FAA
Alaska Region
Office of Airports

FINAL ENVIRONMENTAL ASSESSMENT

Hydaburg (Higdáa Gándlaay) Seaplane Facility Refurbishment
Project No. SFAP00328

Kristi A. Warden, Director

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Alaska Region, Office of Airports
222 West 7th Avenue
Anchorage, Alaska 99513-7587
907.271.5443

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HYDABURG SEAPLANE FACILITY REFURBISHMENT

STATE PROJECT NUMBER SFAPT00328

FINAL ENVIRONMENTAL ASSESSMENT

MAY 16, 2024

APPROVED BY:

KRISTI A WARDEN Digitally signed by KRISTI A WARDEN Date: 2024.05.16 15:41:55 -08'00'

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Kristi A. Warden **Date**
Director
Alaska Region Airports Division
Federal Aviation Administration

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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
BMP	best management practices
CEQ	Council on Environmental Quality
CH	Critical Habitat
CWA	Clean Water Act
DOT&PF	Alaska Department of Transportation and Public Facilities
EA	Environmental Assessment
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
IPaC	Information for Planning and Consultation
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
PSMMP	Protected Species Monitoring and Mitigation Plan
PSO	Protected Species Observer
ROI	region of influence
SHPO	State Historic Preservation Office
USACE	United States Army Corps of Engineers
USFWS	United States Fish & Wildlife Service

1.0 PURPOSE AND NEED

1.1 INTRODUCTION

Hydaburg (Higdáa Gándlaay) is located on the southwest coast of Taan (Prince of Wales Island) in Southeast Alaska, approximately 45 air miles northwest of Kichx̱áan (Ketchikan) and 36 road miles west of Hollis where an Inter-Island Ferry Terminal is located. Hydaburg is the largest Haida village in Alaska where residents maintain a subsistence and commercial fishing lifestyle. The seaplane facility is located in Township 77S, Range 83E, Sections 7 and 12, in the Copper River Meridian Craig A-3 (See Appendix A). The seaplane facility reference is located at 58.1079859N, -135.4479458W.

The Alaska Department of Transportation and Public Facilities (DOT&PF) owns and maintains the Hydaburg Seaplane Facility (Facility). DOT&PF and, in cooperation with the Federal Aviation Administration (FAA), proposes to refurbish Facility which is showing signs of severe deterioration.

The refurbishment of the Facility would require FAA Alaska Airports Division approval and use federal funding for the Proposed Action. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. §4321 et seq.), the Council on Environmental Quality (CEQ) (40 CFR Chapter 5), and supplemental requirements provided under FAA Order 1050.1 and Order 5050.4B, this Environmental Assessment (EA) is being prepared to assess the potential environmental and socioeconomic impacts from this Proposed Action. The Proposed Action is discussed further in Chapter 2.0. DOT&PF anticipates that construction of this project would begin in 2024. It is expected to take approximately two months to complete the project.

1.2 PROJECT BACKGROUND

The facility was originally constructed in 1995 and is showing signs of severe deterioration due to wind and wave forces. The project would reconfigure the seaplane float and rehabilitate the remaining facility with a new single float built to meet the highest safety standards which include features such as a high-strength float design, a secure pipe-pile mooring system, and adequate tie-down points for the planes. The proposed project would involve the following:

- Refurbish the existing concrete approach;
- Refurbish the existing steel gangway and bearings;
- Remove and dispose of the existing cantilevered piles (4 total) and timber floats (2 total);
- Install a new 60 feet x 80 feet seaplane float;
- Install two (2) new 24-inch diameter vertical piles and cap-beam for the gangway shoreward bearings;
- Install one (1) new float restraint structure with four (4) new 24-inch diameter vertical piles and two (2) new 24-inch diameter batter piles;
- Install rock sockets at all vertical piles; and
- Install tension anchors at two (2) vertical piles, and two (2) batter piles at the float restraint-structure.
- Confirm the conditional approval of the Airport Layout Plan upon implementation of the proposed action.

