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List of Acronyms and Abbreviations

AASP	Alaska Aviation System Plan
ADEC	Alaska Department of Environmental Conservation
ADFG	Alaska Department of Fish and Game
ADNR	Alaska Department of Natural Resources
APDES	Alaska Pollutant Discharge Elimination System
APE	Area of Potential Effect
AWOS	Automated Weather Observation System
BBNC	Bristol Bay Native Corporation
BMPs	Best Management Practices
BRL	Building Restriction Line
DCCED	Alaska Department of Commerce, Community and Economic Development
DOT&PF	Alaska Department of Transportation and Public Facilities
EA	Environmental Assessment
E.O.	Executive Order
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
ILMA	Interagency Land Management Agreement
MIRL	Medium Intensity Runway Lighting
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
OHA	(Alaska State) Office of History and Archaeology
OHW	Ordinary High Water
PAPI	Precision Approach Path Indicator (lights)
RSA	Runway Safety Area
RS 2477	Rural Statute 2477
REIL	Runway End Identifier Lights
RPZ	Runway Protection Zone
SHPO	State Historic Preservation Officer
SREB	Snow Removal Equipment Building
SWPPP	Storm Water Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WHA	Wildlife Hazard Assessment

1.0 PURPOSE AND NEED

The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Federal Aviation Administration (FAA) proposes to rehabilitate and extend the runway, upgrade the lighting, resolve the structural and drainage issues that have developed, and upgrade the airport structures at the Koliganek, Alaska Airport.

The purpose of the project is to correct airport deficiencies and bring the airport up to current standards for a Community Class Airport that meets criteria identified in the Revised Southwest Area Transportation Plan, the Alaska Statewide Transportation Plan, the Alaska Aviation System Plan (AASP), and current Federal Aviation Administration (FAA) design standards.

Since the airport was relocated in 1994, the runway surface has become damaged from soil settling unevenly under the embankment. The snow removal equipment building (SREB) is threatened by the apron embankment collapsing on one end, and is within the Building Restriction Line (BRL) for current non-precision instrument approach standards. In 1994, the statewide standard recommended a minimum runway length for Community Class Airports of 3,000 feet (ft). Since then, the statewide standard was changed to 3,300 ft in response to FAA Advisory Circular 150-5300, which required a runway length of 3,200 ft for non-precision instrument flight approaches (nationwide). The State recommended an additional 100 ft added to accommodate variation in temperature and elevation in Alaska, so the current recommended minimum runway length for Community Class airports is 3,300 ft.

The Koliganek Airport serves as the primary transportation route to and from the community. Air freight, mail and passengers are typically routed from Dillingham to Koliganek. Koliganek is serviced by a number of daily flights offered by several carriers. Medevac flights originate in Anchorage and Dillingham and patients are transported to the Kanakanak Regional Hospital in Dillingham or to Anchorage. Typical aircraft flying into Koliganek and the aviation forecast for Koliganek are detailed in Appendix A.

2.0 PROPOSED ACTION

The proposed action consists of rehabilitating and extending the runway at Koliganek to meet current State and FAA standards for a Community Class airport. The project components include: acquiring approximately 24 total acres of property [20 acres from Koliganek Natives Ltd., 2.5 acres from a Native Allotment, and a 1.3 acre Interagency Land Management Agreement (ILMA) with the Alaska Department of Natural Resources (ADNR) for managing state land in the Runway Protection Zone (RPZ)]; extending the runway from 3,000 to 3,300-ft long by 75-ft wide, install runway lighting; extending the apron, relocating navigational aids, building a new snow removal equipment building (SREB) and relocating the existing SREB, and moving 800 ft of the access road around the extended apron. Components of the proposed action are discussed in detail in Section 3.2 and illustrated on Figures 2 through 8.

2.1 IDENTIFICATION OF FEDERAL ACTION

The Federal action requested by the DOT&PF is approval of the Airport Layout Plan, land acquisition; and participation in funding the Koliganek Airport Reconstruction through the Airport Improvement Program. Construction is planned for 2013, to be completed by 2014.

3.0 ALTERNATIVES

Due to the airport's current configuration, extending the runway to 3,300 ft would require extending one end or the other, or a combination of both. Since the east end of the runway is has a pond off the RPZ, and would require additional wetland fill to re-route the material site access road, extending to the east was dropped from consideration. The land is homogenous, so physical and biological impacts would be the same for either end of the runway, except for the additional impact to relocate the material site access road.

3.1 ALTERNATIVE 1: PROPOSED ACTION

The proposed action is to extend the runway and move the apron to meet DOT&PF and FAA standards for a Community Class airport. The airport project would include the following components, as illustrated on Figure 3:

- Rehabilitate the existing 3,000-ft runway, apron, and taxiway;
- Extend the runway by 300 ft on the west end for a total 3,300-ft runway, with a 300-ft RSA on each end;
- Expand existing apron by approximately 100 ft to the south to allow for the SREB to be moved outside the BRL; this will require relocating 800 ft of the airport access road around the apron to provide access to land on the other side of the airport;
- Repair and relocate the existing SREB, and construct a new heated single bay SREB. (The FAA requires that snow removal equipment be stored in a covered building.);
- Replace runway and taxiway lighting: Medium Intensity Runway and Taxiway Lighting (MIRL), and install Runway End Identifier Lighting (REIL);
- Acquire approximately 24 total acres of property (20 acres from Koliganek Natives Ltd., 2.5 acres from a Native Allotment, and a 1.3 acre ILMA with ADNR for managing state land in the RPZ) to include the primary surface area that is being expanded for non-precision instrument flight approaches;

The runway, taxiway, and apron cross sections are illustrated on Figures 4 through 6. The primary surface width will be expanded from 250 ft to 500 ft. and the BRL offset from the runway centerline will increase to 495 ft.

A potential material site has been identified northeast of the airport on an island within the Nushagak River (see Figures 7 through 8) which is owned by the Bristol Bay Native Corporation (surface and subsurface). Material has been removed from this island for past projects in Koliganek, including constructing the new airport in 1994, and constructing the Bureau of Indian Affairs community roads project in 2006. The road illustrated on Figure 7, was built in 1994 when the airport was relocated to the present site, and provides access to the Nushagak River bank closest to the island material site.

The proposed action would meet the expected increase in passengers and cargo, and would meet safety needs identified for the desired design life of 20 years. The service life of the surface course would vary, depending on the structural condition of the embankment, and may require resurfacing during the 20-year life cycle.

3.1.1 Permits or Approvals

The permits and/or other approvals listed below would be obtained prior to construction to comply with all applicable federal, state, and local regulations. The proposed action would require the following permits or approvals:

- U.S. Army Corps of Engineers (USACE) Section 404 permit for fill in wetlands;
- Alaska Department of Fish and Game (ADFG) Title 16 Fish Habitat Permit for access to the island material site and withdrawing water from designated anadromous and resident fish stream;
- Alaska Department of Environmental Conservation (ADEC) 401 Certificate of Reasonable Assurance for fill in wetlands;
- ADEC Letter of Non-objection for the proposed airport's change to the natural drainage movement;
- Alaska Department of Natural Resources (ADNR) Material Site Reclamation Plan approval (obtained by the construction contractor);
- ADNR Temporary Water Use Permit for water withdrawal for embankment material compaction and dust control (obtained by the construction contractor);
- USCG Permit for obstructing the Nushagak River channel, a navigable waterway;
- Section 106 consultation with the SHPO (already obtained).

