

## **APPENDIX B**

### **Wetlands Avoidance and Minimization Analysis**



State of Alaska  
Department of Transportation  
& Public Facilities  
Statewide Design &  
Engineering Services

**Wetland Avoidance and Minimization Analysis**  
***Project Name: False Pass Airport Master Plan***  
***Project Number: 56514***

**I. Project Scope:** Provide a brief description of and reason for project.

The existing False Pass Airport provides only limited access to the community because of severe restrictions arising from weather, terrain, runway length, and crosswinds. Mountains on both ends of the airport penetrate the runway's approach slopes. The existing runway measures approximately 2,150 feet long and 60 feet wide, and the runway safety area (RSA) is approximately 2,630 feet long by 120 feet wide. These runway dimensions accommodate the A-I (small aircraft) design category. The primary purpose of the project is to upgrade the existing airport facilities to A-I design category standards to improve the airport and accommodate the forecasted aircraft at the False Pass Airport.

The proposed action would consist extending the runway and RSA 950 feet to the south along the existing alignment. The extension would be into the ocean and have a top width of 120 feet, and a bottom width of 350 feet, with approximately 2:1 side slopes varying in depth from 0 to 55 feet. Elevation of the runway and RSA would be approximately 12 feet above mean lower low water (MLLW) and will require raising a portion of the existing runway and RSA slightly. Actual runway width within RSA will be 75 feet.

Other elements of the proposed action include:

- Resurface runway with gravel and remove large rocks on the north end of the runway.
- Remove brush along sides of existing runway and a portion of the existing apron.
- Install erosion protection above the high water line at Roundtop Creek at the north end of the runway. This will be installed to protect the runway if the creek moves farther south in the future.
- Replace the bridge deck and resurface the access road.
- Roundtop Creek Bridge Upgrades - Install spur dikes beneath the access road bridge and replace bridge deck (Sheet 8).
- Install a beacon, lighted windsock, and medium-intensity runway edge lighting, and mark the runway. Relocate runway-end identification lights that are currently being installed by Federal Aviation Administration on the existing runway, and replace segmented circle.
- Demolish 0.24 acres of the existing apron.
- Relocate the Snow Removal Equipment Building (SREB) west of the existing airport access road and improve the SREB by providing heat and lights. Extend electricity from the Automated Weather Observation System to the proposed SREB. Acquire a new grader and loader.
- Purchase an aviation easement for 1.6 acres.

Compensatory mitigation for the projects impacts to Essential Fish Habitat (EFH), wetlands, and other waters of the U.S. include the following:

- The footprint of rock fill in Isanotski Strait will be minimized by maximizing the steepness of side slopes.
- The backfilled rock is expected to create new habitat and be colonized by plants and animals that were temporarily displaced. Approximately 3 three acres of a fringing kelp bed is expected to develop between approximately -2 and -30 feet Mean Lower Low Water.
- Create approximately 0.4 acres of new EFH by constructing a 10-foot-wide bench along the east side and south end of the runway extension.
- Conduct one year of post-construction monitoring of the runway bench consisting of four sampling events in one year, one in each season of the year.

## **II. Avoidance Measures:**

1. Can the proposed project or project components be located in a non-wetland area? If not, explain in detail why not? (Refer to preliminary jurisdictional wetland determination.)

At the beginning of the project, a wetlands delineation was completed to determine the location of wetlands in the project area. The United States Army Corps of Engineers (USACE) concurred with the delineation. Impacts to wetlands adjacent to the runway and the Isanotski Strait could not be avoided due to the proximity to the existing runway. However, the SREB and erosion protection at the north end of the runway was designed to avoid impacts to wetlands and other waters of the U.S.

1.a. If yes, does this non-wetland area provide unique habitat to the area or contain other protected resources (e.g., cultural resource, federal listed or candidate species, bald eagles, or other raptors)? Consult with the agency with jurisdiction or expertise if appropriate; e.g., USACE, Fish and Wildlife Service (FWS), Nation Marine Fisheries Service (NMFS), Alaska Department of Fish and Game (ADF&G).

