

DRAFT ENVIRONMENTAL ASSESSMENT

Saint Mary's Airport Improvements

State Project Number #Z605630000

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ACRONYMS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish & Game
ADNR	Alaska Department of Natural Resources
AHRS	Alaska Heritage Resource Survey
APDES	Alaska Pollutant Discharge Elimination System
BMP	best management practices
CEQ	Council on Environmental Quality
CWA	Clean Water Act
DOT&PF	Alaska Department of Transportation and Public Facilities
DWPA	Drinking Water Protection Area
EA	Environmental Assessment
EFH	Essential Fish Habitat
EFHA	Essential Fish Habitat Assessment
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
IPaC	Information for Planning and Consultation
MALSR	medium intensity approach lighting system and runway alignment indicator lights
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NLRUA	Northern Land Use Research Alaska, LLC
NWR	National Wildlife Refuge
OHW	ordinary high water
PAPI	precision approach path indicators
PM ₁₀	particulate matter 10 micrometers or less in diameter
PWS	public water system
REIL	runway end identifier lights
RSA	runway safety area
SHPO	State Historic Preservation Office
USACE	United States Army Corps of Engineers
USFWS	United States Fish & Wildlife Service
VASI	visual approach slope indicators

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1.0 INTRODUCTION

Located in southwestern Alaska, Saint Mary's lies on the north bank of the Andreafsky River, five (5) miles from its confluence with the Yukon River. The City of Saint Mary's encompasses the Yup'ik villages of Saint Mary's and Andreafsky with 550 total residents (U.S. Environmental Protection Agency [EPA] 2021) who maintain a fishing and subsistence lifestyle. Saint Mary's is served by barge and air transport. The Andreafsky River provides the only deep-water barge landing in the Yukon Delta. A 22-mile local gravel road links the village of Saint Mary's to the villages of Andreafsky, Pitka's Point, and Mountain Village (Figure 2). This road is not maintained during winter months.

The Saint Mary's Airport is located approximately seven road miles from the community of Saint Mary's, 450 air miles west-northwest of Anchorage and 515 air miles southwest of Fairbanks, located in Sections 19, 24, 25, and 30, Township 23 North, Range 76 West, Seward Meridian at latitude 62.060833 degrees north and longitude 163.3018333 degrees west (U.S. Geological Survey [USGS] Quadrangle Kwiguk A-3 SW) See Appendix A, Figure 1, Project Location and Vicinity Map¹.

The Alaska Department of Transportation and Public Facilities (DOT&PF) owns and operates Saint Mary's Airport, and in cooperation with the Federal Aviation Administration (FAA), proposes to upgrade existing airport facilities. Saint Mary's Airport has two runways: Runway 17/35 and Runway 6/24. Taxiway A connects Runway 17/35 to the transient apron, and Taxiway B connects Runway 17/35 to the main apron. Taxiway A also connects Runway 17/35 to the General Aviation Apron (DOT&PF 2020) (Table 1). See Appendix A, Figure 2, Existing Airport Facilities and Proposed Airport Improvements.

Table 1: Current Conditions

	Length (ft)	Width (ft)	Surface
Runway 17/35	6,000	150	gravel
Runway 6/24	1,520	60	gravel
Taxiway A	900	75	gravel
Taxiway B	1,025	75	gravel
Transient Apron	650	320	gravel
Main Apron	600	250	paved
General Aviation Apron	345	295	gravel

¹ All figures for the Saint Mary's Airport Improvements EA are located in Appendix A, Figures.

Because improvements to Saint Mary's Airport would require FAA Alaskan Airports Division approval and federal funding of the Proposed Action (a federal nexus as defined under the National Environmental Policy Act [NEPA]), an Environmental Assessment (EA) is required. This document serves to evaluate the environmental effects of the Proposed Action, which is discussed further in Chapter 3.0. DOT&PF anticipates that construction of this project would begin in 2022 and is expected to last two years.

2.0 PURPOSE AND NEED

The identification of the purpose and need for a proposed project is the primary basis for developing the range of reasonable alternatives. The proposed project will upgrade the Saint Mary's Airport to meet FAA design standards. The following provides a description of the deficiencies and needs that the proposed project would address.

The purpose of the proposed project is to improve safety at Saint Mary's Airport by upgrading existing aviation facilities to meet current FAA standards for the De Havilland Canada Dash 8-100 and Cessna 208 Caravan, the design aircraft for Runway 17/35 and Runway 6/24, respectively (DOT&PF 2020).

Saint Mary's and the surrounding communities served by the airport are not connected to the Alaska State Highway System. Freight is barged to Saint Mary's in the summer months or flown into the airport year-round. The continued safe operation of Saint Mary's Airport is critical; the airport is a hub for residents, visitors, bypass mail, freight, medical emergencies/needs, and commercial fishing shipping.

The primary north/south runway (17/35) does not currently meet the FAA 600-foot runway safety area (RSA) standard beyond each runway end and the runway surface has degraded over time (Table 2; Graphic 1).

Graphic 1: Current Runway (17/35) Surface



The cross-wind runway (6/24) does not currently meet the FAA standard safety area width of 150 feet and the runway surface has degraded over time. Taxiway A and B and the transient and main aprons also have degraded surfaces (Table 2; Graphic 2).

Graphic 2: Current Taxiway B Surface



Table 2: RSA Deficiencies

	Existing RSA Length Prior to Threshold (ft.)	FAA standard Length Prior to Threshold (ft.)	Existing RSA Width (ft.)	FAA Standard Width (ft.)
Runway 17/35	195/185	600/600	300	300
Runway 6/24	240/240	240/240	115	150

All runway and taxiway lighting components and most navigational aids are more than 24 years old and at the end of their useful life (Graphic 3). There are existing embankment drainage issues in many locations and water is present in the surface and subsurface of many runway, taxiway, and apron areas (Graphic 4). Drainage ditches around the airport facilities would need to be shifted based on the proposed changes in airport layout. Vegetation within the proposed RSA expansions consists of shrubs and trees which would require clearing to support a new embankment.

Graphic 3: Current Lighting on Runway 6/24



Graphic 4: Current Drainage Deficiencies on Runway 17/35



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3.0 PROPOSED ACTION

DOT&PF, in cooperation with the FAA, proposes to upgrade existing facilities at the Saint Mary's Airport (Proposed Action) including the following elements (bulleted below) that are shown (Figures 2 through 4; Appendix A). These elements are further described in detail in Section 3.1:

- Airport improvements
- Resurface unpaved Runway 17/35 and extending the RSA north approximately 450 feet
- Resurface unpaved Runway 6/24 and widening of existing RSA embankment by approximately 35 feet
- Resurface unpaved (gravel) Taxiways A and B in kind
- Resurface the transient apron and the unpaved portion of the main apron
- Repave the main asphalt apron
- Construct drainage improvements within the embankment and structural sections, construct new conveyance ditches, and replace culverts
- Demolish existing FAA-owned navigational aids, including Runway 17 Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) and existing Visual Approach Slope Indicators (VASI)
- Replace all runway and taxiway/apron edge lighting
- Layout new lighted signs
- FAA navigational aid design elements
- New Precision Approach Path Indicators (PAPI) for each end of Runway 17/35
- New Runway End Identifier Lights (REIL) at the Runway 17 threshold and the Runway 35 displaced threshold
- Material site and haul route development
- Five potential material sources are currently being investigated for use by this project:
 - One existing, un-permitted material site in Pitka's Point which will not require expansion. Material would be hauled on existing roads.
 - One existing, un-permitted material site in Mountain Village which will not require expansion. Material would be hauled on existing roads.
 - One existing permitted (commercial) material site in Saint Mary's. Material would be hauled on existing roads.
 - One existing, permitted (commercial) material site in Nome. Material would be barged in.
 - A future material site in Marshall that is currently under development and would be permitted by Calista as a commercial source may be developed in time to serve the project. The Marshall site would include a barge landing, from which material would be barged.

- Material imported via barge on the Yukon River would require development of a temporary barge landing to allow material to be transported up the Yukon River Access Road, approximately 1.3 miles to the airport.
- Use of these options may require replacement of a culvert on the Yukon River Access Road (Figure 3). The temporary barge landing would require fill and placement of piles in the Yukon River (See Section 3.1.5, for additional barge landing design details).

3.1 Airport Improvements

3.1.1 Runway, Taxiway, and Apron Resurfacing

Runways 17/35 and 6/24 and Taxiways A and B would be resurfaced with new crushed aggregate. With the exception of the existing asphalt paved portion of the main apron, all other operational surfaces at the Airport would be resurfaced with new crushed aggregate base course to a depth of 6 inches with an 8-inch subbase course. After the new crushed aggregate is installed, a dust palliative would be applied immediately after surfacing is completed.

The asphalt paved section of the apron would be repaved. The asphalt mixture surface course would be a depth of 4 inches. The total repaved asphalt pavement section would be a depth of 18 inches and consist of (top to bottom): 4-inches asphalt, 6-inches crushed aggregate base course, and 8-inches subbase course. The asphalt pavement's location, materials, and dimensions would remain the same as the existing conditions following reconstruction. Approximately 8,350 cubic yards of material would be required for this resurfacing.

3.1.2 Runway Safety Area Extension and Operational Surfaces

At the north end of north/south Runway 17/35, an approximately 415-foot-long by 300-foot-wide embankment would be constructed to extend the RSA 450 feet north of its current endpoint. At the south end of north/south Runway 17/35, the operational surface would be maintained, but the landing point would be moved north approximately 400 feet.

The outer edges of the Runway 6/24 RSA embankment would be widened by approximately 18 feet on each side of runway centerline to meet current FAA standards. Vegetation within the airport property and immediately adjacent to the runways would be cleared as needed for new embankment construction.

3.1.3 Drainage Improvements

Improving drainage around the runway would allow for a stable runway surface and minimize future runway deterioration. Proposed design elements are depicted in the Drainage Plan included in the Preliminary Engineering Report (Appendix B), and generally include the following:

- New drainage ditch construction on the west side of Runway 17/35. This would include new ditches located outside the RSA embankment with a minimum depth extending at least two feet below the wicking geotextile layer. The new ditch would extend from a high point near Taxiway B north and drain to the north and south to daylight. The final typical section for the ditch has yet to be determined.

