

**Department of Transportation
Federal Aviation Administration**

**FINDING OF NO SIGNIFICANT IMPACT
Nome Airport Runway Safety Area Improvements
DOT&PF Project No. 61413**

Purpose and Need

The Proposed Action would enhance safety at the Nome Airport by bringing the runway safety area (RSA) into compliance with Federal Aviation Administration (FAA) standards to the extent practicable based on available funding. The airport is vital because air transportation is the only feasible year-round mode of travel for fuel, supplies, and passengers to Nome, the Bering Strait regional transportation center. A congressional mandate (Public Law 109-155) requires airports with Airport Operating Certificates to comply with FAA design standards, which state that such airports shall provide a standard RSA, to the extent practicable, for the types of aircraft regularly operating at a facility. Nome Airport holds an Airport Operating Certificate and therefore must comply with the congressional mandate. Nome's main and crosswind runways (Runway 10-28 and Runway 3-21, respectively) are currently classified by the Airport Reference Code as C-III, servicing commercial jets. FAA's RSA standards for C-III runways are 500 feet (ft) wide and 1,000 ft long beyond each runway end. Neither RSA at the Nome Airport meets FAA design standards.

Requested Federal Action

The Alaska Department of Transportation and Public Facilities (DOT&PF) is requesting the following federal actions from the FAA: (1) approval of the Airport Layout Plan; (2) participation in funding the proposed improvements using Airport Improvement Program (AIP) grant funds; and (3) property acquisition for right-of-way (ROW) as necessary for airport improvements as identified in the Final EA and approved in this Finding of No Significant Impact (FONSI).

Proposed Action

- **Main Runway 10-28.** Existing cleared areas along the north and south sides of the runway would be graded to create a 500-ft-wide RSA along the entire paved runway, with only minor deficiencies in width on the southwest end, to minimize impacts to the Snake River. Additionally, threshold RSAs would be constructed at the east and west ends of the runway. A 1,000-ft-long RSA would be built beyond the eastern end of the runway by grading and extending the existing cleared area to the width practicable; the RSA would be deficient in width on the south side for 500 ft on the east end to avoid impacts to Seppala Drive and the Snake River and to preserve existing instrument approach procedures. A new 190-ft-long embankment off the western end of the runway would provide for a 170-ft-long RSA equipped with an Engineered Materials Arresting System (EMAS). A 150-ft-wide and 135-ft-long EMAS arrestor bed would be constructed on the paved RSA surface beyond the west threshold, with a 35-ft set-back/lead-in ramp. The north and south edges of the EMAS bed would slope for 10 ft. The RSA would include a 20-ft-wide paved access off the west end of the arrestor bed, a 15-ft-wide paved access on the north and south sides, and an additional graded area on the north side of the arrestor for maintenance and emergency vehicle access.