The location of the erosion protection do not provide unique habitat to the area or contain other protected resources.

1.b. Are there other project related impacts to the non-wetland area that are considered substantial (e.g., subsistence use or other socio-economic factors)? Consult with the agency with jurisdiction or expertise if appropriate (e.g., USACE, FWS, NMFS, ADF&G).

Residents use the shoreline to access subsistence areas. Access to the shoreline in the vicinity of the southern end of the runway will be temporarily closed during construction.

2. In consideration of forecast changes in aircraft use, future airport projects, expected community growth, and maintenance considerations, have facilities been sited to avoid wetland impacts? Has this been applied to all individual components of the airport (e.g., runway, taxiways, aprons, lease lots, navigational aids)?

Yes, refer to the answer provided for question 1.

2.a. Can dimensions of facilities be traded off (i.e., length versus width of the apron) in order to lessen impacts?

The SREB was designed to be located in uplands.

2.b. Can the footprint of specific project components be reduced to avoid wetlands (i.e., steeper side slopes on support facilities)?

The footprints of the runway and taxiway have been consolidated to the extent practical. The landside side slopes are 2:1.

2.c. Can facilities be consolidated to avoid impacts?

The facilities were consolidated to the extent practical (steeper side slopes).

2.d. Have existing roads, pads, runways, and other facilities been incorporated into the design of the proposed project to avoid wetland impacts?

Yes. The staging area used for the construction of the harbor will also be used for as the staging area for this project. Additionally, existing roads will be used as haul routes.

3. Have crossings of fish streams been avoided? (Consult the Anadromous Fish Catalog or contact ADF&G for information on fish-bearing waters.)

Yes. The alternative extending the runway into Roundtop Creek was eliminated.

4. If the Regional Environmental Coordinator has determined that the project may adversely affect Essential Fish Habitat (EFH), list the preliminary EFH conservation measures.

Best Management Practices (BMPs) for erosion and sediment control will be utilized during construction to minimize the introduction of suspended sediment to EFH. Silt curtains or other sediment control measures will be utilized to the extent possible. The footprint of rock fill in Isanotski Strait will be minimized by maximizing allowable steepness of side slopes. The backfilled rock is expected to create new habitat and be colonized by plants and animals that were temporarily displaced. Approximately three acres of a fringing kelp bed is expected to develop between approximately -2 and -30 feet MLLW. EFH will be created by constructing a 10-foot-wide bench along the east side and south end of the runway extension (Sheet 7). Post-construction monitoring of the runway bench will be conducted, consisting of four sampling events in one year, one in each season of the year. All work would be conducted in accordance with permit stipulations (i.e., USACE 404 Permit, Title 41, and State Consistency Determination). The heavy equipment used for this project will be inspected for leakage such as fuel, oil, hydraulic fluid, and any other leaking hazardous material on a daily basis. If such a leakage is found, the equipment will not be used and will be pulled out of service until the leak is repaired. Cleanup of any spills will begin immediately. No wheeled or track vehicles will operate in any open water (unless the work area is completely isolated). No vehicles or equipment will be fueled or serviced within 100 feet of any wetlands or waters of the U.S. with the exception of "low mobility" equipment. Gas or diesel fueled pumps, engines, or generators will not be fueled or serviced within 100 feet of waterbodies unless pumps, engines, or generators are situated within a double catch basin designed to contain 110% capacity of the largest independent container. All containers must be clearly marked with the contents. Fueling and service vehicles shall be equipped with adequate materials (such as sorbent pads, booms, etc.) to immediately contain and commence cleanup of spilled fuels and other petroleum products or hazardous materials. Any spills or hazardous materials, fuel, or other petroleum products will be immediately reported to the State of Alaska Department of Environmental Conservation (DEC) at (907) 269-7500 during working hours, or 1(800) 478-9300 outside of working hours. In-stream work in Roundtop Creek will be conducted between April 30 and July 31 and while the site is naturally dewatered or isolated from the waters of Roundtop Creek.