Copies of the permit applications are provided in Appendix B. Copies of the SHPO consultation are provided in Appendix C, and summarized in Section 5.7. The project would involve more than one acre of ground disturbance from construction activities and has a potential for storm water discharge to adjacent wetlands and waters. The construction contractor and DOT&PF would be required to conduct all construction activities in compliance with the ADEC Alaska Pollutant Discharge Elimination System (APDES) General Permit for Construction Activities in Alaska. A Storm Water Pollution Prevention Plan (SWPPP) will be developed by the contractor, reviewed by DOT&PF, and submitted to ADEC for approval, and implemented throughout construction.

3.1.2 Cost

The cost to construct the proposed action is approximately $11,500,000, which includes land acquisition, design, utility work, and construction. Maintenance and operation costs would be approximately $61,000 per year. The cost is based on construction to begin in 2013.

3.2 ALTERNATIVE 2: NO ACTION

The No Action alternative would leave the existing airport unimproved. Minor improvements to address the deficiencies (i.e. grading the surface or adding additional surface material) could be undertaken, and would require State Maintenance and Operation funds, not Federal funds. The goals and objectives of the Southwest Alaska Transportation Plan and Federal design standards would not be met.

Under the No Action alternative, the purpose and need would not be met with flight service at Koliganek continuing at a facility that does not meet current design standards.

3.2.1 Permits or Approvals

No permits or other approvals would be needed under the No Action alternative.

3.2.2 Cost

No construction funds would be needed. Maintenance funds would likely increase as the condition of the airport continues to deteriorate. Currently, existing maintenance and operation costs are approximately $60,000 per year.

3.3 ALTERNATIVES SUMMARY

The alternatives, the proposed action and no action, are summarized in Table 1 below.

Table 1: Comparison of Alternatives

	Proposed Action	**No Action**
Purpose and Need: Compliance with current State and FAA Airport Standards	Would meet purpose and need.	Would not meet purpose and need.
Environmental Impacts		
Air Quality	No long term effects.	No long term effects.
Compatible Land Use	Community supports airport extension. Land acquisition from Native Corp. and Native Allottee. ILMA from DNR for RPZ.	No effect.
Construction Impacts	Temporary effects to air quality, community noise.	No effect.
Fish, Wildlife, and Plants (Threatened/Endangered Species (T&E), Essential Fish Habitat (EFH)	No effects to T&E or EFH. Loss of 2 acres of plants and wildlife habitat.	No effects to fish, wildlife, plants, T&E, or EFH.
Floodplains	No measurable effect.	No effect.
Historical, Architectural, Archaeological, and Cultural	No effect.	No effect.
Light Emissions and Visual Effects	No effect.	No effect.
Natural Resources and Energy Supply	Require using 140,000 cubic yards of material. No adverse effects to energy supply.	No effect.
Noise	No effect.	No effect.
Socioeconomic, Environmental Justice, and Children's Health and Safety Risks; Subsistence	No effect.	No effect.
Solid Waste	No effect.	No effect.
Water Quality	No effect.	No effect.
Wetlands	Requires 2 acres wetland fill.	No effect.
Regulatory Requirements		
Section 404 permit for wetlands fill	Required.	Not required.

	Proposed Action	**No Action**
401 Certificate of Reasonable Assurance for water quality	Required.	Not required.
ADEC Letter of Non-objection	Required.	Not required.
Mining and Reclamation Plan approval	Required.	Not required.
Title 16 Habitat	Required.	Not required.
USCG approval for river channel obstruction	Required.	Not required.
Temporary Water Use Permit	Required.	Not required.
ILMA with DNR for RPZ	Required.	Not required.
Section 106 consultation	Required.	Not required.
Mitigation		
Wetlands impacts	Mitigation in accordance with the USACE permit.	Not required.
Land Use	Not required.	Not required.

4.0 AFFECTED ENVIRONMENT

4.1 CLIMATE

Koliganek is in a climatic transition zone. The primary influence is maritime, although a continental climate affects the weather. Average summer temperatures range from 37 to 66 °F; winter temperatures range from 4 to 30 °F. Annual average precipitation is 26 inches. Winds are primarily from the north and east in winter and from the southeast and south in summer. The predominant wind direction is from the east. The Nushagak River reportedly freezes in November and breaks up in early May.

4.2 TOPOGRAPHY

Koliganek is located on the left bank of the Nushagak River and 65 miles northeast of Dillingham. The community lies at approximately 59.728610° North Latitude and 157.284440° West Longitude (USGS Quad Map Dillingham C-4) in Section 21, Township 5 South, Range 47 West, Seward Meridian. Low rolling hills are the predominant topography in the vicinity of Koliganek. The highest point of relief in the area is the 698-ft Ketok Mountain about one mile north of Koliganek. The airport lies about 1 mile east of the village at an elevation of 269 ft. The village and existing airport are on low lying, relatively flat ground.

4.3 HYDROLOGY, SOILS AND GEOLOGY

Locally, the Nushagak River is heavily braided and bordered by extensive wetlands with numerous small drainage streams from Riverine wetlands and upland lakes and ponds as illustrated on Figures 1 and 2. Two to three mile-plus wide floodplains of the Nushagak River in the project vicinity create extensive emergent grasslands. The Mulchatna River enters the Nushagak River about one mile downstream from the village.

Water bodies in the area include the Nushagak, Mulchatna, and Nuyakuk Rivers, Cranberry Creek, and numerous drainages, lakes, and ponds. The area is dominated by water bodies and wetlands.

Regional Geology. Koliganek is located in the southern Kahiltna terrane in the Chilikadrotna Greenstone stratigraphic unit. The southern Kahiltna terrane is located in the Bristol Bay lowlands which is part of the overall Southwest Alaska geological region (Decker et al, 1994). The Chilikadrotna unit is characterized by two Quaternary period volcanic flows separated by a limestone layer.

Site Geology. Koliganek is located along the Nushagak River in the Bristol Bay lowlands. Low rolling hills characterize the Bristol Bay lowlands. The existing airport is located on a raised knoll oriented east-west and grading north and south over discontinuous perennially frozen ground (permafrost). About 1 ft of surface peat was left in place during the original construction over the foundation soil. Warm (near 32° F) perennially frozen ground is present and degrading beneath the current facilities. The DOT&PF 2010 geotechnical investigation observed permafrost beneath the taxiway and runway safety and proposed runway extension areas. A typical soil profile in the proposed project area is: 1 ft peat, 4 ft organic silt with sand, 5 ft sandy silt with gravel, and 1 ft silty sand with gravel.