1.3 PURPOSE AND NEED FOR PROPOSED ACTION

1.3.1 PURPOSE OF THE PROPOSED ACTION

The purpose of this project is to re-establish strength, longevity, and safety at the Facility for its continued use. Deterioration of the facility is mainly due to several factors including: larger than predicted wave heights at the facility, float design details now performing under capacity due to the larger wave forces, and a gangway roller bearing detail at the float interface that prematurely seized and caused additional lateral forces on the float structure and support piling. The proposed action will replace the existing float with a new float designed for the wave environment in Hydaburg, as well as refurbish the gangway bearing components with a modern design that will minimize friction and prevent damage to the float.

1.3.2 NEED FOR THE PROPOSED ACTION

This seaplane facility is the only seaplane base providing access to the remote City of Hydaburg and so it is essential to the community. Rebuilding will make it a safe and reliable air transportation hub for its residents to utilize for many decades.

Photo 1 – May 2021

Hydaburg seaplane facility looking north west from the adjacent city dock. One pile collar at the gangway landing float has detached and the associated pile is no longer anchoring the float into position.

Photo 2 – May 2021

Gangway float and main float held together with chain (in lieu of piling) after storm damage. Several deck boards on the main float are no longer attached to the underlying stringers and pop up when there is wave action at the float.

Photo 3 – May 2021

Transition ramp between gangway float and main float has been damaged and repaired. An ADA compliant transition ramp is needed. The adjacent timber bullrail along the gangway float is severely damaged and needs to be replaced.

1.4 SCOPE OF ENVIRONMENTAL ANALYSIS

This EA considers relevant environmental resource areas which are the resources, ecosystems, and human communities of concern that could be affected by the proposed action. The environmental resources evaluated in this EA are identified in Chapter 3. The scope of this EA incudes the geographic area potentially influenced by the Proposed Action as well as the area of potential environmental effect, which varies by resource. The main study area encompasses the Facility. For some environmental resources, however, such as for endangered species, the study area expands to the "action area" and for others (such as climate change, air quality, and socioeconomic impacts), then the study area expands to a regional area. The geographic scope for each resource area is identified within the discussion for each resource topic.

PUBLIC/AGENCY INVOLVEMENT

In accordance with FAA Order 1050.1F and Order 5050.4B, the FAA provides the public opportunities to participate in the NEPA process to promote open communication and to improve the decision-making process. FAA has a community involvement policy that recognizes community involvement as an essential part of FAA programs and decisions. All persons and organizations having potential interest in the Proposed Action are encouraged to participate in the environmental analysis process. The formal opportunity to comment involves a 30-day period of public review of the Final EA and potential proposed Finding of No Significant Impact (FONSI). A Notice of Availability of the Final EA and potential FONSI has been published in the Ketchikan Daily News and copies of the documents have been distributed to the City of Hydaburg and at the Hydaburg Tribal Library and Hydaburg School Library. The Final EA and potential FONSI has been made available on the project website: https://dot.alaska.gov/sereg/projects/hydaburg-seaplane-base/. The FAA and DOT&PF will review and consider all comments received during the public comment period. At the conclusion of the public comment period, once comments that have been considered and resolved, if necessary, the FAA will proceed with the finalization and approval of the FONSI.

Agency scoping letters were sent on August 21, 2019 (Appendix B). No objections were expressed concerning this project at that time. All documents can be found in the appendices.

Public coordination for the proposed project included a public notice posted at the following locations on April 22, 2022: City Hall; Hydaburg Post Office; Hydaburg Cooperative Association; Haida Market; and SEARCH. An online public notice was posted on April 27, 2022. A poster was also sent to the Hydaburg Cooperative Association. Public notification included the disclosure that the Facility would be closed for three months during the construction time period. No comments were received.

A mailer was sent on November 6, 2023, to all residents and businesses within approximately 0.25 miles of the project site notifying them of the upcoming project, temporary Facility closure, and temporary noise impacts during construction.

TRIBAL RESOURCES OF INTEREST

The FAA, in cooperation with DOT&PF, sent Government-to-Government Consultation Initiation Letters

on October 19, 2022 to the following Tribal entities of the proposed action area: Sealaska Heritage Institute, Sealaska Corporation, Central Council of the Tlingit and Haida Indian Tribes of Alaska (CCTHITA), Haida Corporation, and Hydaburg Cooperative Association. To date, no Tribes have provided a response.