5. Are bald eagle nest trees at least 330 feet from the project? If not, consult FWS.

Yes. A bald eagle nest survey was conducted in August 2005, and no nests were located. However, residents have indicated that a nest is located in the north end of town (see Figure 11 in the Environmental Assessment). Another survey will be completed prior to construction to locate nests and determine if they area active.

6. Have abandoned pads, roads, runways, and other fills associated with the airport project been considered for gravel re-use, rehabilitation, and/or restoration?

Approximately 0.24 acres of apron to be abandoned may be available for re-use if the material is suitable.

### **III. Minimization Measures (If the impacts cannot be avoided, continue):**

1. Can the proposed project or project components be located in a lower value wetland area? If not, explain in detail why not? (Refer to appropriate resource mapping or functional value assessment.)

Some project components (SREB and erosion protection) were located in uplands. Impacts to wetlands could not be avoided due to the proximity of the wetlands and other waters of the U.S. to the existing runway.

1.a. If yes, would construction affect other protected resources (e.g., cultural resource, federally listed or candidate species, bald eagles, or other raptors)? Consult with the agency with jurisdiction or expertise if appropriate (e.g., USACE, FWS, NMFS, ADF&G, and State Historic Preservation Officer).

N/A

1.b. Are there other project related impacts to this lower value wetland considered substantial (e.g., cultural resource, subsistence use, or other socio-economic factors)? Consult with the agency with jurisdiction or expertise if appropriate.

N/A

2. In consideration of forecast changes in aircraft use, future airport projects, expected community growth, and maintenance considerations, have facilities been sited to minimize wetland impacts? Has this been applied to all individual components of the airport (e.g., the runway, taxiways, aprons, lease lots, navigational aids)?

At the beginning of the project, a wetlands delineation was completed to determine the location of wetlands in the project area. The USACE concurred with the delineation. Impacts to wetlands adjacent to the runway and the Isanotski Strait could not be avoided due to the proximity to the existing runway. However, the SREB and erosion protection at the north end of the runway was designed to avoid impacts to wetlands and other waters of the U.S.

2.a Can dimensions of facilities be traded off (i.e., length versus width of the apron) in order to lessen impacts?

The SREB was designed to be located in uplands.

2.b. Can the footprint of specific project components be reduced (i.e., steeper side slope on support facilities)?

The footprints of the runway and taxiway have been consolidated to the extent practical. The landside side slopes are 2:1.

2.c Can facilities be consolidated to minimize impacts?

The facilities were consolidated to the extent practical.

2.d Have existing roads, pads, runways, and other facilities been incorporated into the design of the proposed project to minimize wetland impacts?

Yes. The staging area used for the construction of the harbor will also be used for as the staging area for this project. Additionally, existing roads will be used as haul routes.

3. Have crossings of fish streams been located to minimize adverse impacts to the extent practicable? (Contact agencies with jurisdiction or special expertise as appropriate.)

Stream crossing were avoided (the alternative extending the runway into Roundtop Creek was eliminated).

3.a. Have adverse affects to fish spawning habitat been minimized?

Yes. In-stream work in Roundtop Creek will be conducted between April 30 and July 31 and while the site is naturally dewatered or isolated from the waters of Roundtop Creek.

3.b. Have stream crossings been designed in accordance with the State of Alaska Department of Transportation and Public Facilities/ADF&G culvert design and construction memorandum of agreement?

N/A

4. If the Regional Environmental Coordinator has determined that the project may adversely affect EFH, list the preliminary EFH conservation measures.