4.3.1 Potential Material Sources

The only practical local source of rock for surface course aggregate is a vegetated gravel bar in the Nushagak River located about 2.5 miles east (downstream) from the airport. In 1994, the DOT&PF New Koliganek Airport project used the gravel bar material site. The DOT&PF 2010 Koliganek Geotechnical Report found that material from the river bar source is useable. The source material is a fine, clean, poorly-graded sandy gravel. A haul road was constructed for the 1994 airport project to transport the material to the airport from the south bank of the Nushagak River opposite the gravel bar (see Figures 7 through 9). The material would need to be moved from the island to the mainland over a Nushagak River channel approximately 130 ft wide. Water levels vary throughout the year, flowing deepest in the spring and the channel drying up and then freezing over in the late fall/early winter.

4.4 FLOODPLAINS

The Koliganek community does not participate in the National Flood Insurance Program, and floodplains are not mapped. The USACE Public Floodplain Viewer (2012) flood event data (updated October 2011) reports no known flooding at the community's present location. The community moved 4 miles downstream from its original site in 1967 to escape flooding. The existing airport site is situated on a raised knoll more inland from the river and on slightly higher ground than the village.

4.5 NOISE

Airport noise is often one of the most common effects of aviation operations encountered in the vicinity of an airport. Aviation noise extends beyond the boundary of the airport into areas over which the FAA has no authority. Often noise problems develop around airports if adequate limitations on incompatible uses have not been adopted by the local government. The village currently has not instituted protection measures to limit potential for airport noise impacting adjacent development. Because operation estimates for the Koliganek Airport do not approach 90,000 propeller operations or 700 jet operations a year, FAA does not require a noise analysis.

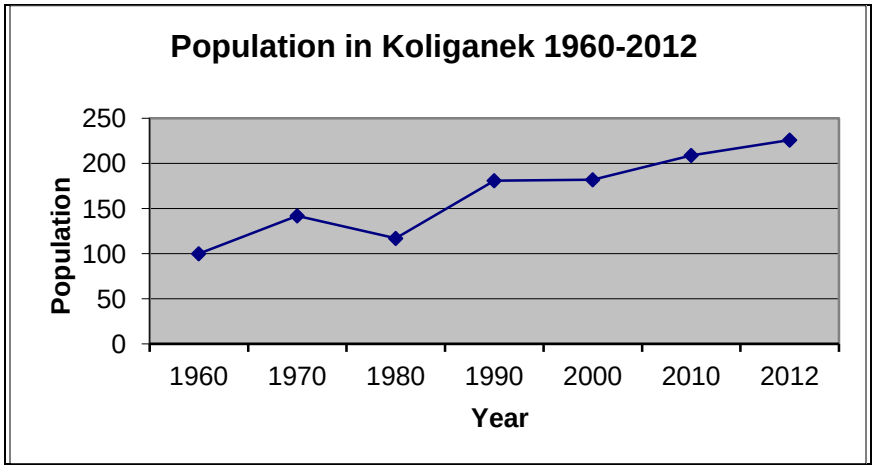
4.6 LAND USE AND LAND STATUS

Land use patterns in Koliganek have been influenced by wetlands, the presence of permafrost, surface drainage, wind direction, the proximity of the Nushagak River and various physical, cultural, and historic factors. These factors will continue to influence land use and development patterns well into the future. The Koliganek Comprehensive Plan (2005) states the goal to maintain a compact land use pattern to keep the cost of providing community services to a minimum. Outside the main community, the surrounding lands are used primarily for subsistence hunting and gathering.

In the summer, boats are used for travel to other villages along the Nushagak and snow machines are used during the winter. ATV trails are short and near the village on account of the extensive wetlands in the region. The existing airport rests on one tract of land totaling 116.2 acres within an Alaska Native Claims Settlement Act (ANCSA) section conveyed to the local Village Corporation, Koliganek Natives Limited. The State of Alaska owns the property within the existing airport boundary. The access road from the airport to the proposed material site, including the proposed realignment for the apron expansion, is owned by Koliganek Natives Limited (surface rights) and Bristol Bay Native Corporation owns the subsurface rights. The proposed runway RPZ intersects a Native Allotment, of which 2.54 acres would be acquired as airport property.

4.7 SOCIOECONOMIC CONDITIONS

According to Census 2010, Koliganek is predominately a Yup'ik community with a population that is at least 95.7 percent American Indian or Alaska Native, 3.4 percent are white, and 1 percent have 2 or more races. The Alaska Department of Commerce, Community and Economic Development (DCCED) (2012) reports the population of Koliganek at 226 in 2011. The U.S. Census Bureau reported 209 residents in 2010. The population has grown from 90 in 1950 to 209 in 2010. The population reported by DCCED for the last 60 years is 1960: 100; 1970: 142; 1980: 117; 1990: 181; 2000: 182, 2010: 209 as illustrated in the chart below.



The Alaska Department of Labor and Workforce Development (DLWD) predicts an average 0.24 percent growth rate for the Dillingham Census area for the period from 2010 to 2035 (DLWD, 2010). Using this data, by the year 2030, the population could be 220 (at the average

0.24 percent growth rate) or 246 (using regression analysis). The Revised Southwest Area Transportation Plan (DOT&PF, 2004) estimated 260 Koliganek residents by 2020.

The school and village council provide most year-round employment. In 2010, 18 residents held commercial fishing permits. Many residents trap, and subsistence activities are an important part of the economy. Residents are employed in sales, clerical, management, professional, production, transportation, and service occupations. According to DCCED (2012), unemployment in Koliganek is 31.1 percent, with 41.2 percent of Koliganek adults out of the labor force (unemployed and not seeking employment), and 7.2 percent are below poverty lever. Per capita income is $15,944, median household income is $56,563, and median family income is $73,250.

Koliganek has one village council, the BIA-recognized Traditional Council (federally-recognized tribe for Koliganek). FAA conducted government-to-government consultation with the federally-recognized tribe, as required by Executive Order (E.O.) 13175, Consultation and Coordination with Indian Tribal Governments. The correspondence is provided in Appendix C.

4.7.1 Subsistence

According to a 2005 ADF&G subsistence use and harvest data (Krieg et al. 2009 and http://www.adfg.alaska.gov/sb/CSIS/) virtually every person in Koliganek participates in subsistence activities and used wild resources. Fishing (salmon and non-salmon fishes) and large land mammals (moose, caribou) comprised over 92% of wild resource harvests in 2005. Subsistence harvest currently is the main source of food for Koliganek residents with salmon comprising 63% of all wild resources harvest by weight. Salmon are harvested upstream on the Nushagak River and downstream to Nushagak Bay. Harvest resource areas for a wide variety of resources extend widely from Koliganek in all directions.

Community members report that the proposed airport area does not provide important habitat for subsistence harvests (see Appendix C, 2010 Public Meeting in Koliganek). The ADEC 2006 study of the Lower Nushagak River (2006, ADEC) reported water quality parameters measured from the lower Nushagak River met almost all ADEC water quality standards for drinking water and drinking water maximum contaminants levels.