- Existing drainage ditches on the west edge of the paved apron and south side of Taxiway B would be expanded. These ditches would be increased in size and depth to ensure water drains from the reconstructed paved asphalt apron and the resurfaced gravel apron and taxiway sections.
- Two existing culverts would be replaced (in coordination with the phasing plan to ensure continued daytime use of Runway 17/35)
- The 36" culvert under Taxiway B will be replaced in kind
- The 24" culvert under Runway 17/35 will be replaced with a 36" culvert

3.1.4 Navigational Aids and Lighting Improvements

All Airport runway and taxiway lighting components, including most navigational aids, would be replaced. The existing Runway 17 approach lighting system would be permanently removed. The segmented circle and lighted wind cone would be replaced and shifted slightly to accommodate drainage ditches. Runway 6/24's supplementary wind cone will be replaced in situ.

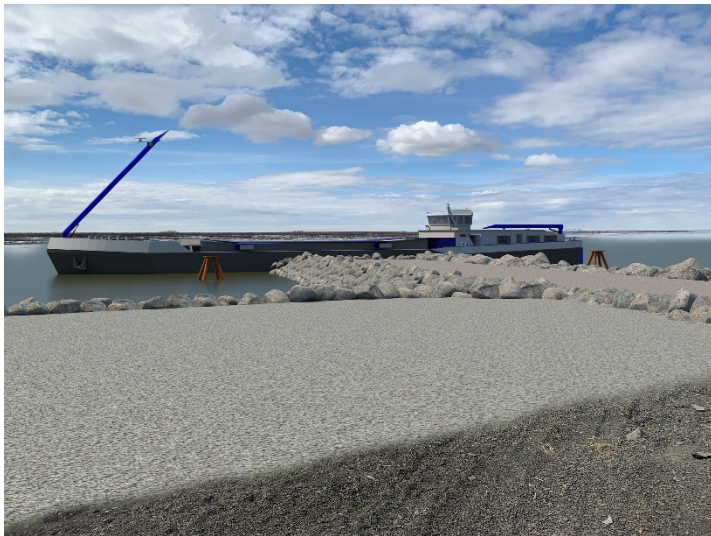
The project would include the following changes to FAA-owned navigational aids:

- Removal of the existing Runway 17 MALSR
- Removal of the existing Runway 17 and Runway 35 VASI
- Installation of new PAPI for each end of Runway 17/35
- Installation of a new REIL at the Runway 17 end and at the new Runway 35 displaced threshold.

3.1.5 Temporary Barge Landing

Material imported via the Yukon River would require development of a temporary barge landing and construction of a temporary combination causeway/pile-supported causeway at the airport barge landing site to allow material to be transported up the Yukon River Access Road, approximately 1.3 miles to the airport (Graphic 5). This option may require offloading and staging areas at the airport barge landing site and a new culvert along this existing road. See Appendix A, Figure 3, Proposed Temporary Barge Landing.

Graphic 5: Proposed Causeway



The proposed design of the temporary barge landing would be a solid fill causeway extending approximately 500 feet into the Yukon River. The causeway would be approximately 65 feet wide at the toe of slope, with a 430-foot-long by 30-foot-wide compacted driving surface and would be constructed primarily from Type A selected granular core material. The upstream 1.5(H):1(V) causeway side slope would be reinforced with geotextile overlaid with a 1-foot-deep Class I riprap filter layer and armored with 2 feet of Class II riprap. An additional 2 feet of Class II riprap would be placed at the toe of the slope. The causeway's downstream 1.5(H):1(V) side slope would have geotextile overlain with 3 feet of Class II riprap. The causeway end would extend another 70 feet into the river at an approximate 5 percent average slope, to approximately 10 feet below ordinary high water (OHW). The causeway end would be protected with geofabric and 2 feet of Class II riprap overlain with 6 inches of sacrificial material. The causeway end toe of slope would be protected with an additional 2 feet of Class II riprap.

Fill would be brought to the Airport Barge Landing and offloading and storage site by truck via the access from a nearby permitted location. A bulldozer would place the material from shore into the river. Riprap would be placed either from a barge or from the causeway and the offloading and staging area using an excavator. It is expected that riprap would be brought to the site as a single barge.

Two mooring dolphins would be installed along the causeway. The dolphins would consist of four 10-inch diameter steel piles. Each 50-foot long pile would be driven about 25 feet into the bed of the Yukon River using a vibratory hammer. It is expected that it will take 30 minutes to drive each pile and a single pile will be driven per day. Removal of the piles is expected to take approximately 15 minutes and completed over 3 days. It is expected that a barge (expected to be around 55 feet by 200 feet and 2,500 Tons) equipped with a crane and vibratory hammer pile driver and supported by a skiff would complete the work.

Approximately 50 feet upstream of the causeway, a 10,000-square-foot offloading and staging area would be constructed 8 feet above OHW. The offloading and staging area and the connector area would be constructed of Type A selected granular core material with side slopes armored with geotextile overlain with riprap, as required.

The development of the temporary barge landing and staging area is dependent on several factors, including:

- Permitting and timing for in-water work windows
- Coordination with and potential approval from Boreal Fisheries
- Coordination with the Saint Mary's community regarding subsistence fisheries at this location

The temporary barge landing is on Saint Mary's Airport property and would lead to a significantly shorter haul route to the Airport, than the barge landing on the Andreafsky River near Saint Mary's. The haul route is expected to accommodate larger haul trucks due to the flatter grades. The proposed barge landing would be temporary, so all improvements would be removed after construction is complete and therefore impacts would be short term.

3.2 Federal Action Requested

The Federal Action requested of the FAA by the DOT&PF is to approve the proposed improvements to Saint Mary's Airport and fund it under FAA's Airport Improvement Program. There are no proposed modifications to FAA Design Standards included in this project.

4.0 ALTERNATIVES

This chapter identifies the proposed alternatives that address the Saint Mary's Airport deficiencies stated in Section 2.0, *Purpose and Need*. The analysis has been prepared in accordance with the Council on Environmental Quality's (CEQ) regulations (40 CFR 1502.14) for implementing NEPA, as well as FAA's NEPA guidelines (FAA Orders 5050.4b and 1050.1F).

4.1 Alternatives Considered but Dismissed

This section describes other alternatives considered and eliminated from further environmental analysis. FAA Order 1050.1F, Change 1, paragraph 506.e states that alternatives "... must be reasonable, feasible, and achieve the project's purpose." Potential alternatives that would not meet these criteria are eliminated from further consideration. DOT&PF investigated several alternatives to address RSA deficiencies and material site development to support reconstruction of the Saint Mary's Airport facilities. Table 3 outlines the alternatives that were considered but dismissed.

Table 3: Alternatives Considered but Dismissed

Runway Safety Area and Apron Alternatives		
Alternative	Description	Rationale for Dismissal
Option 1	Extend the embankment 822 feet to the north and shift Runway 17/35 to provide standard RSAs beyond each runway end	This option would meet the purpose and need but would impact five acres more wetlands than the proposed action and require road realignment.
Option 2	Displace Runway 17 and Runway 35 thresholds to provide standard RSAs beyond each runway end	Would not meet the purpose and need by reducing the available runway length and potentially restricting aircraft currently using airport during inclement weather conditions.

4.2 Proposed Action Alternative

The Proposed Action would resurface both runways and aprons, extend the north/south runway RSA, improve drainage, and replace navigational aids and lighting. The Proposed Action would meet FAA standards while minimizing environmental impacts and keeping the project's cost within available funding limits.

Additional Proposed Action elements are described further in Chapter 3, *Proposed Action*. The Proposed Action would also require related actions as discussed below.

4.2.1 Material Sources and Haul Roads

In addition to the Proposed Action, the project would require acquisition and transport of materials for resurfacing, embankment construction, and other activities. A number of potential material sources are currently being investigated for potential project use. The following options are included in the environmental review of project effects:

- One existing, un-permitted material site in Pitka's Point (See Appendix A, Figure 4, Existing Material Sites)

- One existing, un-permitted material site in Mountain Village (See Appendix A, Figure 4, Existing Material Sites)
- One existing, permitted material site in Saint Mary's
- One existing, permitted material site in Nome
- Use of a future material site in Marshall that is currently under development and may be permitted by Calista in time to serve the project.

Contractors would maintain all haul roads (e.g., grading). Extensive improvements to the Saint Mary's-Mountain Village Road and Yukon River Access Road are not anticipated, other than a culvert replacement on the Yukon River Access Road where drainage overtops the road from a wetland area.

4.2.2 Permits and Authorizations

Permits required to construct the Proposed Action include:

- United States Army Corps of Engineers (USACE), Section 404 Clean Water Act (CWA) Individual Permit
- Alaska Department of Environmental Conservation (ADEC), Section 10 CWA; Alaska Pollutant Discharge Elimination System (APDES) General Permit for Discharges from Large and Small Construction Activities/National Pollutant Discharge Elimination System Section 402 Permit
- Alaska Department of Fish and Game (ADF&G) Title 16 Fish Habitat Permit

Approvals through consultation with:

- The Alaska State Historic Preservation Office (SHPO) and local Indian Tribes, and Alaskan Native Villages, under the National Historic Preservation Act
- U.S. Fish and Wildlife Service (USFWS): Endangered Species Act (ESA)
- National Marine Fisheries Service (NMFS): ESA, Magnuson-Stevens Fishery Conservation and Management Act
- Essential Fish Habitat Assessment (under the Magnuson-Stevens Fishery Conservation and Management Act)

4.3 No Action Alternative

NEPA requires agencies to consider a "no action" alternative in their NEPA analyses and to compare the effects of the No Action Alternative with the effects of the Proposed Action. Under the No Action Alternative, no airport improvements would occur and the existing deficiencies would remain present at the airport. The No Action Alternative would not improve operational surfaces. The No Action Alternative would not meet the project's purpose and need.