BMPs for erosion and sediment control will be utilized during construction to minimize the introduction of suspended sediment to EFH. Silt curtains or other sediment control measures will be utilized to the extent possible. Footprint of rock fill in Isanotski Strait will be minimized by maximizing allowable steepness of side slopes. The backfilled rock is expected to create new habitat and be colonized by plants and animals that were temporarily displaced. Approximately three acres of a fringing kelp bed is expected to develop between approximately -2 and -30 feet MLLW. EFH will be created by constructing a 10-foot-wide bench along the east side and south end of the runway extension (Sheet 7). Post-construction monitoring of the runway bench will be conducted, consisting of four sampling events in one year, one in each season of the year. All work would be conducted in accordance with permit stipulations (i.e., USACE 404 Permit, Title 41, and State Consistency Determination). The heavy equipment used for this project will be inspected for leakage such as fuel, oil, hydraulic fluid, and any other leaking hazardous material on a daily basis. If such a leakage is found, the equipment will not be used, and will be pulled out of service until the leak is repaired. Cleanup of any spills will begin immediately. No wheeled or track vehicles will operate in any open water (unless the work area is completely isolated). No vehicles or equipment will be fueled or

serviced within 100 feet of any wetlands or waters of the U.S. with the exception of “low mobility” equipment. Gas or diesel fueled pumps, engines, or generators will not be fueled or serviced within 100 feet of waterbodies unless pumps, engines, or generators are situated within a double catch basin designed to contain 110% capacity of the largest independent container. All containers must be clearly marked with the contents. Fueling and service vehicles shall be equipped with adequate materials (such as sorbent pads, booms, etc.) to immediately contain and commence cleanup of spilled fuels and other petroleum products or hazardous materials. Any spills or hazardous materials, fuel, or other petroleum products will be immediately reported to DEC at (907) 269-7500 during working hours, or 1(800) 478-9300 outside of working hours. In-stream work in Roundtop Creek will be conducted between April 30 and July 31 and while the site is naturally dewatered or isolated from the waters of Roundtop Creek.

5. Have abandoned pads, roads, runways, and other fills associated with the airport project been considered for gravel re-use, rehabilitation, and/or restoration?

Approximately 0.24 acres of apron may be available for re-use if the material is suitable.

#### **IV. Material Site Considerations**

Contractor supplied and commercial material sites are not subject to an avoidance and minimization review.

1. Has a material site been designated for this project? If yes, continue; if no, go to V.

Due to the unknown of material availability in the vicinity of False Pass, material would be contractor supplied. However, some material would be supplied from the current gravel mining operations in Roundtop Creek, abandoned portions of the existing apron, and dredged material from the harbor construction.

- 1.a. If a new material site is required, have you considered locating and accessing material an adequate distance from the airport so that it can be reclaimed as wetlands or other wildlife habitat?

N/A

- 1.b. Would a new site, located a safe distance from the airport, require a new road, resulting in additional wetland resource or community use impacts? Are there means to avoid a new access road? Would development of this new site result in more or less wetland impacts than a new or existing material site located closer to the airport?

N/A

- 1.c. If a new or existing material site has been selected that would be located a safe distance from the airport and requires minimal additional road building, has a mine reclamation plan been developed? If located an appropriate distance from the airport, can the material site be reclaimed to provide open water habitat such as shallows, islands, and irregular shorelines? (Consult agencies with jurisdiction or special expertise.)

N/A

1.d. Has geotechnical and hydrological information been collected and used to maximize gravel exploitation while minimizing wetland impacts (e.g., mining deeper, adjusting material site boundaries, and using portions of the pit for temporary stockpiling of material)?

No.

1.e. Has a long-term material site been considered? If so, can a portion of the site be closed and reclaimed at the end of this project?

N/A

**V. Additional Material Site Considerations:**

1. Will project overburden be stockpiled (preferably in uplands) for use as “topsoil” or in reclamation of material sites or previously disturbed areas?

The overburden would be stockpiled in uplands to the extent feasible for later use as topsoil.

2. How will access roads and other fills associated with the material site be restored upon project completion?

N/A. The material will be barged in.

3. Can development of the material site be timed to avoid or minimize affects during spawning, migration, and nesting periods? (Consult agencies with jurisdiction or special expertise.)

N/A.