On March 31, 2023 a Government-to-Government Consultation Findings, Finding of No Adverse Effect letter was sent to the recognized tribes of the proposed action area: Sealaska Heritage Institute, Sealaska Corporation, CCTHITA, Haida Corporation, and Hydaburg Cooperative Association. To date, no Tribes have provided a response.

1.5 REGULATORY FRAMEWORK

The FAA is guided by relevant statutes (and their implementing regulations) and executive orders (EO) that establish standards as well as provide guidance on environmental compliance, including natural and cultural resources management and planning in support of their mission to provide the safest, most efficient aerospace system in the world. The FAA Order 1050.1, Environmental Impacts: Policies and Procedures, provides FAA's agency-wide policies and procedures to ensure agency compliance with the requirements set forth in the CEQ Regulations for implementing NEPA. In Addition to FAA Order 1050.1, there are other NEPA-implementing policies and procedures that may be applicable, including FAA Order 5050.4B, NEPA Implementing Instructions for Airport Actions. Other major statues and EOs that apply to the Proposed Action are as follows:

- Alaska Historic Preservation Act (AHPA), Alaska Statute 41.35
- Archaeological Resources Protection Act of 1979 (16 U.S.C. §§ 470aa–470mm)
- Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668–668c) • CAA (42 U.S.C. §§ 7401–7671q)
- CEQ (Council on Environmental Quality). 2023. National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change. 88 FR 1196. Interim Guidance. January 2023.
- Clean Water Act (CWA), Sections 401, 402, and 404 (33 U.S.C. §§ 1251–1387)
- Endangered Species Act of 1973, Section 7(a)(2), (16 U.S.C. § 1536(a)(2)
- EO 11514 as amended by EO 11991, Protection and Enhancement of Environmental Quality
- EO 11593, Protection and Enhancement of the Cultural Environment
- EO 11988, Floodplain Protection
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- EO 13985, Executive Order on Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government
- EO 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All
- EO 13175, Consultation and Coordination with Indian Tribal Governments
- EO 13834, Efficient Federal Operations
- Fish and Wildlife Coordination Act, Section 2(a), 16 U.S.C. § 742(a)-754)
- Magnuson-Stevens Fishery Conservation and Management Act, Section 305(b)(4)(A), (16 U.S.C. § 1855)
- Marine Mammal Protect Act, Section 101(a)(5)(D) (16 U.S.C. 1371(a)(5)(D))
- Migratory Bird Treaty Act (16 U.S.C. §§ 703–712)

- National Historic Preservation Act of 1966 (54 U.S.C. § 300101)

1.6 DECISION TO BE MADE

The Federal Action requested of the FAA by the DOT&PF is to fund the proposed improvement to the Facility, under FAA's Airport Improvement Program. There are no proposed modifications to FAA Design Standards included in this project.

2.0 ALTERNATIVES TO THE PROPOSED ACTION

2.1 PROPOSED ACTION

DOT&PF, in cooperation with the FAA, proposes to reconstruct the Facility and includes the following elements (bulleted below) that are shown (Appendix A). These elements are further described in detail in Section 3.1.

The project would reconfigure the seaplane float and rehabilitate the remaining facility with a new single float. The proposed project would:

- Refurbish the existing concrete approach;
- Refurbish the existing steel gangway and bearings;
- Remove and dispose of the existing four (4) cantilevered piles and two (2) timber floats;
- Install a new 60 feet x 80 feet seaplane float;
- Install two (2) 20-inch new vertical piles and cap-beam for the gangway shoreward bearings;
- Install a new float restraint structure with four (4) 24-inch vertical piles and two (2) 20-inch batter piles; and
- Install rock sockets for all vertical piles, and tension anchor four (4) of the restraint-structure piles.
- Confirm the conditional approval of the Airport Layout Plan upon implementation of the proposed action.

The facility would be fully closed for up to three months during the implementation of the proposed action. There is no alternate location for seaplanes to dock at Hydaburg. Hydaburg is connected to the road system of Prince and Wales and the community would be able to meet transportation needs during the construction timeframe.