4.4 Summary of Alternatives' Environmental Consequences

Table 4 compares the Proposed Action against the No Action Alternative.

Table 4: Comparison of Alternatives

Metric	Proposed Action	No Action
Purpose and Need		
Safety	The Proposed Action would meet this aspect of the purpose and need	The No Action Alternative would not meet this aspect of the purpose and need.
Operations	The Proposed Action would meet this aspect of the purpose and need	The No Action Alternative would not meet this aspect of the purpose and need.
Environmental Impacts²		
Air quality	Minor impacts from material transport	Non-issue
Biological resources	<p>Approximately 0.88 acres of Essential Fish Habitat temporarily filled and 8 piles placed to construct temporary barge landing and staging area</p> <p>Approximately 5.37 acres of previously undisturbed wildlife habitat would be affected; 2.81 acres of vegetation clearing and fill would be placed in uplands and 2.56 acres of vegetation clearing and fill would be placed in wetlands.</p> <p>The project is not anticipated to have an effect on bald or golden eagles</p>	Would not affect biological resources beyond existing effects
Hazardous materials, solid waste, and pollution prevention	<p>The Proposed Action does not involve a property on the National Priorities List and hazardous waste generation is not anticipated</p> <p>Construction generated solid waste is not expected to exceed available landfill capacities</p>	The No Action Alternative would not result in a change from existing conditions.
Historical, architectural, archaeological, and cultural resources	The Proposed Action Alternative would not affect any significant historical, architectural, archaeological, or cultural resources.	The No Action Alternative would not affect historical, architectural, archaeological, or cultural resources.
Natural resources and energy supply	Minor effects	The No Action Alternative would not result in a change to current energy consumption levels or material needs.
Noise and noise-compatible land use	Minor effects	The No Action Alternative would not change noise levels from current conditions.
Socioeconomics	Minor effects	The No Action Alternative would not affect socioeconomics.
Children's health and safety risks	Minor or insignificant effects	The No Action Alternative would potentially affect children's health or safety risks that would increase over time related to airport deficiencies such as soft spots and degrading pavement.
Visual effects	Minor effects	The No Action Alternative would not affect visual resources.

² Only includes resource categories with impacts and does not include Non-Applicable/Non-Issue Categories

Metric	Proposed Action	No Action
Wetlands	Proposed improvements associated with Saint Mary's Airport and temporary barge landing and staging area would result in the fill of 2.56 acres of terrestrial wetlands and 0.88 acres of riverine Waters of the United States. A Clean Water Act Section 404 wetland fill permit would be required from USACE prior to construction.	The No Action Alternative would not affect wetlands.
Floodplains	Minor effects	The No Action Alternative would not affect floodplains.
Surface waters	Minor effects	The No Action Alternative would not affect surface waters.

5.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

5.1 Overview

This chapter provides a description of the existing environmental, social, and economic setting for the area that would be affected by the Proposed Action. This chapter also presents the environmental effects that would likely result from the implementation of the alternatives presented in Chapter 3. The two alternatives carried forward for full evaluation in this EA are the Proposed Action and the No Action Alternative.

Environmental effects are defined in the CEQ NEPA implementing regulations (40 CFR 1500-1508) as changes to the human environment from the Proposed Action or actions that are reasonably foreseeable and have a reasonably close causal relationship to the Proposed Action. In addition to the Proposed Action, the project would require acquisition and transport of materials for resurfacing, embankment construction, and other activities.

FAA Order 1050.1F (2015) and FAA 1050.1F Environmental Desk Reference for Airport Actions (2015) provide guidance on FAA NEPA documentation and provide direction for the evaluation of potential impacts of a proposed federal airport project on specific environmental categories. This is an issues-based EA focused on evaluating effects that are significant or potentially significant based on significance thresholds outlined in FAA Order 1050.1F. Therefore, resource categories where the effects are likely to be minor or insignificant, are not evaluated in detail. The rationale for these determinations are provided in Section 5.2 (*Non-Issue Resource Categories*).

Table 5 summarizes FAA Order 1050.1F significance thresholds for applicable resource categories. If the Proposed Action is likely to meet any of these impact thresholds, the FAA must prepare an Environmental Impact Statement; however, as summarized below, none of the impacts are anticipated to reach this level of significance.

Table 5: Significance Thresholds

Category	Significance Threshold
Biological resources (e.g., fish, wildlife, vegetation)	<p>The US Fish and Wildlife Service or the National Marine Fisheries Service determines that the action would be likely to jeopardize the continued existence of a federally listed threatened or endangered species or would result in the destruction or adverse modification of federally designated critical habitat.</p> <p>The FAA has not established a significance threshold for non-listed species, however factors to consider include if the action would have the potential for:</p> <ul style="list-style-type: none"> • A long-term or permanent loss of unlisted plant or wildlife species, i.e., extirpation of the species from a large project area (e.g., a new commercial service airport) • Adverse impacts to special status species (e.g., state species of concern, species proposed for listing, migratory birds, bald and golden eagles) or their habitats • Substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitats or their populations • Adverse impacts on a species' reproductive success rates, natural mortality rates, non-natural mortality (e.g., road kills and hunting), or ability to sustain the minimum population levels required for population maintenance
Hazardous materials, solid waste, and pollution prevention	<p>The FAA has not established a significance threshold for hazardous materials, solid waste, and pollution prevention, however factors to consider include if the action would have the potential to:</p> <ul style="list-style-type: none"> • Violate applicable Federal, state, tribal, or local laws or regulations regarding hazardous materials and/or solid waste management • Involve a contaminated site (including but not limited to a site listed on the National Priorities List). Contaminated sites may encompass relatively large areas. However, not all of the grounds within the boundaries of a contaminated site are contaminated, which leaves space for siting a facility on non-contaminated land within the boundaries of a contaminated site. • Produce an appreciably different quantity or type of hazardous waste • Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity • Adversely affect human health and the environment.
Historical, architectural, archaeological, and cultural resources	<p>The FAA has not established a significance threshold for historical, architectural, archeological, and cultural resources, however factors to consider include if the action would result in a finding of Adverse Effect through the Section 106 process.</p>
Land use	<p>The FAA has not established a significance threshold for land use.</p>
Natural resources and energy supply	<p>The FAA has not established a significance threshold for natural resources and energy supply, however a factor to consider is whether or not the action's construction, operation, or maintenance would cause demands that would exceed available or future natural resources or energy supplies.</p>
Noise and noise-compatible land use	<p>The FAA has determined that a significant impact would occur if the proposed action causes noise sensitive areas located at or above day-night average sound level (DNL) 65 decibels (dB) to experience a noise increase of at least DNL 1.5 dB. For example, an increase from DNL 65.5 dB to 67 dB is considered a significant impact, as is an increase from DNL 63.5 dB to 65 dB.</p>

Category	Significance Threshold
Socioeconomics, environmental justice, and children's health and safety risks	<p>The FAA has not established a significance threshold for socioeconomics, environmental justice, or children's environmental health and safety risks, however factors to consider include if the action would have the potential to:</p> <ul style="list-style-type: none"> • Induce substantial economic growth in an area, either directly or indirectly (e.g., through establishing projects in an undeveloped area) • Disrupt or divide the physical arrangement of an established community • Cause extensive relocation when sufficient replacement housing is unavailable • Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities • Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities • Produce a substantial change in the community tax base. • Lead to a disproportionately high and adverse impact to an environmental justice population, i.e., a low-income or minority population, due to significant impacts in other environmental impact categories; or impacts on the physical or natural environment that affect an environmental justice population in a way that the FAA determines are unique to the environmental justice population and significant to that population. • Lead to a disproportionate health or safety risk to children.
Visual effects (light emissions and visual resources/character)	<p>The FAA has not established a significance threshold for light emissions or visual resources/character, however factors to consider include if the action would have the potential to:</p> <ul style="list-style-type: none"> • Create annoyance or interfere with normal activities from light emissions • Affect the visual character of the area due to the light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources. • Affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources • Contrast with the visual resources and/or visual character in the study area and block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.
Wetlands	<p>The FAA Order 1050.1F defines significant impact thresholds for wetlands. According to the Order, a significant impact would occur when the proposed action causes any of the following:</p> <ul style="list-style-type: none"> • Adversely affect a wetland's function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other aquifers • Substantially alter the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected • Substantially reduce the affected wetland's ability to retain floodwaters or storm runoff, thereby threatening public health, safety, or welfare (the term welfare includes cultural, recreational, and scientific resources or property important to the public) • Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands • Promote development of secondary activities or services that would cause the circumstances listed above to occur • Be inconsistent with applicable state wetland strategies.
Floodplains	<p>The FAA has determined that a significant impact would occur if the proposed action causes notable adverse impacts on natural and beneficial floodplain values.</p>
Surface waters	<p>The FAA has determined that a significant impact would occur if the proposed action would:</p> <ul style="list-style-type: none"> • Exceed water quality standards established by Federal, state, local, and tribal regulatory agencies • Contaminate public drinking water supply such that public health may be adversely affected.

5.2 Non-Issue Resource Categories

5.2.1 Biological Resources

5.2.1.1 Marine Mammals

Although uncommon, Saint Mary's residents have observed beluga whales upriver on the Yukon River as far as Hughes and Nenana (ADF&G 2021a). Unlike the Cook Inlet beluga population, which cannot be hunted due to its endangered status, belugas in the Yukon River are not subject to additional hunting regulations and are likely from the Eastern Bering Sea, which sustains a healthy population and are not listed as a threatened species. Because beluga whales are rarely documented in the project area, it is unlikely they would be present during construction activities; as such, this is a non-issue.

5.2.1.2 Eagles

According to ADF&G, the range of bald eagles extends over the project area, but the western extent of the golden eagle range is to the east of the project area (ADF&G 2021b). The nearest documented bald eagle nest is approximately 96 miles to the east (USFWS 2021a). During field work in 2021, no trees large enough to support an eagle's nest were observed within 0.5 mile of the Proposed Action (J. Grabel, personal communication, June 21, 2021). Therefore, this resource is not anticipated to occur in the project area and has been determined a non-issue.

