

STATE OF ALASKA

SARAH PALIN, GOVERNOR

DEPARTMENT OF FISH AND GAME

DIVISION OF HABITAT

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FISH HABITAT PERMIT FH08-I-0003

Amendment I

ISSUED: February 2, 2009

Mr. Dave Palmer, Manager
Juneau International Airport
1873 Shell Simmons Drive
Juneau, Alaska 99801

RE: Juneau International Airport Runway Safety Area Expansion
Runway Safety Area Expansion and Modifications to Jordan Creek
Stream No. 111-50-10620
T. 40 S., R. 66 E., S. 31 and 32 (Juneau B-2 SW)
State ID AK 0705-03J, FH08-I-0150-SA, FH08-I-0002, FH08-I-0116-SA, FH08-I-0010

Dear Mr. Palmer:

Pursuant to AS 16.05.871(b), the Alaska Department of Fish and Game (ADF&G), Division of Habitat has reviewed your request to expand the Juneau Airport Runway Safety Area (RSA). The purpose of this project is to meet Federal Aviation Administration (FAA) RSA standards and reduce wildlife hazards.

Background and Project Description

The Juneau International Airport (JNU) has proposed a number of projects to enhance airport capacity and efficiency and to meet FAA requirements to improve the RSA and reduce risks posed to aviation from wildlife. These projects are described as the "Agency Preferred Alternatives" in the Juneau International Airport Final Environmental Impact Statement, April 2007 (FEIS Section 2.13.2).

JNU proposes to implement two projects that would require modifications to Jordan Creek: RSA Alternative RSA-5E (FEIS Section 2.6.6), and Wildlife Hazard Management Plan (WHMP) Alternative WH-1H (FEIS Section 2.9.1.8).

Alternative RSA-5E will expand the RSA by filling areas on the south and east end of the runway. The fill area includes the mouth and tidal channels of Jordan Creek and the area between the taxiway and runway. The culverts carrying Jordan Creek under the taxiway and runway will be lengthened to accommodate the fill. The existing culverts under the taxiway and runway are long at approximately

370-feet and 242-feet and undersized at 8-feet in diameter. Under some flow conditions this can create a partial barrier to fish passage. Widening the RSA will require connecting additional culverts to the two substandard culverts to form a culvert system approximately 770-feet long, exacerbating the existing partial barrier to fish passage.

The FEIS presents a design in Section 2.11.3 to replace the entire culvert with a 12-foot diameter bottomless arch or box culvert that would incorporate daylight wells at approximately 100-ft intervals. Replacing the old culvert sections at this time, however, would cause significant disruption to runway operations in a city where access is currently limited to water or air, and increase the costs of the RSA expansion project. The ADF&G Division of Habitat will authorize replacement of the entire culvert in phases with the new sections of culvert installed in portions of the creek filled during RSA expansion, and the old culverts replaced with a comparable design coinciding with major runway maintenance. In February 2009 service life of the current culverts was estimated to be at least 15 years by Malcolm Menzies, PE of R&M Engineering. However, even with the prescribed structures the additional culvert length will further impair fish passage until all old culvert sections are replaced. As compensation for this impairment, ADF&G requires additional fish-passage mitigation described in the Mitigation Plan for the Juneau Airport Projects.

To accommodate the expanded RSA, a new 14-foot-diameter corrugated aluminum culvert will be installed between the taxiway and runway connecting the existing culverts. Another new 14-foot-diameter corrugated aluminum culvert will be connected to the south end of the existing runway culvert. Culvert installation will follow drawings submitted on July 20, 2007. At each connection between new and existing culverts, a 16-foot-square manhole with skylights will be installed. Approximately four feet of fill material will be placed throughout the new culvert system to create a more natural stream bed. Baffles will be installed at regular intervals to hold the substrate in place and limit the flow of water through the substrate. A rock apron will be constructed at the outlet area of the extended culvert system to dissipate energy and prevent scour during high flow periods.

JNU will also implement Wildlife Hazard Alternative WH-1H. This action will remove a rock weir at the mouth of Jordan Creek that was constructed to improve fish passage through the existing runway culvert. Migrating fish and carcasses accumulate in the pond formed by the weir, attracting large birds that create a hazard to aircraft. ADF&G recognizes the necessity of removing this hazard, but the action will be detrimental to fish passage in Jordan Creek. Consequently, ADF&G will authorize removal of the weir, per AS 16.05.850(1), but require mitigation as described in the Mitigation Plan for the Juneau Airport Projects.

Expansion of the RSA at the east end of the runway will also fill a portion of a tidal channel of Jordan Creek known as East Runway Slough. That action will block drainage from the tidelands adjacent to the Honsinger Family Trust pond to Fritz Cove via Jordan Creek and to Gastineau Channel via Sunny Point Slough. To maintain these hydrologic connections, East Runway Slough will be relocated to adjacent land on the Mendenhall Wetlands State Game Refuge (MWSGR). This permit allows filling the portion of East Runway Slough under the footprint of the new RSA. Constructing a new slough channel on the MWSGR will be permitted under FH 08-I-0116 SA.