4.8 CULTURAL RESOURCES

In 1993, DOT&PF conducted a cultural resources survey for moving the airport to the current location, as well as several potential material sites. In 2011, the SHPO concurred with DOT&PF's finding on FAA's behalf that no historic properties were present within the project area which includes the proposed airport boundary, access road, and potential material site.

For the previous projects' material excavation at the proposed material site, DOT&PF did not conduct a cultural resources survey since island formation is relatively recent and still accreting. Additionally, on June 17, 2011, DOT&PF searched the Alaska Heritage Resources Survey (AHRS) database and found no new sites reported in the Area of Potential Effect, and sent a finding of no effect to historic properties to the State Historic Preservation Officer (SHPO), the Koliganek Village Council, Koliganek Natives Limited), and the Bristol Bay Native Corporation

(BBNC). The SHPO concurred with a finding of no effect to historic properties on July 13, 2011.

4.9 BIOTIC COMMUNITIES, ESSENTIAL FISH HABITAT, AND THREATENED AND ENDANGERED SPECIES

The Nushagak River is located adjacent to the Koliganek airport and the Mulchatna River confluence is located about 10 river miles downstream from Koliganek. The Nushagak River (ADFG Fish Distribution Mapper # 325-30-10100) provides habitat for the following salmon species

- Chum Salmon (spawning)
- Coho Salmon (rearing)
- King Salmon (spawning and rearing)
- Pink Salmon (spawning)
- Sockeye Salmon (spawning, rearing)
- Arctic Char (present)
- Whitefish (present)
- Rainbow smelt (present)

The Nushagak River is an anadromous stream and considered Essential Fish Habitat (EFH) (as established by the Magnuson-Stevens Fishery Conservation and Management Act). In the 2011 scoping effort for this project, DOT&PF asked ADFG to identify other rivers, tributaries, backwaters, and sloughs in the proposed project area that may also provide habitat for resident and anadromous species. The Nushagak River is the only resident and anadromous fish stream near the proposed project footprint.

Large land mammals in the project area are moose, caribou and black and brown bear. A long list of small land mammals and furbearers occur in the project area including beaver, coyote, hares, red fox, lynx, marmot, marten, mink, muskrat, porcupine, squirrels, weasel, wolf, and wolverine. A large number of migratory bird species are also seasonally present in the project area including various species of duck and geese; tundra swan, sandhill crane, loons. Also present are upland game birds including ptarmigan and grouse (ADFG, 2005).

A review of the U.S. Fish and Wildlife Service (USFWS) and ADFG websites on June 5, 2012, indicated there are no candidate, threatened or endangered species within the project area. The Marbled Murrelet (*Brachyramphus marmoratus*) is a candidate for protection under the Endangered Species Act and protected under the Migratory Bird Treaty Act. The Marbled Murrelet, common to the southeastern and south coastal region of Alaska, has occurred casually or accidentally within the central region where Koliganek is located between August and November. Murrelets typically feed in nearshore marine waters and pursue fish and aquatic invertebrates under water. These habitat and feeding requirements preclude the probability of the bird occurring within the project area.

A review of the USFWS Alaska Bald Eagle Nest Atlas on June 5, 2012, found one Bald Eagle nest approximately 4.5 miles upstream on the Nushagak River from the proposed project.

4.10 WETLANDS

Wetlands dominate the Koliganek area. DOT&PF conducted wetlands delineation for the 1994 New Koliganek Airport EA/FONSI. In 2010, DOT&PF personnel field checked the 1994 delineation and found it still valid. The delineation mapped Palustrine emergent and Palustrine scrub-shrub wetlands in the project area (Figure 2). Brief descriptions of these wetland communities and locations are presented below. Wetlands surrounding Koliganek likely function to improve water quality in the Nushagak River because of their ability to retain sediments, nutrients, and pollutants. They also function as habitat for birds and rodents in addition to supporting moose browse. These wetlands may also provide nutrient cycling or food chain support functions and could provide organic detritus to area ponds and streams. Wetlands, including open water habitat are abundant in the Koliganek vicinity and region. All wetlands in the area are adjacent or hydrologically connected to a navigable water body, the Nushagak River, and are under the USACE jurisdiction, so a wetlands permit will be required for the project.

Palustrine Emergent Wetlands: Palustrine emergent wetlands are primarily associated with low lying, flat areas in the project footprint. Grasses and sedges are the dominant vegetation in these wetlands. Most of these wetlands are seasonally flooded following snowmelt in the spring, and during periods of regular rains, and are typically saturated to the surface with areas of open water.

Palustrine Scrub-Shrub Wetlands: Palustrine scrub-shrub wetlands occur throughout the project area in areas slightly elevated above the Palustrine emergent wetlands. Common vegetation includes sedges, blueberry, bearberry, mosses, and lichens. Some typical shrubs such as stunted willows, dwarf birch, and alders are present.

4.11 SOLID WASTE

The community dump site is located about 1.7 miles southwest from the existing airport. Although the dump was at one time a Class 3 ADEC permitted facility, the permit is now expired.

4.12 HAZARDOUS MATERIALS

A search of ADEC's Contaminated Sites mapper and database on June 5, 2012, showed only one site in the Koliganek vicinity, a closed site with cleanup complete in 1994. A leaking above ground storage tank was the cause. A search of ADEC's Spill Prevention and Response databases on June 5, 2012, list no spills from 2004 through the present for Koliganek. At the existing airport, as is typical for SREBs, residue from fuel and lubricants may have leaked from equipment. However, the floor of the existing SREB is concrete.

An investigation for potential contaminants of the airport area, haul route, and staging area was conducted by DOT&PF staff during a September 15, 2010 site visit. No signs (visual or olfactory) of contamination were observed.

5.0 ENVIRONMENTAL CONSEQUENCES

This section discusses the environmental consequences of the proposed action and no action alternatives for the Koliganek Airport. The following is a list of statutory and Executive Order requirements used as guidance to conduct this EA.

- National Environmental Policy Act (NEPA)
- Clean Air Act, as amended
- Clean Water Act, as amended
- National Historic Preservation Act, as amended
- Coastal Zone Management Act, as amended
- Endangered Species Act, as amended
- Fish and Wildlife Coordination Act, as amended
- Magnuson-Stevens Fisheries Conservation Act, as amended
- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act
- Uniform Relocation Assistance and Real Property Acquisition Policies Act, as amended
- E.O. 13112 Invasive Species
- E.O. 11990 Protection of Wetlands
- E.O. 11988 Floodplain Management
- E.O. 13175 Consultation and Coordination with Indian Tribal Governments
- E.O. 12898 Federal Actions to Address Environmental Justice in Minority and Low-Income Populations
- E.O. 13045 Protection of Children from Environmental Health Risks and Safety Risks
- Aviation Safety and Noise Abatement Act of 1979, as amended
- Farmland Protection Policy Act
- Section 4(f)/49 U.S.C. 303
- USACE Alaska District Regulatory Guidance Letter ID No. 09-01

The FAA's potential impact categories discussed in FAA Orders 1050.1E and 5050.4B are listed in Appendix D. The justification for determining categories to be non-issues for this project is briefly discussed in Appendix D. The remaining categories are included in the environmental consequences section as an "issue" warranting discussion—either because of potential for impact, public comment, or agency interest.