- **Snake River Realignment.** To accommodate the western embankment extension and the EMAS bed, land would be acquired and the Snake River would be realigned between approximately river miles (RMs) 2.1 and 2.3 and routed around the RSA expansion area in a modified 900-ft-long channel; the realignment would require a maximum excavation depth of approximately 25 ft and construction dewatering. A ditch on the north side of the main runway would be improved and drainage would continue to flow from the ditch to the Snake River as it does at present. The modified channel would have cross-sectional geometry, flood flow, and spring breakup ice flow conveyance characteristics similar to those of the existing river. The maximum slope of the RSA embankment extending into the new channel would be 2:1 (horizontal to vertical), and the cut slope geometry across the river from the expanded RSA would be based on the existing cross-sectional geometry of the river, with a maximum slope of 3:1. Cut slopes above the ordinary high water line (OHW) would be revegetated with a seed mix appropriate for the region. Of the approximately 24,000 cubic yards (cy) of excavated material from the realignment, a portion of the material would be placed as fill on the new embankments and unused material would be stockpiled in a DOT&PF stockpile area proposed as part of the project.
- **Crosswind Runway 3-21.** The RSA would be widened to the standard 500 ft, except on the south end of the runway where it would follow the existing embankment to avoid additional impacts to the Snake River. Thresholds would be shifted 600 ft to the north for Runway 3 operations, providing a 600-ft non-standard RSA south of the shifted Runway 3 threshold, eliminating airspace obstructions, and ensuring that nighttime approach procedures for Runway 3 would continue. The safety area on the north end would then be extended beyond the new Runway 21 threshold by 1,000 ft. Threshold 21 would be displaced to maintain its existing approach and continue use of existing navigational aids (NAVAIDS). The NAVAIDS for Runway 3 would be relocated and the new 600-ft runway and shoulder surface would be paved due to the threshold shift. The proposed action would require relocation of a segment of Construction Road, part of the Center Creek channel, a segment of a water utility line, and the existing drainage ditch west of the crosswind runway. Of the approximately 280,000 cy of excavated material from the threshold shift and RSA extension, a portion of the material would be placed as fill on the new embankments and unused material would be stockpiled in a DOT&PF stockpile area proposed as part of the project.
- **Utility Relocation.** The Nome Joint Utility System's water line that currently runs along the existing Construction Road and east of the crosswind runway would be realigned to allow for the extension of the crosswind runway embankment to the north. An overhead power line from the west end of the runway to the localizer west of the Snake River would be realigned to allow for the extension of the main runway embankment.
- **Drainage Improvements.** Center Creek and the existing dike on its west side would be shifted east to provide a buffer between the water and the new crosswind embankment to prevent flooding problems. A road immediately west of the rerouted ditch would provide access for augeis (body of layered ice) management. A 10-ft-tall dike would be constructed along the northern 900 ft of the ditch to ensure that flow and augeis is routed away from airport surfaces. The rerouted stream would rejoin the existing conveyance just southeast of the existing Runway 21 threshold. Additional drainage improvements along the creek would be necessary near the threshold 28 end of the proposed main RSA to move the drainage away from the area that would be filled by the proposed embankment extension and to reestablish the ditch to connect flow to the Snake River.
- **Construction Road Relocation.** Approximately 1,500 ft of Construction Road north of the existing threshold 21 would need to be relocated to allow for the crosswind runway RSA expansion and threshold shift.
- **Stockpile Area.** The stockpile site is approximately 15 acres and designed to accommodate all unused excavated material generated from the project. Land would be acquired to construct the site southwest of the relocated Construction Road, which would be used for access. To reduce the

attractiveness of the stockpile site to nesting migratory birds, the site would be graded or other best management practices (BMP) used to eliminate potential ponding of water and encourage runoff

- **Property Acquisition.** The proposed property acquisition would be a mixture of land purchase and avigation easement, to include existing and planned airspace required for safe and efficient aircraft operations and all other existing and planned airport elements. The other airport elements include: Object Free Areas; Runway Protection Zones; areas under the airport airspace imaginary surfaces out to where the surfaces obtain a height of 35 ft above the primary surface; and areas, other than those that can be adequately controlled by zoning, easements, or other means to mitigate potential incompatible land uses. The lands proposed for property acquisition range from areas disturbed by past mining activity to areas of undisturbed wetlands, and although most of the property is owned by a single proprietor, several parcels are owned by the City of Nome and Sitnasuak Native Corporation/Bering Straits Native Corporation. No property acquisition of homes or relocation of residences would occur as part of the proposed property acquisition. Any property acquisition in areas containing contamination would be avigation easement only.

Reasonable Alternatives

The two alternatives are the No Action Alternative and the Proposed Action. Under the No Action Alternative existing deficiencies would remain present at the airport. This alternative would not improve RSAs to the extent practicable given available funding and the risk to aircraft and personal injury from accidents would not be reduced. The No Action alternative would make no improvements to the existing main runway RSA, which has no safety area beyond threshold 10 and has a graded area beyond threshold 28 that is of deficient width and narrows to less than the runway width towards the east end. Additionally, no improvements would be made to the crosswind runway RSA, which has a 200-ft width deficiency and lacks safety area beyond either threshold. This alternative does not meet FAA design standards. The stated purpose and need to meet FAA standards to the extent practicable would not be met by this alternative.

Other alternatives (discussed in the Final EA, Section 3.1) were considered but dismissed.