5.2.2 Climate

Climate change refers to a significant change in long-term (decades to millennia) weather patterns as a result of changes in the concentrations of greenhouse gases within the Earth's atmosphere. While aviation contributes to greenhouse gas emission, the Proposed Action is not anticipated to result in a substantial increase of aviation activity or greenhouse gas emissions.

5.2.3 Coastal Resources

Alaska's participation with the national Coastal Zone Management Act (known as the Alaska Coastal Management Program) ended on June 30, 2011. There are no coastal barriers within the State of Alaska and the project is not located within marine waters (USFWS 2021).

5.2.4 Farmland

There is no prime or unique farmland, nor farmland of state or local importance in the vicinity of the project (NRCS 2021).

5.2.5 Land Use

The Saint Mary's airport improvements, staging areas, and temporary barge landing are located within the existing airport property boundaries, owned by DOT&PF. Designated land use adjacent to the airport boundary is undeveloped land. In the southwestern portion of the project area, adjacent to the Yukon River, is the Boreal Fisheries commercial seafood processing and discharge plant. Although the land in this area is owned by DOT&PF, the area contains a native allotment. The potential Mountain Village and Pitka's Point material sites are located on land conveyed to native corporations.

The Saint Mary's Community Economic Development Strategy (RBH Management Services 2000) was the first comprehensive undertaking to develop an overall community plan. The study was intended to assist the City of Saint Mary's decision-makers by providing guidelines to address questions and concerns related to future growth and development. It is a policy plan and has not been updated since its inception in 2000.

Land uses in Saint Mary's are primarily residential, commercial, light industrial, and public and institutional uses including the airport, a fire station, school, post office, health care, cemetery, and other public buildings and utilities. Residential areas are located within Saint Mary's. The commercial center is primarily along Airport Road and there is limited industrial property in the vicinity of the port.

The primary transportation links to Saint Mary's are by air and water, with barge and air transport services. The Saint Mary's Airport is capable of receiving jet aircraft. Air service is the only connection between other communities in the region on a year-round basis. The primary air routes to Saint Mary's are from Anchorage and Bethel. Saint Mary's has a deep water port on the north bank of the Andreafsky River, which provides the only deep-water dock in the Yukon Delta. A 22-mile local road links the village of Saint Mary's to the villages of Andreafsky, Pitka's Point, and Mountain Village. This road, however, is not maintained during winter months.

The Proposed Action would not change land uses as the Saint Mary's Airport Layout Plan identifies all undeveloped land as an aviation use and expansion of the airport is consistent with the Saint Mary's Community Economic Development Strategy economic goals and objectives.

5.2.6 Wild and Scenic Rivers

The Andreafsky River is the nearest Wild and Scenic River; however, it is five miles from the Saint Mary's Airport and the nearest material source (Pitka's Point, an active site) is located 0.5 miles upslope (USFWS 2021). No expansion of the Pitka's Point material site would occur and the area between the material site and river is an approximately 20 percent, heavily vegetated slope.

5.2.7 Section 4(f)

Publicly owned wildlife refuges, parks and recreation areas, and historic sites eligible for the NRHP are protected from transportation impacts by Section 4(f) of the Department of Transportation Act.

Review of the U.S. Bureau of Land Management, U.S. Forest Service, National Park Service, and the Alaska Department of Natural Resources (ADNR) websites indicate there are no state Recreation Areas, Critical Habitat Areas, or public parks in the vicinity of the proposed project. A review of the USFWS's National Wildlife Refuges System identified the Yukon Delta National Wildlife Refuge (NWR) boundaries overlapping the project, as shown on Figure 5, General Land Ownership.

As discussed in Section 5.3.10 there are no previously documented cultural resources or properties within the Saint Mary's project area.

However, proposed improvements at the Airport, including the temporary barge landing, would be located on land owned by the State of Alaska. As such, the project would occur on inholdings owned by the State of Alaska and/or native corporations through Alaska Native Claims

Settlement Act Section 14(f) within the boundaries of the NWR. Land management of these inholdings is not within the purview of the NWR managers. Therefore, these inholdings are not considered to be a Section 4(f) property.

The Andreafsky Wilderness area is located approximately 14.5 miles north of the proposed project in Saint Mary's (USFWS 2021c).

The Kotlik-Marshall Trail (RS2477 #120) follows the east bank of the Yukon River and bisects the Boreal Fish Camp. This winter-only trail is used primarily for transportation (not recreation) but does not have a specific management plan. However, it is shown in a regional transportation plan and crosses DOT&PF and privately-owned land (DOT&PF 2018). The trail is exempt from Section 4(f) consideration per 23 CFR 774.13 (f)(4)³ and the project would not impact the trail.

5.2.8 Groundwater

Limited published data exists regarding groundwater within the project area. A search of EPA's sole source aquifers indicates there are no such resources in Alaska (EPA, 2021). No private drinking water wells are located within the project area. The ADEC database of public water system (PWS) sites shows the only project element within a drinking water protection area (DWPA) is the Pitka's Point material site (ADEC 2021b). The material site is located within Zone B for two groundwater wells (#AK 2272750), which supply the community water system (serves 109 people). The Pitka's Point material site is approximately 8,000 feet from the groundwater wells and on the edge of Zone B, as shown on Figure 6. A source water assessment has not been completed for this source, as a result DEC's recommendations are used in lieu of site specific recommendations (18 AAC 80). Per DEC Table A, minimum separation distances between drinking water sources and potential sources of contamination are no less than 200 feet. Additionally, the material site is existing and obtaining material would not require expansion of impervious surfaces.

5.2.9 Threatened or Endangered Species

According to the USFWS's Information for Planning and Consultation (IPaC) decision support tool, there are no species listed as threatened or endangered under the ESA that occur within the project area (USFWS 2021b) (see Appendix C, *US Fish and Wildlife Service – Information for Planning and Consultation Results*).

5.3 Resource Categories with Minimal Effects

5.3.1 Biological Resources

5.3.1.1 Migratory Birds

5.3.1.1.1 Affected Environment

The project is within the southwestern margin of the Nulato Hills physiographic division where it meets the Yukon-Kuskokwim Coastal Lowland at the Yukon River and is adjacent to the nearly 20-million-acre Yukon-Kuskokwim NWR, which is comprised of the Yukon and Kuskokwim

³ Trails, paths, bikeways, and sidewalks that are part of the local transportation system and which function primarily for transportation.

River deltas (DOT&PF 2007; ADF&G 2006). This area has bird species more in common with Eurasia than the rest of Alaska, with yellow and white wagtails (*Motacilla flava* and *M. alba*), bluethroats (*Luscinia svecica*), and red-throated pipits (*Anthus cervinus*) overlapping with high densities of nesting tundra swan (*Cygnus columbianus*), common eider (*Somateria mollissima*) and other waterfowl. Additionally, shorebirds such as the bristle-thighed curlew (*Numenius tahitiensis*), dunlin (*Calidris alpina*), and black-bellied plover (*Pluvialis squatarola*) are found in abundance, particularly in sedge flats.

According to USFWS's IPaC decision support tool, there are three migratory birds of concern expected to occur within the project area: bristle-thighed curlew, Pacific golden-plover (*P. fulva*), and whimbrel (*Numenius phaeopus*) (see Appendix C).

5.3.1.1.2 Environmental Consequences

Approximately 5.37 acres of previously undisturbed wildlife habitat would be affected; 2.81 acres of vegetation clearing/grubbing and fill would be placed in uplands and 2.56 acres of vegetation clearing and fill would be placed in wetlands.

5.3.1.1.3 Minimization and Mitigation

To avoid adverse impacts to migratory birds, vegetation clearing would follow the USFWS *Recommended Time Periods for Avoiding Vegetation Clearing in Alaska* in order to protect migratory birds, as well as use the most appropriate clearing methods to avoid impacts to nesting migratory species (USFWS 2020). For the Yukon-Kuskokwim Delta ecoregion, the following vegetation clearing avoidance periods would apply (USFWS 2021c):

- Forest or woodland – May 1 through July 15
- Shrub or open habitat – May 5 through July 25

If working in shrub or open habitat (e.g., marsh, pond, tundra, gravel, or other treeless/shrubless ground habitat), the following time periods to avoid vegetation clearing may be expanded where the following species are present (USFWS 2020b):

- Raptors, which may nest two or more months earlier than other birds
- Canada geese (*Branta canadensis*) and swans (*Cygnus spp.*), which begin nesting April 20
- Black scoters (*Melanitta americana*), which are known to nest through August 10

5.3.1.2 Invasive Species

5.3.1.2.1 Affected Environment

Executive Order 13112, Safeguarding the Nation from the Impacts of Invasive Species, as amended on December 5, 2016, requires federal agencies to prevent and control the introduction of invasive species to minimize the economic, ecological, and human health effects that invasive species may cause. The Alaska Exotic Plant Information Clearinghouse database, administered by the Alaska Center for Conservation Science at the University of Alaska Anchorage, was used to identify any invasive terrestrial, marine, and aquatic plant species that could do harm to native habitats on or adjacent to the project. Although available mapping does not report invasive plant occurrence in the area, three non-native species were observed

adjacent to the Saint Mary's Airport during the wetland delineation: white clover (*Trifolium repens*), common dandelion (*Taraxacum officinale*), and common yarrow (*Achillea millefolium*).

5.3.1.2.2 Environmental Consequences

Construction, operation, and maintenance activities could increase opportunities for invasive species introduction and dissemination through vehicle/airplane traffic.

5.3.1.2.3 Minimization and Mitigation

Measures to minimize or eliminate the potential for introduction, establishment, and spread of invasive species would be implemented during construction. Construction equipment would be pressure washed to remove soil, seed, and plant material prior to moving onto or off the project site. Clean fill material, native plants, and certified native seed mix would be used, removing the risk of seeding exposed areas with invasive species. Stabilization of disturbed areas would occur as soon as practicable, reducing the risk of invasive species establishing themselves in the exposed soils. Stabilization can include paving, laying down a gravel layer, and/or seeding and vegetating. Certified native seed or locally produced seed mix would be used when seeding is the selected stabilization method.