5.1 COMPATIBLE LAND USE

In accordance with 49 USC 47107(a)(10), appropriate action (sufficient land acquisition) will be taken to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including aircraft landing and takeoff. Sufficient property will be acquired to construct the proposed and future airport improvements, the RPZs, and to protect the FAR Part 77 airspace.

No noise impacts are anticipated, as discussed in Appendix D, Non-issues. Existing land uses in the immediate vicinity of and adjacent to the airport are compatible with normal airport operations and the expected increase in operations over time.

Sewage lagoons and landfills can be wildlife attractants. The FAA minimum standard separation distance between an airport's movement areas and a wildlife attractant is 5,000 ft for the type of aircraft expected to be used at the Koliganek airport. The existing dump site is approximately 1.7 miles from the proposed project site. The Koliganek sewage lagoon is located 0.3 miles (1,584 ft) from the existing airport. Bird/aircraft conflict at the present site is a low probability for the following reasons:

- The size of the lagoon is insignificantly small as compared to the total area of the open water habitats in the vicinity of the village;
- The location of the lagoon relative to the river is such that the most likely approach to the lagoon from the river by gulls and migrating birds does not carry them across the runway or its approaches;
- The runway proximity to the village presents a greater level of noise and disturbance than other open water-bodies in the area, and is likely less attractive to birds;
- During on-site visits during the fall migration, few water birds were observed using the lagoon for resting or feeding.
- Through discussions with local residents and pilots, there have been no reported concentrations of gulls, ravens, or water birds at or near the sewage lagoon.

The proposed action does not require a formal Wildlife Hazard Assessment (WHA). The specific events which trigger the need for a WHA are established in 14 CFR 139.337(b). These events include: (1) multiple wildlife strikes reported by air carrier aircraft; (2) an air carrier aircraft experiences substantial damage from striking wildlife; (3) an air carrier aircraft experiences an engine ingestion of wildlife; or (4) when wildlife of a size or number capable of causing the damage in 1 through 3 above are observed to have access to airport flight patterns or movement in the area. The FAA Wildlife Strike Database searched for Alaska from January 2000 to June 2012 lists no wildlife strikes for Koliganek. Currently no new capital projects are being constructed that would be wildlife attractants.

Proposed Action. The proposed action would extend the existing runway and bring the airport up to standards without disturbing existing community infrastructure and land use patterns. Koliganek Natives Limited owns the surface rights at the proposed airport site and BBNC owns the subsurface rights. DOT&PF would acquire about 24 acres of property including 2.5 acres from a Native allotment, 20 acres from the Koliganek Natives Ltd. and 1.3 acres from ADNR through an ILMA. The acquired property would expand the existing airport boundary to include the object-free area that is being expanded for non-precision instrument flight approaches. No land use plans or zoning are in place in the area, and the community supports the proposed project.

No Action. Under the No Action Alternative, the airport would continue to operate on DOT&PF property.

5.2 CONSTRUCTION IMPACTS

Proposed Action. Approximately 1.9 wetland acres would be filled for the project as a result of airport and road construction. Construction would likely take two years.

Noise. Airport construction would create temporary impacts, including increased noise and dust from heavy equipment operation. Construction noise generated from heavy equipment would be limited primarily to the runway area, haul routes, and material sites. Noise impacts would be minor and temporary. If construction noise disturbs the community, they could notify the Project Engineer who will determine whether construction activity could be limited to the waking hours.

Water Quality. Construction activities could result in direct, short-term effects to water quality due to ground disturbance and erosion and sedimentation from storm water runoff. In accordance with Section 401 of the Clean Water Act and the Alaska Water Quality Standards, the project will require a 401 Certificate of Reasonable Assurance from ADEC prior to construction. Construction plans will include measures to control erosion and sedimentation. The construction contractor will comply with the APDES General Permit for Construction Activities, and a Notice of Intent will be filed. Best Management Practices (BMPs) will be identified and followed. The construction contractor will prepare and implement a SWPPP that describes BMPs and measures to prevent and minimize construction storm water impacts. BMPs may include:

- Seeding embankment surfaces after embankment is placed and allowed to dry and settle.
- Using erosion and sedimentation control measures as needed to prevent wetland sedimentation outside of the permitted construction footprint.
- Inspecting the embankment periodically to ensure seeding is successful.

Air Quality. Due to the distance from the community, approximately 1,000 ft to the Nushagak subdivision on the east end of the village (closest to the airport), direct effects to air quality in the community are not likely to occur from construction equipment emissions. Airborne dust may be generated from the runway embankment construction activities. Disturbed areas may need to be watered during the summer months to mitigate fugitive dust. Wind erosion would be mitigated by revegetating the embankment as soon as possible or other best management practices. Once revegetated, the side slopes would be permanently stabilized.

Solid Waste. The community dump is not currently permitted. Solid waste generated from construction debris will need to be barged or flown out of Koliganek. All construction waste will be disposed of in accordance with State and federal regulations.

Hazardous Materials. Hazardous materials are not likely to be encountered during construction. Environmental contamination due to heavy equipment operation will be minimized through the use of BMPs, for example:

- The Construction Contractor will be required to prepare and implement a Hazardous Materials Control Plan (HMCP) in accordance with DOT&PF contract specifications. A Spill Prevention, Control, and Countermeasures Plan may also be required to address storage of fuels and potential fuel spills.
- If contaminated or hazardous materials are encountered during construction, all work in the vicinity of the contaminated site will be stopped until ADEC is contacted and a corrective action plan is approved by ADEC and implemented.
- The existing SREB has a concrete floor. The SREB will be separated from the floor slab, braced, and moved to the new slab. The existing floor slab would be used for other purposes at the airport or broken up and removed, depending on airport needs. The

SREB and concrete slab would be moved in accordance with state and federal laws regarding handling, disposal, and spill response for hazardous materials, waste, and substances if any are encountered.

Staging Area. DOT&PF has identified a potential staging area at the end of the access road to the Nushagak River. These same areas have been used for two other large projects in Koliganek, the airport relocation project, and the BIA road improvement project. After construction, the staging area would likely be left in place for community use.

Traffic Delays. Brief construction delays for traffic are expected along the access road between the airport and the staging area. ATV and foot traffic on the access road/haul route between the airport and the Nushagak River would likely be restricted during work hours.

Community Impacts.
Short-term economic gain could be beneficial if residents are hired for available construction positions. Construction may temporarily provide additional revenue for businesses or individuals providing housing or supplies to workers.

Material Site. An existing material site, a vegetated island in the Nushagak River at the end of the airport access road/haul route (Figures 7 through 9) may be selected by the contractor for use in the project. This material site has been used in the past for two large projects, moving the airport in 1994 and reconstructing community streets in 2006; as well as smaller projects. The material anticipated for use is poorly graded sandy gravel. The proposed island material site has suitable embankment and surface course material for the proposed project. Vegetation on the gravel bar includes grasses, willows and alders.