- **Snake River Relocation.** Three relocation alternatives were developed. The first would reroute the river more directly south from RM 3.7 and create a new river mouth 13,000 ft west of the existing harbor. This alternative was dismissed due to the impractical cost and undesirable environmental and socioeconomic impacts associated with the creation of a new river mouth. The second alternative considered a substantial relocation of the river that would reconnect with the existing river. Although the difference in hydraulic characteristics between the new and existing river channels would be negligible, and impacts to fish habitat and the estuary would be temporary or minor, the high estimated cost of this alternative led to its dismissal. The third alternative evaluated a reduced Snake River relocation that was established as the preferred option. The alternative was ultimately dismissed due to economic infeasibility, particularly with respect to construction dewatering and property acquisition costs. Details of the relocation options are found in the Final EA, Appendix A.
- **RUNWAY 10-28.** Implementing declared distances on the main runway to gain a standard RSA was dismissed because it would decrease runway length, and reducing runway length to meet RSA standards is not allowed under an amendment to Public Law 108-176. Constructing an EMAS bed to standard criteria beyond threshold 10 was dismissed due to high costs. Shifting the main runway threshold east to create space for the RSA was dismissed because it would degrade instrument approach procedures and require relocation of several roads. Constructing a bridge to create RSA spanning the Snake River, on the west end, was dismissed due to high costs and concerns about flooding and salmon migration. Complete relocation of the main runway to an area just northwest of the airport was dismissed due to a lack of available funding.

- **RUNWAY 3-21.** Relocating the Snake River to accommodate a full RSA for Runway 3-21 was dismissed due to undesirable environmental and economic impacts. Shifting Runway 3-21 north to provide space for a full 1,000-ft RSA for threshold 3 was dismissed due to the prohibitive cost associated with rehabilitating hazardous waste sites on land that would be acquired for this alternative.
- **Stockpile Area.** Disposal of material at the Nome landfill was dismissed due to the large quantity of material that would need to be disposed of and the lack of ability to use the fill for later airport projects. Contractor responsibility for material disposal was dismissed because a large amount of excavated material generated would be usable for future airport projects. Options to develop an off-site stockpile area were dismissed for various reasons, including potential to delay the project schedule, greater environmental impacts, and the need for new or improved access roads.

In the DEA, Stockpile Site 1, west of the proposed relocated Construction Road, was chosen as the preferred stockpile location. However, USFWS requested that DOT&PF reconsider this selection, recommending that Stockpile Site 2, southwest of the proposed Construction Road, was the Least Environmentally Damaging Practicable Alternative (LEDPA). After re-evaluation, DOT&PF concurred that Site 2 was LEDPA, and selected it as the preferred stockpile location.

Coordination

Pre-scoping meetings were held in October 2009 and November 2010 with a Multi-Agency Task Force consisting of the U.S. Fish and Wildlife Service (USFWS), the Alaska Department of Fish and Game (ADF&G), the Alaska Department of Environmental Conservation (ADEC), the U.S. Army Corps of Engineers (USACE), the Nome Port Commission, and the National Marine Fisheries Service (NMFS). Informal Endangered Species Act Section 7 consultation was conducted in April 2011 regarding potential impacts to threatened and endangered species. A scoping meeting was held on May 17, 2011 with a Fisheries Work Group (Multi-Agency Task Force subcommittee) consisting of ADF&G, the Nome Port Commission, and NMFS. Public meetings were held on September 17, 2009; June 2, 2010; and May 16, 2012. Consultations for potential impacts to Essential Fish Habitat and as required by the National Historic Preservation Act Section 106 were ongoing between April 2011 and May 2012.

The Draft EA was circulated for public and resource agency review on May 3, 2012. A public meeting to present and discuss the Draft EA was held on May 16, 2012. The proposed project was well received by the attending public; no opposition was voiced to the Proposed Action (see Appendix F of the Final EA for the meeting summary). Key agency comments and how they have been addressed are summarized in the Final EA Summary on pages i, ii.

The USFWS concurred with DOT&PF's determination that the proposed project is not likely to adversely affect listed species, candidate species, or polar bear critical habitat on May 9, 2011. On May 14, 2012, SHPO concurred with a finding of no adverse effect for the Proposed Action. A summary of agency coordination activities is provided in the Final EA in Chapter 5, Table 6.