5.3.1.3 Essential Fish Habitat

5.3.1.3.1 Affected Environment

Habitat (Saint Mary's): The proposed temporary barge landing, including the causeway and mooring dolphins and staging area would be located in the Lower Yukon River at the airport barge landing approximately 100 miles upstream from the Yukon River's mouth, approximately 13 miles upriver from Mountain Village, and 1.5 miles and 5.5 miles downriver from Pitka's Point and St. Mary's, respectively. The Yukon River is an important subsistence and commercial fishery. There is some existing development in the area associated with Boreal Fisheries, and much of the riparian area is either unvegetated or somewhat vegetated with alders (*Alnus spp.*), willows (*Salix spp.*), grasses (*Poaceae spp.*), and sedges (*Cyperaceae spp.*). At the proposed project area, the Yukon River is approximately 0.75 mile wide. At a river cross section taken on June 26, 1996 at Pitka's Point, the Yukon River had a maximum depth of 40 feet. The velocity on that date and at that location was 3.17 feet per second (Brabets et al. 2000). The river bottom in this area is primarily sediment and mud. At its mouth, the Yukon River transports about 60 million tons of suspended sediment annually into the Bering Sea (Brabets et al. 2000).

Fish and Essential Habitat: Resident Arctic Char (*Salvelinus alpinus*), Inconnu (or sheefish) (*Stenodus leucichthys*), and whitefishes (*Coregonus spp.*) are resident fish present in the reach of the Yukon River adjacent to the proposed barge landing and causeway/dock expansion. In addition, the Yukon River in this area is identified by ADF&G as an anadromous fish stream (ID #334-20-11000-2451), which is designated as Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act. ADF&G shows that all five species of Pacific Salmon are present in the proposed barge landing area at some time during the year, as described below (ADF&G 2021c).

- Chinook Salmon (*Oncorhynchus tshawytscha*): According to ADF&G, about 183,000 adult Chinook Salmon migrate upstream through the project area annually (ADF&G 2020a) between mid-to-late May through early July, and after July 15, migration is typically completed. It is likely Chinook Salmon juveniles are in the project area during outmigration immediately before or after ice-out in early May (Ohlberger et al.

2021); however, the timing varies between different cohorts of fish from different parts of the Yukon River and may be influenced by physical factors, such as water temperature (Miller et al. 2020).

- **Chum Salmon (*O. keta*):** An average 1.9 million adult Chum Salmon make up the summer run and migrate through the project area from early May through July 15, and about 740,000 adult Chum Salmon are present migrating through the project area between July 18 and early September (fall run) (ADF&G 2020a). Juvenile Chum Salmon outmigration downstream past the project area peaks in late June when millions of small fry are dispersed by high river discharges through numerous distributary channels into coastal habitats. Juvenile out migration through the project area decreases as water temperatures increase (64 to 70 degrees Fahrenheit) in mid-July (National Academies 2005).
- **Coho Salmon (*O. kisutch*):** About 209,000 Coho Salmon travel upstream past the project area each year between mid-July through early September (ADF&G 2020b), typically during periods of high water (Yukon River Panel 2017). Coho Salmon juvenile outmigration timing from the Yukon River is less understood.
- **Pink Salmon (*O. gorbuscha*):** Adult Pink Salmon migrate upstream through the project area between late June and mid-August. A total of 689,607 Pink Salmon were estimated to have migrated pass the Pilot Station sonar (about 20 miles upriver from the project area) in 2018 (Dreese and Lozori 2019). Outmigration of juvenile Pink Salmon through the project area peaks before mid-June as they move rapidly through delta habitats (National Academies 2005).
- **Sockeye Salmon (*O. nerka*):** Sockeye salmon adults travel past the project area in July and August (Dreese and Lozori 2019). Eggs hatch during the winter, and the young salmon move into the rearing areas. In systems with lakes, juveniles usually spend up to three years in fresh water before migrating to the ocean in the spring as smolts. However, in systems without lakes, many juveniles migrate to the ocean shortly after emerging from the gravel in the spring (ADF&G N.D.).

5.3.1.3.2 Environmental Consequences

Although salmon spawning and rearing habitat has been avoided, approximately 0.88 acres would be filled and 8 piles would be placed within Yukon River salmon migration EFH for the Airport Barge Landing. The impacts to EFH and EFH-listed species (salmon) would be temporary, and the riprap from the causeway and piles would be removed within two seasons.

The discharge and removal of fill material for the barge landing causeway and offloading and staging area has the potential to impact EFH through the creation of turbidity plumes. In addition, development of the fill placement would create impervious surfaces which could cause local stormwater runoff leading to sedimentation, siltation, and an increase contaminants and debris in EFH. Turbidity and associated sedimentation could cause an increase in the fluctuation in water temperature and decreases in dissolved oxygen, which could result in juvenile salmon mortality and a change in returning adult behavior.

The Airport Barge Landing would temporarily remove salmon migration habitat. The causeway could create a physical barrier to migration by pushing outgoing juvenile salmon into deeper water, where they could be more susceptible to predation, and creating a minor obstacle to adult salmon migrating upstream. The causeway could also change water flow causing

sediment deposition in shallow areas that are potentially important for juvenile and adult salmon migration refuge.

Placement and removal of piles for the dolphins has the potential to impact EFH and salmon by creating underwater noise. Noise from pile driving has the potential to affect the distribution and behavior and potential injury of juvenile salmon, making them more susceptible to predation resulting in indirect impacts and disruptions to the local river system as a whole. Pile driving and removal could also temporarily increase water turbidity.

Short-term impacts to EFH from project vessel traffic during construction could increase wakes and surge in the area, which could lead to riverbank erosion and increased turbidity; however, since the airport barge landing would only be used to bring in fill material for the airport project, these impacts are expected to be short-lived.

Impacts to EFH are further discussed in the EFH Assessment in Appendix D. The NMFS has provided information on the EFH, with consultation conducted on September 22, 2021 (Appendix G). During consultation, NMFS stated the project may adversely affect EFH, but these effects would be minimal and temporary in nature. An ADF&G Title 16 Fish Habitat permit and USACE Section 404 permit would be obtained prior to construction.

5.3.1.3.3 Minimization and Mitigation

Incorporating the following conservation measures would help minimize adverse impacts to EFH and EFH-managed species/species complexes and other fish and riverine resources in the Project area.

- The Project design minimizes the areal extent of fill in EFH to the extent practicable, and no spawning or rearing habitats are impacted
- Fill would be sloped to maintain shallow water and allow for unrestricted fish migration and provide refuge for juvenile salmon.
- The Project would employ the fewest number of pilings necessary to support barge activities, minimizing impacts to the substrate and construction noise.
- DOT&PF would implement practical measures to avoid, contain, and clean up petroleum spills from material barges.
- Fill placement and pile installation and removal timeframes would be negotiated with ADF&G and NMFS to minimize impacts during sensitive time periods when salmon migrate through the area.
- Impact hammer use would be avoided and piles would be driven as deep as possible with a vibratory hammer.
- Piles would be removed slowly to allow sediment to slough off at or near the mudline to reduce suspended sediment and turbidity.
- Pile driving would incorporate “soft start” methods when possible.
- New piles would be used when possible to avoid the introduction of invasive species.

5.3.1.4 Minimization and Mitigation

No minimization and mitigation measures are proposed or would be required.

5.3.2 Floodplains

5.3.2.1 Affected Environment

The proposed project is located in an unmapped floodplain area. Federal Emergency Management Agency (FEMA) has not completed a study to determine flood hazards in Saint Mary's; therefore, a flood map has not been published (FEMA 2021). Recorded flooding events are due to ice jams and Yukon River stream overflows, with the last flood event occurring in 1989 from a Yukon River ice jam (USGS 1994; AECOM 2018). Additionally, a 2016 Disaster Cost Index states that a spring flood (declared by Governor Palin on May 6, 2009; FEMA declared under DR-1843 on June 11, 2009) had extensive widespread flooding due to snow melt and destructive river ice jams caused by rapid spring warming combined with excessive snow pack and river ice thickness. The airport is not subject to Yukon River flooding, and the Yukon River 100-year floodplain is estimated at 32 feet (USGS 1994).

5.3.2.2 Environmental Consequences

Although portions of the project would occur within the Yukon River 100-year floodplain, no local flood hazard permit would be obtained as a regulatory program does not require one. Further, no buildings or permanent infrastructure would be built within the floodplain.

5.3.2.3 Minimization and Mitigation

No minimization and mitigation measures are proposed or would be required.

5.3.3 Natural Resources and Energy Supply

5.3.3.1 Affected Environment

Electrical power: The City of Saint Mary's and Saint Mary's Airport receives electrical power from the Alaska Village Electric Cooperative.

Water system: The City of Saint Mary's is responsible for potable water service. Water comes from Alstrom Creek where a small reservoir provides storage. In the summer, Alstrom Creek is charged by surface runoff and during the winter, it is spring fed. Water is filtered and chlorinated at a water treatment plant near the reservoir. Water is continuously circulated to prevent pipe from freezing and receives heat from a waste heat recovery system at the power plant.

Sewer system. The City of Saint Mary's is responsible for sanitary sewer service. Sewer effluent flows to a sewage lagoon with an approximately 1.7 million gallons for retention capacity. No chlorination is added prior to release.

Fill materials for the Proposed Action construction would potentially be obtained from one of the following proposed sources:

- One existing, un-permitted material site in Pitka's Point (See Figure 4, Existing Material Sites)
- One existing, un-permitted material site in Mountain Village (See Figure 4 Existing Material Sites)
- One existing, permitted material site in Saint Mary's

- One existing, permitted material site in Nome
- Use of a future material site in Marshall that is currently under development and may be permitted by Calista in time to serve the project.

The Proposed Action, including the proposed material sites, and the No Action Alternative would not change the long-term energy requirements at the airport. Construction of the airport improvements may allow airport operations to increase over current levels, which could increase electrical and fuel demand; however, the increase in energy usage from the project would likely be negligible. The Proposed Action would have minimal effects on local utility systems and city water and sewer systems would have sufficient capacity to accommodate any resulting changes in usage.