Required permits will be obtained (copies of permit applications are provided in Appendix B). ADFG advised they will only permit crossing the river channel with no fill/temporary culverts when the river crossing site is naturally dewatered, or winter crossings when the river is frozen. The material extraction itself will also require an ADFG permit (with proper buffers and measures in place to prevent fish entrapment during high water events). ADFG may stipulate a timing window if blasting is necessary. A copy of the ADFG correspondence is included in Appendix C.

Direct adverse impacts to the Nushagak River channel are not expected if the crossings occur when the channel is dry or frozen (winter). Excavation would take place on the island and material would be excavated below the water table. A 100-ft buffer would be maintained between the river and the excavation area. The contractor would be required to submit a Material Site Reclamation Plan to ADNR to extract material from the site. A typical cross section of the material site is illustrated on Figure 8. Approximately 140,000 cubic yards of material will be excavated for the proposed project, which includes overburden. Overburden will be stored and used for reclamation in the upland areas.

A winter crossing would not adversely impact EFH since the crossing would be on river ice or on frozen river bed. Conservation measures incorporated into the project to prevent adverse effects to EFH include:

- Crossing when the river channel is dewatered or frozen.
- Using Equipment-grade matting in the event of a dry channel crossing.
- BMPs for erosion and sediment control, and hazardous waste management during construction (see Construction Impacts, Section 5.3).
- Not servicing equipment within 100 ft of the river.
- Conducting all work in accordance with the ADFG and USACE permits.
- Designing material extraction methods to prevent stormwater runoff from leaving the site.

The Magnuson-Stevens Act requires NOAA Fisheries consultation if the project may adversely affect EFH. Since EFH will not be adversely affected, consultation with NOAA Fisheries is not required.

Cultural Resources. No historical, architectural, archaeological, or cultural resources have been identified in the Area of Potential Effect. The SHPO concurred with the finding of No Historic Properties Affected for the proposed project, including the haul road and material site. If previously undiscovered cultural material is found during construction, all work will be stopped in the area and the SHPO will be notified immediately. Correspondence with the SHPO is included in Appendix C.

Fish, Wildlife, and Plants. If summer construction is planned, vegetation will not be cleared between May 1 and July 15 to avoid disturbing nesting birds and migratory waterfowl unless the absence of nesting birds is confirmed. If embankment fill is placed during the winter months when the ground is frozen enough to support heavy equipment, wildlife impacts would be avoided and minimized. Waterfowl are not present in the area during the winter, so no direct effects to these species are expected from winter construction. Secondary effects to wildlife are discussed below.

No Action. The No Action Alternative would have no construction-related impacts in the Koliganek area.

5.3 FISH, WILDLIFE, AND PLANTS

Proposed Action. Effects to wetlands include 1.9 acres of wetland fill to extend the runway, expand the taxiway and apron, and re-align the airport access road. Effects to terrestrial wildlife would include direct loss of habitat, and the animals (primarily small mammals) that use the area would be displaced.

The loss of 1.9 acres of tundra and wetland habitat area is expected to have a negligible effect on wildlife and waterfowl, being only a tiny increment of similar habitat available in the mostly undeveloped area and region. The wetland and habitat characteristics are similar to the majority of the area surrounding Koliganek and are widespread and common in the region.

Vegetation clearing would take place outside the bird nesting season (May 1 through July 15) unless a bird survey is conducted to confirm that birds are not nesting in (or adjacent to) the area to be disturbed. Clearing limits for outside the runway, taxiway, apron, access road, and all

clearing required to remove high areas that obstruct airspace, total 5.1 acres. No eagles or eagle nests were observed in the project area during the site investigations.

No Action. The No Action Alternative would not affect fish, wildlife, or plants.

5.3.1 Subsistence

Proposed Action. A graphic of the proposed airport location was displayed at the September 2010 public meeting. Koliganek residents report no unique fish, wildlife, or plant values for the airport or material site (including berry picking).

No Action. No changes to subsistence activities would result from the No Action Alternative.

5.3.2 Essential Fish Habitat

Proposed Action. The constructed project would have no effect to EFH. Construction impacts are discussed in Section 5.3.

No Action. The No Action Alternative would not affect EFH .

5.3.3 Threatened/Endangered Species

Proposed Action. DOT&PF consulted the USFWS and National Marine Fisheries Service (NMFS) in compliance with Section 7 of the Endangered Species Act. The project area is located inland, and no effects to marine mammals or habitat of concern to NMFS under Section 7 are foreseeable. The USFWS did not respond to the scoping letter.

No Action. The No Action Alternative would not impact Threatened or Endangered species or Critical Habitat areas.

5.3.4 Birds

Proposed Action. The Koliganek area provides habitat for birds, especially waterfowl, as documented by an ADF&G subsistence study (ADFG, 2005). Although numerous ponds and lakes are located in the project vicinity, no direct disturbance to these waterbodies would occur from the proposed project. Access to the gravel bar and gravel bar material extraction is not expected to impact waterfowl as they can easily fly away and any vegetation clearing would occur outside the migratory bird nesting window recommendations of the USFWS.

No Action. The No Action Alternative would not impact migratory birds.

5.3.5 Invasive Species

Proposed Action. Koliganek is remote and invasive species may be absent although importing equipment could introduce invasive and non-native species seeds. The contractor would implement BMPs including having all equipment sprayed and washed prior to mobilizing and using weed free seed for revegetation.

No Action. The No Action Alternative is not expected to introduce invasive species.

5.4 FLOODPLAINS

Proposed Action. The airport, material haul route, and proposed material site are not located within the limits of a designated or proposed regulatory floodway. No local flood hazard permit is required. All measures to minimize harm will be included in the project and impacts to the floodplain are not expected to be substantial. DOT&PF placed a public notice in the local papers and the Public Notice webpage notifying the community that the project would be developed in accordance with special purpose regulations, including E.O. 11988 for Floodplains (Appendix C).

In accordance with E.O. 11988, the proposed action would not result in a considerable probability of loss of human life; flooding is not expected to result in extensive damage that would interrupt airport service or use of the facility (including the navigational aids and access road), and no adverse effect on the floodplain's natural and beneficial values is expected. Although the proposed gravel bar material site is subject to flooding, no significant effects to floodplains are expected.

No Action. The No Action Alternative would have no impacts to floodplains in the Koliganek area.

5.5 HAZARDOUS MATERIALS, POLLUTION PREVENTION, SOLID WASTE

Proposed Action. . A site visit was conducted in September 15, 2010. During the field visit, no evidence of environmental contamination was observed on the proposed airport property, haul route or proposed staging area. Based on the finding of the site visit and further examining records, the risk of encountering environmental contamination and the potential for liability in the proposed project area is low.

No measurable increase in solid waste disposal is expected. Construction impacts are discussed in Section 5.3. Since Koliganek's community dump is no longer a permitted facility, solid waste generated from construction would be barged out of Koliganek or disposed of in accordance with state solid waste regulations.

