaska Railroad Corporation's (ARRC) existing freight and passenger rail service south to the community of North Pole. The project would include construction of a parallel access road and related structures, such as a passenger facility, communications towers, construction camp sites, and staging, borrow and excavation areas. The DEIS presents several alternative rail alignments. Additionally, the DEIS proposes several voluntary measures to mitigate adverse effects on fisheries and habitat, such as erosion and sediment controls, seasonal construction restrictions, and the use of embedded culverts (Appendix G of the DEIS).

Essential Fish Habitat

Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires federal agencies to consult with the Secretary of Commerce on any action that may adversely affect EFH. The Act defines "EFH" as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 U.S.C. 1802(10)). In Alaska, EFH has been designated for anadromous salmon and certain life stages of marine species of groundfish and crab under NMFS' jurisdiction.

The proposed rail alignment would transect main tributaries of the Tanana, Salcha, and Delta rivers, as well as secondary and un-named tributaries, sloughs, channels and wetlands. This very complex ecologically connected series of terrestrial land forms and



tributary systems supports habitat for aquatic resources, including EFH for anadromous salmon. EFH for salmon consists of the aquatic habitat, fresh and marine waters, necessary to support a long-term sustainable salmon fishery and salmon contributions to healthy ecosystems. Please visit our web site at <http://www.alaskafisheries.noaa.gov/habitat/default.htm> for additional information on EFH.

The STB has determined the proposed project would adversely affect EFH and associated ecological processes. NMFS concurs with this determination. Specifically, NMFS is concerned the proposed rail alignments would fragment wetland and hydro-geomorphic processes, disrupting the riparian and hyporheic functions necessary to support salmon EFH.

Ideally, rail alignments would be located in upland areas rather than in the watershed flood plain to avoid, minimize or mitigate adverse impacts to rivers, streams and the associated ecosystem processes provided by wetlands, riparian and hyporheic zones. Upland alignments also would eliminate future cumulative effects to EFH resulting from the transient lateral movement of rivers and streams, and eliminate the need for subsequent emergency remediation using riprap and bank armoring to stabilize threatened rail infrastructure during high water events. However, we understand the alternative alignments retained for detailed analysis also are based on technical and practical considerations including natural barriers, engineering design, cost-effectiveness, geological considerations and general land use patterns.

In accordance with Section 305(b)(4)(A) of the Magnuson-Stevens Act, NMFS offers the following EFH Conservation Recommendations to avoid, minimize and mitigate the effects of the proposed rail alignment:

EFH Conservation Recommendations

- 1) Construct bridges to span large rivers and arched or box culverts to cross smaller streams (>10 feet FBW). Free span structures, such as bridges over rivers and streams, provide migratory corridors for anadromous fish species and aquatic organisms, while maintaining ecosystem connectivity and natural substrate function in EFH.
- 2) Use stream simulation modeling to site tributary crossings with traditional corrugated large culverts (round or oval, 10 feet and 60 inches in diameter). Stream simulation methods consider natural environmental variables and incorporate habitat substrate within the structure, providing EFH and migratory corridors for anadromous fish species and aquatic organisms.
- 3) Use stream simulation modeling to site tributary crossings with traditional corrugated small culverts (round or oval, < 60 inches in diameter) to help maintain water quality and tributary connectivity while minimizing impacts from head cut, perched culverts and velocity barriers.

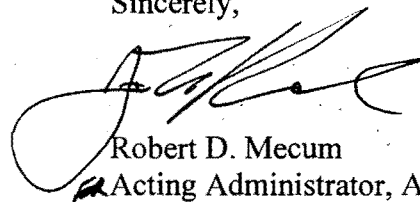
- 4) Conduct fish surveys for all tributaries transected by the rail alignment to characterize the range and life histories of species within these watersheds, fill in data gaps in the Alaska Department of Fish and Game's anadromous waters catalogue, and improve information on appropriate mitigation measures
- 5) Elevate the rail line in wetland areas adjacent to and known to support anadromous spawning habitat to maintain connectivity of the groundwater hydrology and related hyporheic function (up and down welling water) that is critical to spawning site selection, egg and larval survival.
- 6) Employ Best Management Practices when constructing and placing artificial structures to promote natural hydrology and instream flows. Structures built over naturally occurring waters should conform to the natural stream gradients and stream channel alignment. Supporting structures should be designed to prevent scour and velocity barriers to anadromous species.

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

The STB and ARRC have an opportunity to set an example by considering the sensitive nature, relationship and connectivity of aquatic ecosystems and incorporating new technologies into rail construction to minimize adverse impacts to anadromous fish populations and their EFH.

If you have any questions regarding our recommendations for this project, please contact Doug Limpinsel at 907-271-6379 or Doug.limpinsel@noaa.gov.

Sincerely,



Robert D. Mecum

Acting Administrator, Alaska Region

cc: SteveKokkinakis

STB DEIS EFH North Rail Ext 2-26-09 final