The Proposed Action would potentially result in a temporary increase in fuel demands during construction, though additional fuel would likely be barged in to support the project.

Fill material and construction materials are required for construction. Adequate fill material supplies are expected to be available within a local proposed material site. The Proposed Action and No Action Alternative would not cause demands exceeding available or future natural resource or energy supplies.

5.3.3.2 Environmental Consequences

There would be no long-term changes to energy supply requirements or increases in fuel demands as a result of the Proposed Action.

The Proposed Action would use natural resource fill material from the proposed material sites as discussed in Section 4.2.1 *Material Sources and Haul Roads* and would not require the use of other natural resources

5.3.3.3 Minimization and Mitigation

No minimization and mitigation measures are proposed or would be required.

5.3.4 Air Quality

According to Alaska Administrative Code (AAC) 18 AAC 50, Saint Mary's and Mountain Village are considered Class II areas. As such, there are designated maximum allowable increases for particulate matter 10 micrometers or less in diameter (PM10), nitrogen dioxide, and sulfur dioxide. Activities in these areas must operate in such a way that they do not exceed listed air quality controls for these compounds (ADEC 2021a). The project area is not located within or near an area defined by ADEC as a Nonattainment or Maintenance Area, or within an area that regularly exceeds or is near violating the health-based National Ambient Air Quality Standards. The community of Saint Mary's was included on the list of communities reporting that residents are highly affected by dust (PM10) on the 2010 Rural Dust Survey (ADEC 2010). The Project would not be considered a "major source of air pollutants" and would not require an operating permit under Title V of the Clean Air Act. The Saint Mary's Airport is a General Aviation airport with fewer than 180,000 annual operations; therefore, air quality analysis is not required. The Erosion and Sediment Control Plan for the project would address minor impacts to air quality from construction (e.g., dust). 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, would be implemented during construction.

5.3.5 Noise and Noise Compatible Land Use

5.3.5.1 Affected Environment

The existing airport is designated by the FAA as being suitable for use by large aircraft. Existing noise sources in the area are primarily associated with the airport. Existing land use surrounding the Saint Mary's Airport is undeveloped and minimal conflict between noise and compatible land use is anticipated. Both communities are in the vicinity of the Airport, Saint Mary's is approximately 7 miles away via an existing road (3.5 air miles) and Pitka's Point is approximately 4.5 miles away via an existing road (2 air miles); distances that would result in no noise conflicts with the Airport. The proposed project would not increase or decrease aircraft noise as the project only changes safety areas to meet safety standards for the existing fleet mix but would not result in larger sized aircraft using the facility.

No community concerns regarding noise were identified during public scoping for this EA.

5.3.5.2 Environmental Consequences

The Proposed Action would not result in permanent noise impacts. Temporary noise impacts in the immediate vicinity of the Airport and material sites would occur during construction, but these impacts are anticipated to be minimal and short-term.

The Proposed Action would not disrupt current or planned development and the community of Saint Mary's has no zoning laws. The Proposed Action would be compatible with existing land uses and airport improvements would be located within the existing Saint Mary's Airport property boundary. The Proposed Action would not result in any incompatible changes from existing land use designations.

5.3.5.3 Minimization and Mitigation

A noise analysis is not required, as the proposed airport improvements are not being done to accommodate larger aircraft, and the project is not anticipated to trigger a change to the aircraft fleet mix. No minimization and mitigation measures are proposed or would be required.

5.3.6 Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks

5.3.6.1 Affected Environment

Saint Mary's is a First Class City in Kusilvak Census Area, Alaska, located on the north bank of the Andreafsky River in the Bethel Recording District, 5 miles from its confluence with the Yukon River. The city lies 450 air miles west-northwest of Anchorage. It encompasses 44.0 square miles of land and 6.3 square miles of water. It was incorporated as a city in 1967. The adjacent village of Andreafsky (historically known as Clear River) was annexed in 1980. A federally recognized tribe is located in the village – the Algaaciq Tribal Government; Yupiit of Andreafsky. In 2014 to 2018, the population was 550, with 166 households and 201 housing units. The racial makeup of the City was 4.0% White, 2.0% Black, 90.0% Alaska Native, 2.0% Hispanic, and 4.0% reporting 2 or more races. The age distribution of the population shows 12.0% were 4

years and under, 38.0% were under the age of 18, 62.0% were over the age of 18, and 4.0% were 65 years or older. The per capita income was \$15,009 (U.S. Census Bureau, American Community Survey (ACS) 2014-2018).

Mountain Village is a community in the Kusilvak Census Area, Alaska. It is located on the Yukon River near the Yukon-Kuskokwim Delta and covers a total area of 4.8 square miles. Its population is 877 (U.S. Census Bureau 2019). In 2000, there were 183 households 146 families residing in the village, and there were 211 housing units. The racial makeup was 6.4% White, 90.5% Alaska Native, 0.1% Pacific Islander, 0.4% Hispanic or Latino, and 3.1% from two or more races. The age distribution of the population showed 42.4% under the age of 18, 9.9% from 18 to 24, 29.3% from 25 to 44, 13.5% from 45 to 64, and 4.9% who were 65 years of age or older. The per capita income in Mountain Village was \$9,653.

5.3.6.2 Environmental Consequences

The Proposed Action would have positive socioeconomic impacts on Saint Mary's and surrounding villages. Economic advantages would likely arise from a short-term increase in construction employment opportunities (i.e., local hire) and additional revenue for service businesses that support directly or indirectly support the project's construction.

The Proposed Action would not require relocations and the community tax bases would not be affected. No disproportionately high or adverse negative effects to low-income or minority populations are expected. The Proposed Action would have a beneficial effect on Saint Mary's residents, who are primarily a minority race (approximately 90% Alaska Native). The Proposed Action would provide a safer and more reliable air travel and access, including medical evacuation, for all residents, including children and low-income minorities. The airport would remain open during construction, but minor airport delays could occur as a result of construction activities.

The Proposed Action would not result in risks to children's environmental health and safety. Noise levels at the school and clinical facilities would remain within land use compatibility standards. Vehicle traffic may increase during construction, particularly along haul routes to material sites, or to the barge landing site, but it is unlikely to result in any substantial increase in safety risks.

5.3.6.3 Minimization and Mitigation

No minimization and mitigation measures are proposed or would be required.

5.3.7 Visual Resources

5.3.7.1 Affected Environment

The Saint Mary's Airport is located 7 miles from the city of Saint Mary's and it is surrounded by undeveloped land. Distant views of the airport may be seen from Pilcher Mountain. The proposed airport improvement areas are located on or immediately adjacent to existing runways, aprons, and drainage areas within the airport's boundaries. There are limited views of the airport since the surrounding property is undeveloped. Views would be primarily from vehicles on Point Fosdick Drive and Stone Drive.

The proposed existing material areas are located off-site in Nome, Saint Mary's, Mountain Village, and Pitka's Point and accessed via connecting haul roads. Material barged in would be accessed via a temporary barge landing.

5.3.7.2 Environmental Consequences

Existing views of the Airport from adjacent roadways would change insignificantly with the proposed improvements. Material sites would not be expanded; therefore views would not change. Views of the airport barge landing from adjacent areas would be temporary and insignificant.

5.3.7.3 Minimization and Mitigation

No minimization and mitigation measures are proposed or would be required.

5.3.8 Surface Water

5.3.8.1 Affected Environment

According to the ADNR Alaska Mapper - Navigable Waters website, USACE, and the U.S. Coast Guard, the Yukon River is listed as navigable for its entire length (ADNR 2021, USACE 1995, USCG 2012).

5.3.8.2 Environmental Consequences

The Proposed Action may result in some construction-related sedimentation and runoff during excavation and fill activities from the proposed airport improvements. Impacts from construction of the causeway and staging pad to surface waters include placement of 0.88 acres fill into the Yukon River for a period of approximately two years. Fill would be comprised of riprap and gravel and would be removed once material importing was completed.

5.3.8.3 Minimization and Mitigation

Best management practices (BMPs) will be implemented during construction to minimize erosion and sedimentation; BMPs are summarized in Section 6.2, *Water Quality*.

5.3.9 Hazardous Materials, Pollution Prevention, and Solid Waste

5.3.9.1 Affected Environment

According to ADEC's contaminated sites database, there are two known active contaminated sites located within the Saint Mary's project area. The first site located west of the runway and known as FAA Saint Mary's Consolidated Bldg. (Hazard ID 3052), involved the decommissioning and removal of four non-regulated heating oil tanks in June 1998. Soil sampling near the tanks indicate contamination, but the concentrations meet cleanup levels with the exception of one benzene detection. However, benzene was not found at shallower depths and there are no other contaminants of concern exceeding cleanup levels, so ADEC believes that the soil contamination is limited and does not present an unacceptable risk to human health or the environment. Groundwater monitoring is ongoing at this site (ADEC 2021c).

The second site, located on the existing airport apron, known as MarkAir – Saint Mary's Airport (Hazard ID 1878), contains aviation gas contamination on property leased from DOT&PF. A 1996 Phase II Environmental Site Assessment found a 1,000-gallon aboveground diesel storage tank to be the likely spill source. Adjacent lease lots also show signs of historic aviation gasoline and heating oil spills with high levels of diesel range organics and benzene contamination in soil samples taken at depths 3 to 14 inches below the ground surface. After an ADEC review of the file in 2009, further work was recommended for the site:

- Areas of contaminated soil should be removed to the best extent practical and stockpiled and land farmed on site
- Confirmation soil samples should be collected at the excavation depths to verify contaminated soil removal

As of September 21, 2012, all former tanks and dispensers have been removed.

5.3.9.2 Environmental Consequences

The Proposed Action may occur within areas that have been previously contaminated and cleaned up near the existing runway and apron. Project design would avoid these previously contaminated sites to the greatest extent possible. However, while impacts to contaminated soils are not anticipated, there is the potential for discovering hazardous materials during construction. Should additional contaminated soils and waters be encountered during construction, all work in the contaminated zone would be stopped and ADEC would be consulted to coordinate appropriate cleanup actions. The contractor would be required to dispose of these soils and water in an ADEC approved manner. The Proposed Action would be conducted in accordance with state and federal laws regarding handling, disposal, and spill response for hazardous materials, waste, and substances.

