



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

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

February 27, 2003

Mel Langdon  
Montgomery Watson Harza  
4100 Spenard Road  
Anchorage, AK 99517

Re: Girdwood Water Improvements  
Phase II-Transmission Main  
Draft Environmental Assessment

Dear Ms. Langdon:

The National Marine Fisheries Service (NMFS) has reviewed the above referenced Draft Environmental Assessment (DEA) by the Anchorage Water and Wastewater Utility (AWWU). The proposed project involves two crossings of Glacier Creek, two crossings of Tiny Creek, and disturbance to 3.32 acres of wetlands. The proposed action is identified as the Preferred Action Alternative B- Looped Transmission Main, Crow Creek Road Route. The preferred alternative described in the DEA would cross Glacier Creek by diversion and trench method. The DEA is meant to satisfy the requirements for an Essential Fish Habitat (EFH) Assessment.

Glacier Creek and Tiny Creek provide EFH for migrating, spawning, rearing, and/or over-wintering chinook salmon (*Onchorynchus tshawytscha*), coho salmon (*Onchorynchus kisutch*), pink salmon (*Onchorynchus gorbuscha*) and chum salmon (*Onchorynchus keta*). Glacier Creek is listed as anadromous (ADF&G anadromous catalog, Seward D-6). While not listed in the catalog, Tiny Creek is hydrologically connected to California Creek which is listed as anadromous (Chinook, Coho, and Pink salmon). Juvenile coho salmon have been observed in Tiny Creek and the stream is likely rearing habitat. The wetlands in the project area have extensive pockets of standing water for rearing of juvenile salmon and are an integral part of healthy productive fish habitat. Hydrologic functions performed by these wetlands are short and long term water storage. These wetlands buffer peak flows and attenuate low flows into the streams. The wetlands also remove pollutants from water flowing off fill pads, paving, roads and buildings, which can severely impact incubating and juvenile salmon.



NMFS is primarily concerned about the crossing of Glacier Creek by temporary stream diversion. Bridging or Horizontal Directional Drilling (HDD), from a habitat perspective, are the preferred methods for crossing anadromous fish streams. Bridging or HDD would allow the applicant to cross the stream with little if any effect on EFH. We offer the following recommendations pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Fishery Conservation and Management Act.

### **EFH Conservation Recommendations**

1. Consider the pedestrian bridge alternative for the north Glacier Creek crossing. The applicant should develop feasibility and cost estimates.

*Rationale - Glacier Creek is an anadromous fish stream. A bridge for the water line would require no in-water work and presents the least impact to EFH while allowing access by AWWU.*

2. If the pedestrian bridge alternative proves unworkable, use HDD at Glacier Creek for the north stream crossing.

*Rationale - Glacier Creek is an anadromous fish stream. Water flow in Glacier Creek is year-round; flow is augmented by glacier and snow melt, and a large wetland complex. The project area is spawning and/or rearing habitat for coho, chinook, and chum salmon as listed in the ADF&G anadromous fish stream catalog. De-watering the stream runs a risk of impacting these fish resources and EFH.*

3. If after attempting HDD, the technique proves ineffective, revert to the stream diversion and trench method outlined in the DEA. The DEA further states the preferred in-water work window is during a low-flow period, mid to late November or April, outside the normal ADF&G work window for south-central Alaska of May 15 to July 15. NMFS understands the need to work outside the traditional in-water work window due to the heavy flows in Glacier Creek, and if this method is used, the work should be done in April.

*Rationale - While juvenile salmon may be present in April, this period would avoid the November period when eggs are in the gravel.*

4. If the stream diversion and trench method is used, minimize time spent doing in-stream work and working in the flood plain of Glacier and Tiny Creeks.

*Rationale - More time spent in the stream and flood plain increases the probability of sedimentation controls being compromised with damage to EFH.*

5. The applicant should attempt to coordinate the work with other utility and development projects in the area.

*Rationale - A good way to minimize disturbance to fish habitat is to reduce the number of times a wetland is impacted and the number of times in-water work is done in fish streams. Coordination with other projects in the area and long-range planning will help to meet this goal.*

6. Use fish screens on pumps for all water sources classified as anadromous (e.g., Glacier and Tiny Creeks).

*Rationale - Glacier and Tiny Creek are rearing habitat for juvenile salmonids that could be injured or killed by intake pumps. Screens will prevent juvenile fish from entering the pump hose.*

7. Pre-stage hazardous spill response equipment to protect biologically important sites such as anadromous fish streams, tributaries, and associated wetlands. Fueling and handling of other hazardous substances should be restricted to work pads no closer than 100 feet from streams, preferably outside the flood plain.

*Rationale - This is an environmentally sensitive area. Should a spill occur, timing for response could be critical. A hazardous material spill resulting from the proposed project would increase the vulnerability of fish to contamination, injury, and mortality because of the*

*continuity of wetlands and fish streams, anadromous fish, shallow waters, and local currents which tend to disperse pollutants throughout the water column.*

8. Develop a storm water mitigation plan to prevent channeling water directly into Glacier and Tiny Creeks. This may be accomplished by maintenance of drainage swales along the perimeter of any fill and by directing drainage away from streams.

*Rationale: Non-point source pollution can have deleterious effects on salmonids, particularly growth in juveniles. Glacier and Tiny Creeks are spawning and/or rearing habitat for coho, chinook, and chum salmon.*

9. Minimize fill and develop a construction erosion control plan.

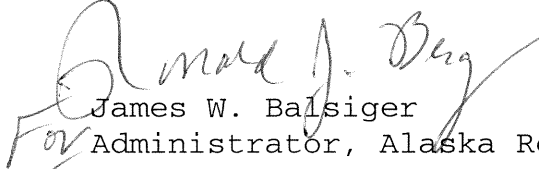
*Rationale: Sediment, associated with erosion, can smother spawning gravels and destroy rearing habitat for salmonids. Contiguous surrounding vegetation serves to filter runoff, buffer peak flows, and trap sediments before reaching the main stream channel.*

10. All standards and mitigation set by the Alaska Department of Natural Resources (ADNR) and the Alaska Department of Fish and Game (ADF&G) in the issuance of any related permits should be adopted as part of the project plan approved by the AWWU and ultimately the Corps of Engineers. The project should follow ADF&G temporary stream diversion guidelines if stream diversion is used for stream crossings. Monitoring should be initiated at startup and repeated periodically throughout the project to ensure compliance with permit standards. An independent trained inspector should be on site at all times while working in the flood plain of Glacier and Tiny Creeks. The inspector should have shutdown authority and operations should be suspended or modified if violations occur. Resource agencies should be contacted if violations and/or a shutdown occur. A site restoration plan including revegetation and clean up should be provided and coordinated with regulatory and resource agencies prior to construction.

*Rationale - ADNR and ADF&G will provide the permitting oversight for in-water work and restoration/revegetation. On-site monitoring will increase the likelihood that Best Management Practices set out in the project design are carried through in the field by contractors.*

Brian Lance is the NMFS contact for this project, and can be reached by telephone at (907) 271-1301.

Sincerely,

  
James W. Balsiger  
For Administrator, Alaska Region

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