Impact Assessment

The Final EA analysis determined that the Proposed Action would not have significant adverse effects. Details of the environmental consequences are presented in the Final EA, Chapter 4. The realigned Snake River is expected to provide the same habitat values as it does currently. Drainage patterns of the area surrounding the river realignment would be altered; however, no permanent changes to water quality are expected. No permanent effects to EFH or EFH-managed species are expected since the realigned channel segment would be relatively small, roughly equivalent in length to the existing channel, and 58.2 acres of habitat would be disturbed by the Proposed Action through either excavation or fill. Impacts to wildlife

would be minor, though, as this habitat is already degraded in value due to proximity to developed surfaces and active hazing by the Nome Airport to discourage waterfowl from loafing and nesting near the runways. The overall net impact to plant communities would be relatively minor as the types of vegetation that would be affected are widespread throughout the vicinity of the project area. The Proposed Action would involve approximately 58.2 acres of unavoidable wetlands and waters impacts through excavation or fill. DOT&PF will propose fee in-lieu compensatory mitigation for the wetland and waters of the U.S. impacts associated with the Proposed Action. Land that would be purchased for development of the Proposed Action would not contain known or suspected contamination.

The DOT&PF has consulted with FAA on a finding of a Section 4(f), *de minimis* impact on the Nome Dredge No. 6 Historic Mining District and the Samuelson Trail. DOT&PF determined that the Proposed Action would result in no adverse effect on historic properties, therefore FAA made a *de minimis* impact finding under the provisions of 49 USC Section 303(d). SHPO did not object to FAA's *de minimus* impact finding. This is the case, because the only action proposed in the historic district and trail is land acquisition needed to secure ROW interests.

Avoidance, Minimization and Mitigation Measures

Conditions of approval associated with this project are detailed in the Final EA and project permits and will be included in the construction contract documents. The project has been coordinated with the appropriate agencies and local Tribes and includes measures to avoid and minimize impacts. The following commitments will be included in the project to reduce environmental impacts.

Air Quality

- Measures to control fugitive dust such as pre-watering sites prior to excavation, applying a dust palliative, controlling construction traffic patterns and haul routes, and covering or otherwise stabilizing fill material stockpiles will be implemented during construction.

Water Quality

- The contractor will be required to comply with the APDES CGP and prepare and implement a SWPPP (subject to DOT&PF approval and based on DOT&PF's Erosion Sediment Control Plan).
- BMPs will be followed, which includes placement of a turbidity curtain or another BMP in the Snake River before in-water construction begins; use of only clean fill material (10 percent in fines or determined by the project engineer) for the construction of the embankments; temporary installation of silt fencing during construction of embankments within wetlands; and re-vegetation of disturbed areas with native species.
- Work will be isolated from the flowing river as much as practicable, silt curtains or another BMP will be used, and the lowest segment of bank-armoring revetment will be placed first to minimize sediment release.
- In-water work will be limited to low-flow periods in the Snake River to minimize sediment discharge.

Construction

- Advance notice of construction and detours will be provided to airport users, and traffic will be re-routed around the construction area to the extent feasible.
- Haul routes, staging, and stockpiling will be planned to avoid and minimize impacts to airport users and local residents.

- Access via the Snake River will be coordinated locally and accommodated as much as possible to allow continued local user access to areas upstream of the construction.
- DOT&PF will coordinate with NMFS and ADF&G to establish appropriate mitigation for the temporary, construction-related impacts to EFH.
- DOT&PF will consult with ADEC, as detailed in the Final EA, to determine the most appropriate land-based dewatering method to avoid discharge of arsenic contaminated groundwater into the Snake River. If land-based methods are found to be impracticable, discharge would be in an ADEC-approved manner and may include a permitted mixing zone for arsenic and sediment to safely introduce the discharge into an existing mining dredge pond on site or other approved water body (not within a public drinking source or fish habitat).

Aircraft Operations

- An air traffic control plan will be developed and implemented during construction.
- The construction contractor will notify the DOT&PF Project Engineer of any activities that would change available landing surface or NAVAIDs so this information can be broadcast to airport users. The Project Engineer will inform the DOT&PF Airport Manager who will coordinate and issue all required Notices to Airmen.
- Construction activities will be staged to minimize delays to aircraft or passengers.
- During construction periods that do not require partial runway closures, the construction contract will require the contractor to conform to FAA safety guidelines and avoid delays to aircraft or passengers.