The likelihood of encountering contaminated sites in the vicinity of the proposed material sites is low due to the average distance between the contaminated sites and the proposed material sites.

The Proposed Action would generate relatively small amounts of solid wastes from construction that would be disposed of at the local landfill, which has the capacity to receive the solid waste.

Hazardous materials used during construction would be limited to minor amounts of fuel, lubricants, hydraulic fluids, cleaning solvents, paint, and marking materials. Project activities would not generate hazardous materials and the project is anticipated to have no hazardous waste impacts.

5.3.9.3 Minimization and Mitigation

A Hazardous Materials Response Plan and Spill Prevention, Control, and Countermeasures Plan would be required from the construction contractor to address appropriate storage, use, and disposal of any hazardous materials present during construction. All construction waste would be managed and disposed of in accordance with all state and federal solid-waste-management laws and regulations. On-going consultation with ADEC would be conducted during the design phase to determine if contamination may be present in the environment surrounding the project area and whether mitigation measures would need to be implemented during construction. If contaminated soil or groundwater is encountered during construction, the

contractor would immediately notify DOT&PF and stop work until coordination on the appropriate response occurs with ADEC.

5.3.10 Historic, Architectural, Archaeological, and Cultural Resources

5.3.10.1 Affected Environment

Saint Mary's Airport

According to the Alaska Heritage Resources Survey (AHRs), there are no previously documented cultural resources or properties within the Saint Mary's project area (Office of History and Archaeology [OHA] 2021). The Kotlik-Marshall Trail (RS 2477 Trail #120) is mapped on the surface of the Yukon River and follows the east bank bisecting the Boreal Fish Camp; however, the trail is recorded as a winter mail route. According to the Alaska Department of Natural Resources (ADNR) Division of Mining, Land and Water (ADNR 2021):

“This trail was improved and maintained by Alaska Road Commission from 1922 to 1947. It was also a winter mail route. A substantial part of the area covered by this trail was reserved as Fort St. Michael in 1897 but returned to general BLM management in 1900. Another substantial part of the area was reserved as Yukon Delta Reservation in 1909, revoked in 1922 and returned to general BLM management until 1968.”

In 2003, archaeologists from the Alaska Office of History and Archaeology (OHA) conducted a pedestrian survey with judgmental test excavations of sections of the Saint Mary's Airport property in preparation for proposed upgrades (DePew and Pendleton 2003). No cultural resources were discovered during the survey.

In 2018 Northern Land Use Research Alaska, LLC (NLURA) completed a desktop cultural resource study and review of the Saint Mary's project area (NLURA 2018).

Barge Landing

NLURA's 2018 desktop cultural resource study identified one AHRs site adjacent to the barge landing. The Old Fish Camp (KWI-00021) is located roughly 900 meters downstream along the Yukon River. In 2021 DOWL completed documentation of the Boreal Fisheries Facility (KWI-00087) and recommended it ineligible for the National Register of Historic Places (NRHP).

Material Sites

Pitka's Point and Saint Mary's Material Sites

In 2012, NLURA conducted a cultural resource survey of the Pitka's Point and Saint Mary's material sites. NLURA's survey consisted of pedestrian transects and a single test excavation, during which no cultural resources were identified (NLURA 2012). Both material sites were included in the desktop cultural resource study conducted by NLURA in 2018. There are no documented cultural resources adjacent to either material site.

Mountain Village Material Site

According to the AHRS, there are no previously documented cultural resources or properties within the existing Mountain Village material site and access road (OHA 2021). There are also no documented cultural resources adjacent to the project area.

Other Material Sites

Cape Nome Material Site

There is one previously documented cultural resource in the project area for the Cape Nome material site (OHA 2021). The Nome-Council Road (NOM-00242/SOL-00172) was determined to be ineligible for listing on the NRHP. Several sites are adjacent to the project area, including a WWII-associated site (NOM-00048), a prehistoric Iñupiat village site (NOM-00009), gravesites (NOM-00162 and NOM-00062), and portions of the Unalakleet-Nome trail, which is associated with the Iditarod Historic Trail (NOM-00074/SOL-00127).

Potential Marshall Material Site

There are no previously documented cultural resources in the project area for the potential Marshall material site (OHA 2021). There is one site adjacent to the proposed material site. RUS-00037 consists of the remains of a WWII radio tower situated near the summit of Pilcher Mountain, roughly 915 meters away from the material site. This site was determined to be ineligible for listing in the NRHP. In the summer of 2021, Stephen R. Braund & Associates (SRB&A) conducted survey of the proposed project area for the Marshall material site, during which no cultural resources were identified. SRB&A's report describing the methods and results of this work is forthcoming.

5.3.10.2 Environmental Consequences

No previously identified cultural resources sites are located within the primary project area (Saint Mary's Airport and the Pitka's Point and Saint Mary's material sites). Much of the project area around the Saint Mary's Airport and the Pitka's Point and Saint Mary's material sites have been previously surveyed for cultural resources. Sites located within other portions of the project area (Boreal Fisheries Facility and Nome-Council Road) are unlikely to be impacted by project activities.

Potential project effects to previously unknown cultural resources are being considered under Section 106 of the National Historic Preservation Act and through consultation with the State Historic Preservation Officer and affected Indian Tribes.

Permitted Material Sites

The Saint Mary's material site currently operates under standard permit stipulations, including compliance with Section 106 of the NHPA.

The Cape Nome material site currently operates under standard permit stipulations, including compliance with Section 106 of the NHPA.

Unpermitted and Potential Material Sites

Should materials from the Mountain Village material site be used for the project, the quarry would have to meet standard permit stipulations, including compliance with Section 106 of the NHPA.

Should the Marshall material site be developed, the quarry would have to meet standard permit stipulations, including compliance with Section 106 of the NHPA.

5.3.10.3 *Minimization and Mitigation*

Although there are two cultural resource sites located within the project area, they are both ineligible for the NRHP. Moreover, neither is anticipated to be adversely impacted by project activities. Therefore, no minimization and mitigation measures are proposed or would be required.

5.3.11 **Wetlands**

5.3.11.1 *Affected Environment*

A wetland delineation completed in four study areas identified areas that may fall under USACE jurisdiction, per Section 404 of the CWA (Appendix E, *2021 Wetland Delineation*). The wetland delineation study area totaled 285.8 acres (See Table 6 and Figure 7 Wetland Study Areas).

Table 6: Wetland Study Area Descriptions

Name	Description	Acres
Airport study area	Areas within 300 feet of existing disturbance (operational surface of the airport); 50-foot-wide area on both sides of the Airport Access Road in area of potential culvert replacement; temporary barge landing area	234.6
Pitka's Point study area	Areas within 100 feet of the existing developed extent	19.9
Mountain Village study area	Areas within 100 feet of the existing developed extent	31.3
Total		285.8

Vegetation in all study areas is typical of the lowland tundra found throughout the Yukon-Kuskokwim Delta. Adapted to conditions of high winds, little precipitation and discontinuous permafrost, the vegetation is largely graminoid herbaceous, scrub shrub, and dwarf shrub with occasional stands of open broadleaf forest. The airport and Saint Mary's material site study areas are located along a ridge top, and near the airport, there are small stream headwaters that drain away in all directions, and eventually reach the Yukon River. Thick stands of willow and alder are present in shallow drainages. Continuous permafrost is present near the airport (DOT&PF 2007).

In all study areas, wetlands are characterized by tussock cotton-grass (*Eriophorum vaginatum*), Bigelow's sedge (*Carex bigelowii*), leafy tussock sedge (*Carex aquatilis*), and shrubs such as marsh labrador tea (*Rhododendron tomentosum*). Willow shrubs, such as felt-leaf willow (*Salix alaxensis*) and diamond-leaf willow (*Salix pulchra*), were among the dominant species outside of wet meadows. In general, soils in wetlands had a thick organic layer underlain by permafrost.

Streams were largely absent from all study areas. All wetlands within each study area were connected to tributaries of the Yukon River.

Most shrub thickets were indicative of uplands and typically had 75% or greater cover of shrubs five feet tall or taller. Common species included diamond-leaf willow, Barclay's willow (*Salix barclayi*), and speckled alder (*Alnus incana*). The understory was composed of herbaceous graminoids such as bluejoint (*Calamagrostis canadensis*) and field horsetail (*Equisetum arvense*).

The 234.6-acre Airport study area contains approximately 43.7 acres of jurisdictional wetlands (18.7% of the study area), 3.4 acres of non-jurisdictional wetlands (1.4%), 0.3 acre of other Waters of the US (WOUS) (0.1%), and approximately 187.2 (79.8%) acres of upland (79.9%).

The 19.9-acre Pitka's Point study area contains 0.3 acre of jurisdictional wetlands (1.6%) and 19.6 acres of upland (98.4%).

The 31.3-acre Mountain Village study area contains 6.1 acres of jurisdictional wetlands (19.5%), 1.0 acre of non-jurisdictional wetlands (3.2%) and 24.2 acres of uplands (77.3%).

5.3.11.2 Environmental Consequences

Table 7 summarizes effects from the project and are shown on Figure 8 Wetland Impacts (Saint Mary's). To extend and widen the runway safety areas, improve airport drainage, construct the causeway and staging area, and improve the access road between the airport and the causeway, the project would permanently place 48,500 cubic yards (CY) of fill (including select material, Type C, Class I and II riprap, and gravel) into approximately 3.12 acres of wetlands and waters of the U.S. (Table 1).

Table 7: Wetland Impacts by Proposed Action

Proposed Action	Wetland Impacts (acres)	Waters of the US Impacts (acres)
Airport Improvements	2.6	0.00
Causeway	0.00	0.59
Causeway Staging Area	0.00	0.29
Culvert	0.01	0.00
Total	2.61	0.88

5.3.11.3 Minimization and Mitigation

A request for a Jurisdictional Determination will be submitted to USACE, along with a Section 404 individual permit for unavoidable wetland fill. Concurrent with the Section 404 process, an ADEC Section 401 Water Quality Certification would also be obtained. All permit stipulations and special conditions would be followed. USACE will determine appropriate compensatory mitigation for wetland and riverine impacts, if required, during the permitting process.