Mitigation:

Your proposal includes implementing Best Management Practices to minimize adverse affects to fish and other aquatic organisms. Those practices will help minimize construction impacts to Jordan Creek, but do not fully compensate detrimental effects to fish-passage in Jordan Creek. Fish passage

in Jordan Creek will be adversely impacted because the existing culverts conveying the stream will be lengthened, the weir will be removed, and connected tidal channels will be altered. In situations where maintaining the current level of fish passage is considered impracticable, AS 16.05.850 provides ADF&G with the authority to require mitigation for impacts to fish passage. JNU and ADF&G have agreed that impacts of this project to Jordan Creek can be adequately mitigated by improving in-stream and stream side habitat along the Under Thunder Trail. These improvements are described in the Mitigation Plan for the Juneau Airport Projects and include building five bridges over headwater tributaries of Jordan Creek. These bridges will improve fish passage, decrease stream degradation resulting from unauthorized ATV crossings, and improve conditions in the headwaters of Jordan Creek. By the time fish passage under the airport runway is fully restored, the system will be healthier and better able to accommodate increased salmon abundance. In the Mitigation Plan JNU commits to providing Trail Mix Inc. with \$155,000 to fund purchase of the bridge structures. Trail Mix Inc. will install the bridges. JNU's requirement to mitigate for project effects on Jordan Creek will be fulfilled when they provide \$155,000 to Trail Mix.

Anadromous Fish Act and Coastal Consistency Requirements

Jordan Creek, Stream No. 111-50-10620, is specified in the Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes pursuant to AS 16.05.871(a). The stream provides spawning and rearing habitat for coho, chum and pink salmon, cutthroat trout and Dolly Varden.

Your project is consistent with the Standards of the Alaska Coastal Management Program.

In accordance with AS 16.05.871(d) and 11 AAC 110, your project is approved subject to the project description, standard alternative measures, and the terms of this permit.

1. In-water work, including filling of tidal channels of Jordan Creek, will be conducted between June 15 and April 15 to protect out-migrating salmon smolt. Any exceptions will be evaluated case-by-case and authorized only as an amendment to this permit.
2. The existing culverts under the runway and taxiway must be replaced within 15 years of the effective date of this permit with a culvert design to match that of the culvert extensions addressed by this permit.
3. Adverse impacts to fish passage and habitat will be mitigated by providing \$155,000 in funding and ensuring installation of five bridges over headwater tributaries of Jordan Creek along the Under Thunder Trail as described in the Juneau Airport Mitigation Plan. Mitigation shall be completed during the 5-year term of the ADNR Early Entry Permit for constructing the RSAs.

You must maintain the integrity of the culverts must be maintained for the life of the runway in accordance with the terms of this permit so that free passage of fish is assured. You must restore any obstruction to the free passage of fish to the satisfaction of ADF&G.

You are responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved project. For any activity that significantly deviates from the approved plan,

you shall notify ADF&G and obtain written approval in the form of a permit amendment before beginning the activity. Any action that increases the project's overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of the ADF&G. Therefore, it is recommended you consult ADF&G immediately when a deviation from the approved plan is being considered.

This letter constitutes a permit issued under the authority of AS 16.05.871(d). This permit must be retained on site during construction. This permit provides reasonable notice from the commissioner that failure to meet its terms and conditions constitutes violation of AS 16.05.861; no separate notice under AS 16.05.861 is required before citation for violation of AS 16.05.871 can occur. Please be advised that this determination applies only to activities regulated by ADF&G; other agencies also may have jurisdiction under their respective authorities. This determination does not relieve you of your responsibility to secure other permits; state, federal, or local. You are still required to comply with all other applicable laws.

In addition to the penalties provided by law, this permit may be terminated or revoked for failure to comply with its provisions or failure to comply with applicable statutes and regulations. The department reserves the right to require mitigation measures to correct disruption to fish or wildlife created by the project which was a direct result of failure to comply with this permit or any applicable law.

You shall indemnify, save harmless, and defend the department, its agents, and its employees from any and all claims, actions or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or your performance under this permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the department's negligence.

This permit decision may be appealed in accordance with the provisions of AS 44.62.330-630.

If you have any questions regarding this permit, please contact me at (907) 465-4346 or email tom.schumacher@alaska.gov.

Sincerely,
Denby Lloyd
Commissioner



by Jackie Timothy
Regional Supervisor
Division of Habitat

Email cc:

Al Ott, ADF&G Habitat, Fairbanks
Ryan Scott, ADF&G, Douglas
Brian Glynn, ADF&G, Douglas
Kevin Monagle, ADF&G, Douglas
Jim Anderson, ADNR, Juneau
Fran Roche, DEC, Juneau
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