



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

*National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668*

January 24, 2007

Patricia Sullivan
Federal Aviation Administration
Alaska Region, Airports Division
222 West 7th Avenue #14
Anchorage, AK 99513

RE: Juneau International Airport Preliminary
Final Environmental Impact Statement

Dear Ms. Sullivan:

The National Marine Fisheries Service (NMFS) has reviewed Chapters 2 and 4 of the Juneau International Airport (JIA) Preliminary Final Environmental Impact Statement (PFEIS) dated November 29, 2006. The proposed airport improvements in the PFEIS that are significantly changed from the Draft EIS include Runway Safety Area alternatives, Navigational Improvements, and Aviation Facilities Development. NMFS has previously commented on the Draft EIS.

The combined effects of the proposed actions would be the loss of 77 acres of Essential Fish Habitat (EFH) in the Mendenhall estuarine wetland system, including the Mendenhall Wetlands State Game Refuge, with direct adverse effects to chum, sockeye, pink, and coho salmon, eulachon, sandlance, capelin, sculpins, starry flounder and Pacific herring populations in the project area. NMFS provides the following comments regarding each of the proposed projects modified in the PFEIS.

Runway Safety Area (RSA)

Multiple alternatives are considered in the PFEIS to bring the JIA into compliance with FAA standards for RSA. Alternatives considered for RSA at the runway ends include construction of a standard full dimension RSA (1,000 feet long on both runway ends by 500 feet wide) that would displace the Mendenhall River by 1,000 feet and fill 37.2 acres of emergent estuarine wetland habitat (Alternative RSA-1); alternatives that would avoid displacing the Mendenhall River main channel by shifting runway thresholds toward the east; alternatives that would minimize wetland impacts through use of Engineered Materials Arresting System (EMAS); and alternatives that would use both traditional and EMAS RSA to minimize the amount of wetland fill required. The PFEIS includes two new alternatives, 5D and 6D, designed to minimize impacts to wetlands while still meeting FAA standards. Selection of these alternatives has been precluded by language in the National Transportation Safety Board Amendments Act of 2006 that requires the Secretary of Transportation to select as the preferred alternative the least expensive RSA that meets the standards of the FAA and that maintains the current length of the runway. This law also states that selection of the least expensive safety alternative shall be considered to satisfy the requirements of 49 U.S.C. 303(c)(1), (also know as section 4(f) of the



Transportation Act), as it pertains to preservation of the Mendenhall Wetlands State Game Refuge. Though the FAA has determined that EMAS is feasible and prudent for JIA, alternatives incorporating this technology are more expensive than fill-only alternatives and preclude the FAA's selection of any EMAS alternative as the preferred alternative in the FEIS.

NMFS recommends that the FAA select or develop as the preferred RSA alternative in the FEIS the least environmentally damaging alternative that includes all practicable measures to avoid and minimize impacts to waters of the United States. This alternative should be designed to avoid impacts to the Mendenhall River at the end of Runway 08 and maintains the drainage of Runway Slough into Jordan Creek and Fritz Cove via either a constructed channel, culverts or a combination so that flows maintain their drainage course and are not re-directed to Sunny Slough and east into Gastineau Channel.

Several alternatives involve placing substantial amounts of fill into the Mendenhall River, require extensive riprap armouring of the riverbank, or constructing a new channel for the river. The preferred alternative for the Wildlife Hazard Plan includes filling riparian wetland habitats off the end of the Runway 08 to reduce the possibility of aircraft striking eagles and gulls feeding upon fish and fish carcasses stranded in intertidal marsh habitat. The selected RSA alternative should avoid moving the river channel or extensively armouring the river banks by shifting the runway, runway thresholds, and RSA eastward and accomplishing both wildlife hazard reductions and runway safety area needs at the river bank.

NMFS does not support replacing the combined RSA and wildlife hazard reduction with dredged open-water riverine habitat because of the uncertainty of successfully relocating the river channel, potential upstream adverse effects on habitat and infrastructure and the need for maintenance dredging at this dynamic, intertidal and glacially influenced site. Furthermore, replacing Lyngbe sedge and estuarine high marsh habitat with a constructed intertidal open water river channel would require further extension of wetland fill for RSA off the east end of the runway into estuarine high marsh habitat, thus would not minimize the amount of wetland fill required to accomplish both of these project needs.

Runway Slough, the high marsh estuarine habitat and tidal slough east of the runway, is of high value for groundwater discharge and lateral flow, sediment/toxic retention, nutrient primary production and transport, regional ecological diversity, rearing of juvenile forage and flatfish, and wildlife habitat. Preserving the existing direction of flow from Runway Slough to Fritz Cove is a high priority for NMFS as this slough contributes up to half of the flows in Jordan Creek, an important stream with high value for coho salmon rearing. The slough also drains the high marsh habitat north and west of the runway, providing important rearing habitat for juvenile Pacific herring, sand lance, and flatfish and provides nutrient inputs to Jordan Creek and the marine nearshore environment of Fritz Cove.

Relocation of Duck Creek

The proposed relocation of Duck Creek has the potential to impact 13 acres of estuarine wetlands that are hydrologically connected to the Mendenhall River and Duck Creek. Impacts to estuarine

wetlands at the mouth of Duck Creek would reduce floodplain storage, change tidal channel geomorphology, and increase stormwater runoff. Indirect effects of the development on these wetland functions would include the loss of groundwater discharge and lateral flow, increased sediment/toxicant retention, nutrient transformation and export, loss of riparian support, loss of fish and wildlife habitat, and degradation of regional ecological diversity. These impacts are significant because of the relative rarity of emergent vegetated estuarine wetlands in southeast Alaska and their local and regional importance, particularly to the continued maintenance of fish and wildlife populations, and because they would impair hydrological functions of the creek.

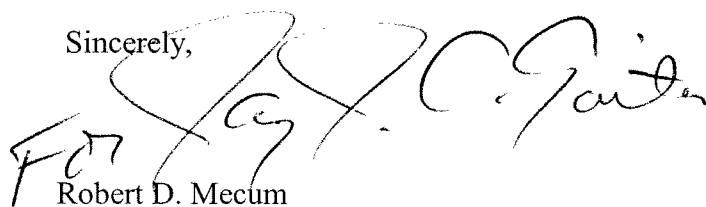
The proposed relocation and reconfiguration of Duck Creek in the PFEIS has been improved; however, some reaches of the creek are still too narrow to provide adequate riparian function. NMFS recommends further adjusting the design to ensure that the riparian zone is at least 50 feet wide on each bank, as measured from bank-full width.

Mitigation Plan

NMFS recommends compensatory mitigation for the remaining unavoidable losses of EFH and wetlands resulting from implementation of the final RSA alternative, as described in the 2006 Compensatory Mitigation Plan. This mitigation plan will provide approximately \$5.8 million in compensatory mitigation funding, depending upon the final alternatives selected and permitted. This money will be used primarily to acquire accreted lands within the original refuge boundary with the goal of fully mitigating for direct impacts to refuge lands as measured in wetland functional capacity units. Secondly, funding will be used to acquire other wetlands or carry out mitigation projects. The FEIS should contain a schedule of mitigation funding and all mitigation should be completed prior to project construction.

Thank you for considering NMFS's comments on the PFEIS. We look forward to continued cooperation on this important project. Please direct any questions to Susan Walker, Habitat Conservation Division, (907-586-7646, susan.walker@noaa.gov).

Sincerely,



Robert D. Mecum

Acting Administrator, Alaska Region

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