No Action. No hazardous materials, pollution prevention, or solid waste effects are expected from the No Action Alternative.

5.6 HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL

A cultural resources survey of the community area was conducted in 1981 (Stephanie Stirling and Steven L. Klingler, Cultural Resources Investigation, Koliganek, Alaska, Office of History and Archaeology) for DOT&PF for the Koliganek Local Service Roads & Trails project. No cultural materials or remains were located, no surface features were observed, and examination of bank exposures at the bridge over a creek in the community were negative.

A cultural resources survey was conducted for moving the airport to the current location, as well as several potential material sites in 1993 (John E. Lobdell & Associates, New Koliganek Airport Archeological and Cultural Resources Reconnaissance, Southwestern Alaska) which concluded that no historic properties were present within the project area. For the previous

projects' material excavation at the proposed material site, no cultural resources survey was conducted due to the relatively "recent" island original, as the island is accreting.

On June 17, 2011, DOT&PF searched the Alaska Heritage Resources Survey (AHRS) database and found no new sites have been reported in the Area of Potential Effect.

Proposed Action. Based on the information in the 1981 and 1993 reports, recent AHRS database search, and the SHPO 1993 concurrence on a finding of no historic properties for constructing the airport at the current location, DOT&PF concluded that no historic properties will be affected by the proposed project within the Area of Potential Effect. The SHPO concurred with the finding on July 13, 2011. Other consulting parties included the New Koliganek Village Council, Koliganek Natives Limited, and the Bristol Bay Native Corporation. No comments were received from the other consulting parties. Copies of the correspondence are included in Appendix C.

No Action. The No Action Alternative would not affect historical, architectural, archeological, or cultural resources.

5.7 LIGHT EMISSIONS AND VISUAL IMPACTS

Proposed Action. Light emissions from the runway lighting are not expected to create an annoyance among people in the community or interfere with their normal activities. The runway lighting system planned for the project is radio-activated and illuminated for only 15 minutes during takeoffs and landings during darkness. The rotating beacon light would be located at the airport, which is far enough from the community that the lights would not shine into residential windows. The rotating beacon has three lighting settings: off, on, and automatically on after dark. The lighting setting is set by the airport operator. Public annoyance from runway lighting is not expected.

No visual impacts are expected after construction. The new SREBs will be consistent with customary airport design. The runway embankment will be revegetated as soon as feasible as a BMP during construction.

No Action. The No Action Alternative would not have light emissions or visual effects.

5.8 NATURAL RESOURCES AND ENERGY SUPPLY

Proposed Action. The changes to the airport would not have a measurable effect on local supplies of energy or natural resources. Sufficient capacity is available in the community tank farm to store fuel oil necessary to heat the SREB. Little increase in electrical usage (approximately 5-15 kilowatts) is expected with the new SREB and runway lighting. A minor increase in fuel would be required for heating the new SREB.

Embankment and surface course material, which are natural resources, are required for construction. Approximately 140,000 cubic yards of fill is expected to be excavated for the proposed project including the overburden. Sufficient material for the embankment and surface course appears to be available at the gravel island in the river and would not cause demands that would exceed available resources.

No Action. The No Action Alternative would not affect natural resources or the community's energy supply.

5.9 SECONDARY (INDUCED) AND CUMULATIVE IMPACTS

Proposed Action. The locations of "nearby communities" are illustrated Figure 1. The nearest community, New Stuyahok, is about 18 air miles away. Extending the Koliganek airport is not expected to cause shifts in population or community growth, as a new community class airport that meets current State and federal standards was recently built in New Stuyahok. No significant changes to public services needs or changes in economic activities are foreseen from providing Koliganek with a community class airport.

No Action. The No Action Alternative would have no secondary (induced) impacts to Koliganek or New Stuyahok.

5.9.1 Cumulative Impacts

"Cumulative impacts" are impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. This project's direct and indirect impacts are not significant. When the direct and indirect effects are added to the aggregate effects of past, present and reasonably foreseeable future actions, the cumulative impacts are not significant. The project lists from the DCCED website and the Denali Commission website (DCCED, 2011 and Denali Commission, 2011) were used for this evaluation.

Past actions that warrant consideration are new/upgraded housing, the new health clinic, bulk fuel facilities and upgrades, sanitation facilities upgrades, power system distribution upgrades, and community road reconstruction. Present actions are the runway extension.

Foreseeable future actions are expected to be similar to other communities that are not on the road system, e.g., airport upgrades, school and housing improvements, and community sanitation facility improvements. A sudden influx of funding or population increase is not expected as large-scale resource development or industry that would change the incremental community growth is not expected.

Each past, present and future project is intended to benefit the entire community, and social impacts are intended to be beneficial. The physical environmental effects of development over time have incrementally affected the natural environment. Wetlands, floodplains, water quality and wildlife are the primary affected resources.

The population growth in Koliganek is similar to other communities in the Bristol Bay Region. Koliganek's developments are spread over an area less than a square mile. The three other communities interspersed down the Nushagak River to Dillingham are New Stuyahok (population 500), Ekwok (population 115), and Portage Creek (population 2). All three communities have a similar footprint for population size. Portage Creek, inhabited mainly during the summer for subsistence harvesting and recreation, is populated primarily by Dillingham residents and has only a dozen or so structures.

The incremental effects of converting less than 4 square miles for the four communities from natural to human environment over the past 150 years and into the future in the region is negligible due to the vast amount of similar natural environment still available. No significant cumulative impacts are expected.

The ultimate airport development would be to construct a crosswind runway to achieve a combined wind coverage of 97.25%. A crosswind runway is not planned at this time.

Long-term project construction impacts from further developing the island material source would primarily be the visual impact. The previous material extraction for the airport relocation and BIA road project have decreased the elevation of the island, however, the island is accreting and over the long term is considered a "renewable" resource. The cumulative impacts of an enlarged material site and haul road are not expected to be significant.

No Action. The No Action Alternative would have no cumulative impacts to Koliganek or neighboring communities.

5.10 SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS

Proposed Action. Approximately 24 acres will need to be acquired from Koliganek Village Corporation approximately 2.5 acres from a Native Allotment, 20 from Koliganek Natives Limited, and 1.3 acres of state land currently managed by DNR will be will managed by DOT&PF. Property will be acquired in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. No relocations will be required. No traffic pattern disruptions or increased employment opportunities are expected after construction. The community is unincorporated and has no local taxes, so the tax base would not be affected.

No disproportionately high or adverse effects to low-income or minority populations are expected. The proposed project would have a beneficial effect to the residents, who are primarily a minority race (95.7 percent of residents are Alaska Natives). Approximately 7 percent of the community is considered below poverty level (DCCED, 2012). No health or safety risks that would disproportionately affect children are expected because the airport would be safer for all users, and no additional exposure to contaminants would likely occur. No measurable effects to subsistence hunting, fishing, or gathering are expected. Subsistence is discussed in Section 5.4.1.