Hazardous Waste, Pollution Prevention, and Solid Waste

- DOT&PF will require the construction contractor to develop a Hazardous Materials Control Plan (HMCP) to address storage and handling of hazardous materials, including fuel and lubricants, and spill response.
- Construction contracts will include a provision that if contaminated soil or groundwater is suspected or encountered during construction activities, the construction contractor will contact the DOT&PF Project Engineer and stop the work, so that the DOT&PF can coordinate with ADEC in accordance with 18 Alaska Administrative Code 75.300. All contamination will be handled and disposed of in accordance with an ADEC-approved corrective action plan.
- All solid wastes generated during construction will be disposed of at a permitted landfill.
- Material excavated in previously mined areas will only be used in an upland, non-environmentally sensitive location and will not be placed within 100ft. of water wells, surface waters and drainage ditches.

Historical, Archaeological, and Cultural Resources

- The construction contract will contain the provision, "*Should cultural or paleontological resources be discovered as a result of this activity, all work that could impact these resources will halt and the DOT&PF Project Engineer and SHPO will be notified immediately.*" Work will not resume at these sites until Section 106 consultation is conducted with FAA and SHPO.

Fish, Wildlife, Plants, and Subsistence

- DOT&PF will comply with the Migratory Bird Treaty Act by either adhering to the USFWS recommended bird timing window of May 20th to July 20th or by sufficiently altering vegetated sites,

before migratory birds arrive to ensure that nesting habitat is not provided. Other methods approved by the USFWS could also be used.

- The proposed project will be conducted in compliance with the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. If an active eagle nest is encountered during construction, intrusive activities such as clearing will not proceed in the vicinity of the active nest until fledging occurs. If construction activities appear to disturb eagles, the USFWS Regional Office would be contacted.
- Impacts to fish will be minimized by using ADF&G-stipulated timing windows, using only clean fill, and isolating work areas where practicable.
- The instream flow rates specified in the ADF&G Snake River water reservation would be adhered to, in order to protect fish, wildlife habitat, migration and propagation.
- Finished slopes would be stabilized with rock or seeded with native grasses or other vegetative plantings. Seeding with native grasses or other vegetative planting in disturbed areas would reduce the risk of bank erosion and mimic existing conditions of the floodplain.

Wetlands

- The project footprint will be staked prior to construction and maintained for the duration of the project to avoid additional impacts to wetlands from construction activities.
- Embankment fill material will be stockpiled within the project fill footprint or upland areas of the airport to avoid impacts to wetlands.
- Setbacks from water channels and standing water will be maintained for refueling and vehicle maintenance activities to avoid impacts to the waterbodies from an accidental spill.
- DOT&PF will propose fee in-lieu compensatory mitigation to the USACE for the approximately 58.2 acres of wetland and waters of the U.S. impacts associated with the Proposed Action.

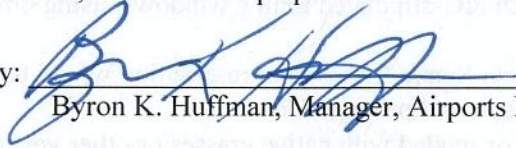
Required Permits and/or Approvals

- **National Historic Preservation Act.** Consultation with the State Historic Preservation Officer (SHPO).
- **Endangered Species Act.** Consultation with the U.S. Fish and Wildlife Service (USFWS).
- **Clean Water Act.**
 - USACE Section 10/404 permit for fill in wetlands and waters of the United States.
 - Alaska Pollutant Discharge Elimination System Construction General Permit for construction activities, pursuant to Section 402.
 - 401 Certificate of Reasonable Assurance to certify that the proposed project would meet State water quality standards.
- **Alaska Water Use Act.**
 - Alaska Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW) Temporary Water Use Permit for relocation of the Snake River.
- **Alaska Administrative Code (11 AAC 51).**
 - ROW agreement for relocation of the Snake River.
- **Fish and Wildlife Coordination Act.** Alaska Department of Fish and Game Division of Habitat Title 16 Fish Habitat Permit for construction in the Snake River.
- **City of Nome Code of Ordinances.** Chapter 11.50.030 Protection Against Flood Damage permit to develop in a flood plain area.
- **City of Nome.** Excavation/Fill permit.

Federal Finding and Approval

I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information I find the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of the National Environmental Policy Act (NEPA) and other applicable environmental requirements. I also find the proposed Federal action will not significantly affect the quality of the human environment or include any condition requiring consultation pursuant to Section 102 (2)(c) of NEPA. As a result, FAA will not prepare an EIS for this action.

Approved by:



Byron K. Huffman, Manager, Airports Division, FAA Alaska Region

10/24/12

Date