



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

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

September 28, 2004

Kathryn Erickson
Project Environmental Coordinator
Alaska Department of Transportation and Public Facilities
6860 Glacier Highway
Juneau, AK 99801

Dear Ms. Erickson:

The National Marine Fisheries Service (NMFS) has reviewed your letter and associated documents requesting comments on the proposed improvements to the Runway Safety Areas (RSAs) at the Ketchikan Airport. The Alaska Department of Transportation and Public Facilities (ADOT&PF) and the Federal Aviation Administration (FAA) propose to bring the Ketchikan Airport into compliance with the most current national aviation safety and design standards by extending the RSAs. We offer the following comments specific to the Endangered Species Act (ESA) and the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA).

Endangered Species:

Section 7(a)(2) of the ESA directs interagency cooperation "to insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species" or result in the destruction or adverse modification of critical habitat. NMFS Alaska Region is responsible for the administration of the ESA as it applies to certain cetaceans, pinnipeds, and marine fish. In the project area, these include humpback whales and Steller sea lions.

Although several of the alternatives involve placement of fill in intertidal estuaries, the majority of the proposed work will occur inland and therefore is unlikely to adversely affect protected species.

Essential Fish Habitat (EFH):

Section 305(b)(2) of the Magnuson-Stevens Act requires interagency consultation for any federal action that may adversely affect EFH. The proposed activities require placement of fill in two anadromous streams that have been designated as EFH for salmonids: Government Creek and Airport Creek. These streams and their associated estuaries provide spawning and rearing habitat for pink, chum and coho salmon. The estuarine areas also provide important habitat for burrowing infauna, crustaceans and fish that are prey to species of commercial importance such as flatfish, rockfish and salmon. All of the alternatives, with the exception of the No Action



Alternative and the Declared Distances Alternative, would adversely impact EFH within one or more of these streams and estuaries.

Channelization and Culvert on Government Creek

Under Alternatives I and II, the extended RSA would cross Government Creek and require placement of fill in the upper end of the Government Creek estuary. The alternatives call for channelizing Government Creek in a bottomless culvert between 800 and 1000 feet in length. NMFS has concerns regarding the channelization of Government Creek through a long bottomless culvert. Salmon rely on visual cues for spatial orientation, prey capture, schooling, predator avoidance, and migration. The reduced light conditions within a culvert may limit the ability of fish, especially juveniles and larvae, to perform these essential activities. Shading within such a long culvert may also reduce prey organism abundance and the complexity of the habitat. In addition, the channelization may increase the slope in the lower reaches of the creek. At high water flows, this channelization may present a challenge to fish passage.

To adequately assess the impacts of channelization and the culvert, NMFS recommends compiling and evaluating the following information in the development of these alternatives:

- 1) NMFS recommends that ADOT&PF attempt to quantify the use of the stream by spawning and rearing salmon (e.g., use minnow traps to trap juvenile salmon).
- 2) NMFS recommends that ADOT&PF retain an environmental firm with expertise in salmon habitat enhancement and alteration to conduct an analysis of the potential impacts of a long, bottomless culvert on salmon spawning and rearing. Among the issues to be evaluated are:
 - a. Salmon response to low light conditions within the culvert and analysis of whether a culvert of the proposed length would present a barrier to fish migration and/or adversely impact rearing habitat;
 - b. Water flows within Government Creek at various times of the year and an analysis of options to prevent the culvert from presenting a barrier to fish passage under all water flow; and
 - c. Design options for the culvert to mimic the existing river channel and decrease channelization.

Reroute of Government Creek

In place of the culvert, another option that was presented for Government Creek was rerouting the creek around the end of the extended RSA. The proposed reroute would require extensive excavation through uplands to create a stream channel with a similar slope as the existing channel, and has the potential to result in an incised, bedrock channel that may not provide the same quality of habitat as the existing creek. In addition, the entire Government Creek estuary would be lost. The proposed outlet to the rerouted creek is very different topographically and

biologically than the existing estuary, and may require extensive modification to simulate the existing conditions.

To adequately assess the impacts of rerouting Government Creek, NMFS recommends compiling and evaluating the following information in the development of these alternatives:

- 1) NMFS recommends that ADOT&PF attempt to quantify the use of the stream by spawning and rearing salmon (e.g., use minnow traps to trap juvenile salmon).
- 2) NMFS recommends that ADOT&PF retain an environmental firm with expertise in salmon habitat enhancement and alteration to conduct an analysis of the feasibility of the proposed reroute and estimated timeframes for recreating stream habitat. Among the issues to be evaluated are:
 - a. Water flows within Government Creek at various times of the year and an analysis of how the rerouted channel will be constructed to mimic habitat within the existing creek;
 - b. Evaluation of the proposed outlet for the rerouted creek and a discussion of modifications required to mimic the functions of the existing Government Creek estuary (including a hydrologic analysis of the proposed outlet area with an emphasis on accretion, water levels at low and extreme low water, substrates, etc.); and
 - c. Feasibility of developing and maintaining a biologically viable stream channel in the area where the rerouted stream would need to be cut deeply into uplands.

Airport Creek and Estuary

Alternative III would require placement of fill in a substantial portion of the Airport Creek Estuary. This alternative appears to close off access completely between Tongass Narrows and Airport Creek, and essentially eliminates the entire estuarine area. Alternatives I, II and IV would require lesser amounts of fill along the northeast portion of the estuary. NMFS recommends compiling and evaluating the following information in the development of these alternatives:

- 1) Quantify the use of the stream, including the small south channel, for spawning and rearing salmon (e.g., use minnow traps to trap juvenile salmon).
- 2) Document water flows within Airport Creek at various times of the year, including an analysis of whether flows are sufficient to maintain an open channel for Airport Creek to connect with Tongass Narrows under Alternative III (closing off the estuary).
- 3) Analyze the impacts of each alternative on salmon spawning and rearing in the stream and estuary.

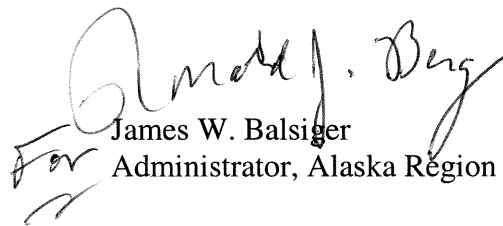
Approach Light System Extension

In addition to the planned RSA extension, the environmental assessment should also evaluate the potential impacts on Airport Creek estuary of the proposal to relocate the approach light system and extend it to a different configuration.

During the September 15 scoping meeting, there was some discussion about location of the extended approach light system and options for maintenance. NMFS is concerned that extending the approach light system into Tongass Narrows northwest of the runway, and creating a road for access, will cause significant disturbance to Airport Creek estuary. NMFS recommends that ADOT&PF evaluate several options for locating and maintaining the extended approach light system, including options that would not require placement of extensive fill adjacent to Airport Creek estuary. The evaluation of all alternatives for approach light system expansion should include an analysis of the hydrologic impacts of any fill placement on water movement within the estuary, as well as impacts to marine and anadromous resources.

Please contact Katharine Miller at (907)586-7643 if you have any questions or for further coordination.

Sincerely,


James W. Balsiger
For Administrator, Alaska Region

Enclosure

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