Proposed wetland avoidance and minimization measures for the Proposed Action are listed below:

- The Proposed Action's elements are designed with minimal dimensions to meet their design function.
- All staging and driving surfaces will be limited to uplands.
- Proposed Action components are sited to avoid impacts to wetlands by using existing embankments and disturbed areas where practicable.
- The Proposed Action's footprint would be staked prior to construction and maintained for the duration of the project, to avoid additional impacts to wetlands from construction activities.
- Materials would be stockpiled within the Proposed Action's fill footprint, or staged in developed or upland areas, to avoid impacting additional wetlands.

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6.0 SUMMARY OF ENVIRONMENTAL COMMITMENTS

The Proposed Action would include standard BMPs and adherence to requirements in applicable permits, such as the APDES Construction General Permit, Section 404 Permit to fill wetlands, and the Section 401 Water Quality Certification. Additional measures outlined in this chapter are project-specific and would be included in construction specifications.

6.1 Water Quality

Environmental commitments related to the PWS DWPA include the following:

- Stormwater discharges would be controlled within the PS DWPA, whose boundaries overlap with the Proposed Action.
- Project activities that could significantly change the natural surface water drainage or groundwater gradient would be restricted to protect public drinking water.
- All data related to the project would be made available to ADEC upon request.
- DOT&PF would limit the amount of equipment storage, maintenance, and operation, and other potential sources of contamination, within Zones A and E of the PWS DWPA.
- BMPs would be implemented where equipment storage, maintenance, and operation, or other potential sources of contamination, are located within a PWS DWPA and that would minimize the potential for contamination to enter water sources used by a PWS.
- DOT&PF would immediately notify the nearby PWS of any identified potential contamination, such as spills or excess erosion.

6.2 Biological Resources

- Fill placement, pile installation and removal timeframes for the causeway would be directed by ADF&G and NMFS to minimize impacts during sensitive time periods when salmon migrate through the area.
- No impact hammers would be used. Piles would be driven as deep as possible with a vibratory hammer for approximately 6 hours over 4 days (non concurrent).
- DOT&PF would comply with the Migratory Bird Treaty Act by adhering to the USFWS recommended window to avoid mechanized vegetation clearing (May 1 through July 15), unless a mitigative work plan is approved by DOT&PF.
- To avoid introducing and spreading invasive species, the contractor would pressure wash all wheeled and tracked construction equipment prior to mobilization and upon construction completion.

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7.0 COORDINATION

7.1 Agency Correspondence

Agency scoping for the project was conducted May 7 through June 7, 2021. Scoping letters describing the project and soliciting information were sent to the appropriate state and federal agencies, tribal organizations, and other entities (summarized in Table 8). Responses to scoping are in Appendix F, *Summary of Consultation and Coordination*.

Table 8: Summary of Agency Coordination

First Name	Last Name	Title	Organization	Organization Type	Response
Doug	Cooper	Branch Chief	USFWS Conservation Planning	Resource/Regulatory	Yes
Matt	Eagleton	Deputy Director/Regional Essential Fish Habitat Coordinator	NOAA Fisheries Habitat	Resource/Regulatory	Response from Sean McDermott
Sean	McDermott	Supervisory Marine Habitat Resource Specialist	NOAA Marine Mammals	Resource/Regulatory	No
			USACE Regulatory	Resource/Regulatory	No
Cynthia	Heil	Environmental Program Manager	DEC Air Quality	Resource/Regulatory	Response from Adeyemi Alimi
Terri	Lomax	Environmental Program Manager	DEC Water Quality Standards Assessment & Restoration	Resource/Regulatory	No
Erin	Gleason	Environmental Program Specialist	DEC Contaminated Sites	Resource/Regulatory	Yes
Jeff	Estensen	Area Management Biologist	ADF&G Commercial Fisheries	Resource/Regulatory	No
Audra	Brase	Regional Supervisor	ADF&G Habitat Division	Resource/Regulatory	No
Liz	Ortiz	Archaeologist	SHPO	Resource/Regulatory	Yes
Jeanne	Proulx	Regional Manager Northern Region	DNR Mining, Land, and Water	Resource/Regulatory	No
Sven	Paukan	Mayor	City of Saint Mary's	Local/Community	No
Marvla	Sipary	City Clerk	City of Saint Mary's	Local/Community	No
Walton	Smith	City Manager	City of Saint Mary's	Local/Community	No
Peter	Andrew	Mayor	City of Mountain Village	Local/Community	No
Joseph	Kitka	Mayor	City of Marshall	Local/Community	No
Herbert	David	Superintendent	Saint Mary's School District	Local/Community	No
Andrew	Guy	President/Chief Executive Officer	Calista Corporation	Native/Tribal	No
William	Ashton	President	Nerkikmute Native Corporation	Native/Tribal	No

First Name	Last Name	Title	Organization	Organization Type	Response
Tisha	Kuhns	VP of Land and Natural Resources	Calista Corporation	Native/Tribal	Response from Mary Martinez
Flora	Paukan	President	Algaaciq Native Village	Native/Tribal	No
James C.	Landlord	First Chief	Asa'carsarmiut Tribe	Native/Tribal	No
Margaret	Guidry	President	Native Village of Pitka's Point	Native/Tribal	No
Gail	Alstrom-Beans	President	Yupit of Andreafsky	Native/Tribal	No
Richard	Alstrom	Tribal Administrator	Yupit of Andreafsky	Native/Tribal	No
Kaitlyn	DelaCruz	Tribal Workforce Development Division	Alaska Village of Council Presidents	Native/Tribal	No
Scott	Hess	Association of Village Council Presidents Unit 2	Alaska Village of Council Presidents	Native/Tribal	No
Loren	Peterson	President	Azachorok, Incorporated	Native/Tribal	No
Bibianna	Sage	President	Pitka's Point Native Corporation	Native/Tribal	No
Nicolai	Duny	President	Native Village of Marshall	Native/Tribal	No
Dolores	Hunter	Chair	Maserculiq, Incorporated	Native/Tribal	No
Florence	Busch	President	Saint Mary's Native Corporation	Native/Tribal	No
Robert	Kelley	President and CEO	Grant Aviation	Community	No
Rick	Zerkel	President	Lynden Air Cargo, LLC	Community	No
Gideon	Garcia	General Manager	Northern Air Cargo	Community	No
Robert	Everts	President and CEO	Everts Air Cargo	Community	No
Robert	Mckinney	President	Ravn Alaska	Community	Response from Callie Delgado
William	Riley	Station Manager	Ryan Air	Community	No

7.2 Section 106 Consultation

Section 106 consultation initiation letters were sent to the Alaska SHPO on June 8, 2021 and to these consulting parties:

- Association of Village Council Presidents
- Algaaciq Native Village, Asa'carsarmiut Tribe
- Azachorok, Incorporated, Calista Corporation
- Native Village of Pitka's Point, Nerkikmute Native Corporation, Pitka's Point Native Corporation
- Saint Mary's Native Corporation
- Yupit of Andreafsky
- Native Village of Marshall, Maserculiq, Incorporated
- City of Marshall
- City of Saint Mary's

SHPO responded on June 3, 2021 with no objections to the proposed Area of Potential Effects (Appendix F).

A Findings letter describing why no historic properties would be affected by the proposed Project pursuant was sent to SHPO and consulting parties on October 4, 2021 (Appendix F).

7.3 Public Scoping

DOT&PF held a virtual public scoping meeting on June 3, 2021 with five people in attendance. Public comments from the meeting are in Appendix E. Notification of the scoping process was advertised through:

- Phone calls directly made to the following entities to discuss the project, optimal meeting dates, and who invites should be extended to:
- Andrafsky (St. Mary's Tribal Council)
- Algaaciq Native Village Tribal Council
- City of St. Mary's
- Asa'carsarmiut Tribe (Tribal Council)
- City of Mountain Village
- Native Village of Pitka's Point
- City of Marshall
- Marshall Traditional Council
- Ohogamiut Traditional Council
- Saint Mary's School District
- Nerklikmute Native Corporation
- Calista Corporation
- Alaska Village of Council Presidents
- Azachorok, Incorporated
- Saint Mary's Native Corporation
- Flyers posted in Mountain Village, Saint Mary's, and Marshall
- Invitation and link to the virtual public meeting posted on Facebook at the Alaska DOT&PF - Home/Events.
- A meeting notice posted online at Alaska Department of Transportation and Public Facilities, Northern Region: <https://dot.alaska.gov/nreg/stmarys/>
- A meeting notice posted online at: <https://saintmarysairportimprovements.com/>

In addition, DOT&PF held a meeting on June 3, 2021 with representatives of Calista Corporation, Maserculiq Incorporated, and the City of Marshall to discuss access permissions for field work, to determine the preferred area on Pilcher Mountain where material site development would begin, and to determine the status of project development. Meeting minutes are included in Appendix E, *Summary of Consultation and Coordination*.

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8.0 LIST OF PREPARERS

Table 7 provides the list of preparers.

Table 7: Preparers of the Draft Environmental Assessment

Name	Agency	Role	Profession
Christopher Johnston, P.E.	DOT&PF	Reviewer	Engineer and Project Manager
Brett Nelson	DOT&PF	Reviewer	Regional Environmental Manager
Melissa Jensen	DOT&PF	Reviewer	Environmental Impact Analyst
Kristen Hansen	Consultant	Quality Control	Senior NEPA Practitioner
Jake Anders	Consultant	Contributing Author	Cultural Resources
Emily Creely	Consultant	Author	Environmental Specialist
Zachary Huff	Consultant	Author	Environmental Specialist
Donna Robinson	Consultant	Author	Environmental Specialist
Tim Jameson	Consultant	Maps and figures	Geographic Information Systems Specialist

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