5.11 WATER QUALITY

Proposed Action. The proposed project will not affect water bodies. Construction impacts are discussed in Section 5.3. Cross-culverts will be installed as necessary to allow for hydraulic conductivity.

The airport area is flat, and sufficient wetlands buffer the proposed project to prevent adverse water quality impacts to the rivers, streams, and drainages. No adverse effects to water quality are expected from operating the lengthened airport. Construction impacts and best management practices to protect water quality are addressed in Section 5.3.

No Action. The No Action Alternative would not affect water quality.

5.12 WETLANDS

Proposed Action. Proposed Action. Approximately 1.9 acres of Palustrine scrub-shrub wetlands would be affected by the project (Figure 2). A USACE permit application is provided in Appendix B. A summary of wetland fill is presented below in Table 2.

Table 2: Wetlands Impacts—Proposed Action

Project Component	Wetland Type	Area of Wetland Impact (Acres)	Surface Course (Cubic Yards)	Embankment (Cubic Yards)
Primary Runway	PSS	1.3	18,050	38,750
Apron	PSS	0.2	4,900	21,00
Airport Access Road Reroute	PSS	0.4	475	4,350
Totals		**1.9**	**23,425**	

Wetlands avoidance is not possible for the proposed project. Virtually the entire area inland from the river and near the community is wetlands, with the exception of existing development.

5.12.1 Wetlands Mitigation

A USACE permit will be obtained for wetland fill. The project is being developed in accordance with the USACE Alaska District RGL 09-01. An ADEC Section 401 Water Quality Certification will be obtained. Copies of the permit applications are included in Appendix B. All stipulations and special conditions of the permits will be followed. Wetland fill cannot be avoided due to the environment of the area, island, and region. High value open water has been avoided and wetland fill has been minimized to the maximum extent. Avoidance and minimization measures that were incorporated into the project include:

- Planning for the minimum size apron and road widths.
- Minimizing footprint by maximizing side slopes to 4:1.
- The potential for sediment transport off the project site would be minimized by using appropriate BMPs that would be identified in the SWPPP, as discussed in Section 5.3.
- Side slopes would be revegetated during the first growing season after the embankment is placed.

Compensation for unavoidable impacts to 1.9 acres of wetlands shall be provided in accordance with USACE RGL ID No. 09-01, which requires a mitigation plan based on the functions and values of the affected wetlands, and compensatory mitigation for federally-funded projects. Wetlands enhancement or restoration would be for Palustrine scrub shrub wetlands. A compensatory mitigation plan for wetlands restoration will be identified during the wetland permitting process.

No Action. The No Action Alternative would have no impact on wetlands in the area.

5.13 MITIGATION/SUMMARY OF ENVIRONMENTAL COMMITMENTS

Other than 1.9 acres of wetland fills, the long-term effects of extending the runway and realigning a short segment of the access road are minimal, and no on-site compensatory mitigation has been identified. In addition to the wetlands mitigation discussed above, the following measures would be taken to mitigate adverse effects during construction:

- If construction noise disturbs the community, construction activity could be limited to the waking hours.
- The construction contractor will prepare and implement a SWPPP that describes BMPs and measures to prevent and minimize construction storm water impacts.
- Dust would be controlled through watering or other appropriate means throughout construction.
- Wind erosion would be mitigated by revegetating the embankment or other appropriate stabilization BMPs as soon as possible.
- If contaminated or hazardous materials are encountered during construction, all work in the vicinity of the contaminated site will be stopped until ADEC is contacted and a corrective action plan is approved by ADEC and implemented.
- If previously undiscovered cultural material is found during construction, all work will be stopped in the area and the SHPO will be notified immediately.
- Vegetation will not be cleared between May 1 and July 15 to avoid disturbing nesting birds, unless a bird survey is conducted to confirm that birds are not nesting in (or adjacent to) the area to be disturbed.
- To prevent spreading invasive and non-native species, the contractor would have all equipment washed and rinsed prior to mobilizing and would use weed-free native seed for revegetation.
- The community dump is not currently permitted. Solid waste generated from construction debris will need to be barged or flown out of Koliganek to be disposed of in accordance with State and federal regulations.

6.0 COORDINATION

Coordination and public involvement for the Koliganek Airport Improvement Project and Environmental Assessment that was conducted in 2010 through 2012 included a community meeting, agency consultations, and an agency scoping meeting to present the project and identify concerns. Copies of meeting notes, public/agency comments, and correspondence relayed to develop this EA in accordance with NEPA are presented in Appendix C. Specific scoping activities conducted for the Environmental Assessment include:

- A public meeting held on September 25, 2010 in Koliganek. The proposed project alternatives were described and a proposed project timeline was discussed, future cloud Subsistence areas, and potential cultural resource areas were discussed. A copy of the public meeting notice, the meeting sign-in sheet, comments received, meeting handouts, and a record of the meeting are provided in Appendix C. Main issues of community concern were construction employment and proximity of the runway to homes.
- A Government-to-Government letter was mailed to the Koliganek Village Council on September 18, 2008. The Village Council opted to communicate directly with DOT&PF for the project.

- An agency scoping letter was e-mailed to resource agencies on April 19, 2011. Scoping information for the Agency Scoping Meeting was sent to the following agencies: USACE, USCG, BIA, EPA, USFWS, NMFS, ADNR, SHPO, ADFG, ADEC, DCCED, Bristol Bay Native Association, Bristol Bay Native Corporation, Koliganek Village Council, Koliganek Village Corporation, and Bristol Bay CRSA. Replies were received from the ADFG, and USACE. Copies of the correspondence are provided in Appendix C.
- Agency Scoping Meeting held in Anchorage on May 25, 2011 to gather input about concerns and perceptions of airport needs. The meeting was attended by DOT&PF staff, and a representative from ADFG and USACE. The project history, purpose, need, schedule, material sites, and wetlands were discussed. A copy of the meeting notes is included in Appendix C.
- Section 106 of the National Historic Preservation Act (NHPA) consultation occurred with the SHPO, Koliganek Village Council, Bristol Bay Native Corporation, Koliganek Village Corporation. The SHPO concurred with a finding of no effect to historic properties on July 13, 2011.

The Draft EA was circulated for public and agency review. USFWS responded that they had no comments at this time. A copy of the USFWS reply is included in Appendix F. No other comments were received.

7.0 LIST OF PREPARERS

The people primarily responsible for developing or review of this Environmental Assessment are listed below in Table 4.

Table 3: List of Preparers

Name	DOT&PF Title and Role	Relevant Experience
Luke Bowland, P.E.	DOT&PF Project Manager	10 years engineering experience
Oscar Menendez, P.E.	DOT&PF Aviation Designer	6 years engineering experience
Angela Smith, P.E.	DOT&PF Squad Leader	13 years engineering experience
Brian Elliott	DOT&PF Environmental Manager	12 years environmental impact analysis experience
Mark Boydston	DOT&PF Environmental Impact Analyst II	7 years environmental impact analysis experience
Teresa Zimmerman	DOT&PF Environmental Impact Analyst III	19 years environmental impact analysis experience

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