2.2 SCREENING CRITERIA

In compliance with the CEQ regulations implementing NEPA, the FAA must consider reasonable alternatives to the Proposed Action. Only those alternatives determined to be reasonable relative to their ability to fulfill the purpose and need for the Proposed Action warrant detailed analysis. To be considered reasonable, an alternative must fulfill the purpose and need for the action, as well as be technically and fiscally feasible. This section presents the criteria used to determine whether alternatives were considered to be reasonable and, therefore, should be carried forward for analysis.

The FAA and DOT&PF established four screening criteria to identify appropriate alternatives to meet the purpose and need of the Proposed Action:

Screening Criterion 1: Ensure Safe Operations

The Action must ensure that, for both active construction and final completion, the facility and surrounding area remain safe to normal operations. The new facility will be built to meet the highest safety standards and will include features such as high-strength float design, a secure pipe-pile mooring system, and adequate tie-down points for the planes. The facility will also be equipped with emergency response equipment such as fire extinguishers and life rings and will be ambulance accessible via a steel gangway leading down to the flat. Furthermore, the facility will undergo regular safety inspections to ensure compliance with all FAA regulations and standards. By incorporating these measures, the updated seaplane facility will be able to provide safe and reliable access for air transportation services to the remote community of Hydaburg.

Screening Criterion 2: Funding Availability
The Action must qualify for FAA Airport Improvement Program Funding.

Screening Criterion 3: Construction Feasibility
The Action must be feasible to construct and that the proposed activities are commensurate to addressing the purpose and need. The facility will be replaced in-kind using common marine construction methods and practices. Common practices in marine construction include prefabricating components prior to shipment to the construction site. Prefabrication offers several advantages in construction including reduced on-site construction time and improved quality control. Another common construction method on marine projects is the utilization of a barge with a crane which can handle heavy equipment and materials. The use of a barge is advantageous in areas with challenging access, such as remote coastal regions in Alaska. The barge can be floated to the construction site, eliminating the need for extensive land-based transportation and allows the contractor to easily work through tide cycles. Using a construction barge also eliminates the need for additional land-based equipment and infrastructure, minimizing the impact on both the environment and the community.

Screening Criterion 4: Minimization of Environmental Impacts
The Action must avoid or minimize impacts to the environment where possible. The project will incorporate a number of measures into the design and construction plan in order to avoid and minimize potential impacts to Endangered Species Act listed species, marine mammals, and Essential Fish Habitat. Potential minimization measures include marine mammal monitoring during construction and limiting the noise produced from pile driving to a level that is below the temporary threshold for fish injury/harassment. The construction schedule would be coordinated with the local community in order to limit impacts to the travelling public.

2.3 ALTERNATIVES CONSIDERED

This section identifies the proposed alternatives that address the Facility deficiencies stated in Section 1.3, Purpose and Need of the Proposed Action. The analysis has been prepared in accordance with the CEQ regulations (40 CFR 1502.14) for implementing NEPA, as well as FAA's NEPA guidelines (FAA Orders 5050.4B and 1050.1).

2.3.1 ALTERNATIVE 1 – PROPOSED ACTION

The Proposed Action would improve the current Facility by refurbishing the existing seaplane base at the current location. Improvements would include replacing the existing facility with a new float that is designed for the wave environment in Hydaburg and refurbishing the gangway bearing components with a modern design that will minimize friction and prevent damage to the float. The new float will be replaced with a pipe-pile frame which has more strength and durability. These refurbishments to

the existing Facility would re-establish strength, longevity, and safety for its continued use as the only seaplane base serving Hydaburg. 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 Section 2.1, *Proposed Action*. The Proposed Action would also require the following related actions:

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; and
- National Marine Fisheries Service (NMFS) Incidental Harassment Authorization.

Approvals through consultation with:

- The Alaska State Historic Preservation Officer (SHPO), local Indian Tribes, and Alaskan Native Villages, under the National Historic Preservation Act;
- NMFS Section 7 Endangered Species Act Consultation; and
- NMFS Essential Fish Habitat Consultation.

2.3.2 ALTERNATIVE 2 – 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. The No Action Alternative would result in continued structural deterioration and eventually render the facility unsafe and unfit for use by the public.

2.4 RESULTS OF VIABILITY ANALYSIS

Table 2.3-1 demonstrates the application of the screening criteria for each alternative. Within the table, viability analysis alternatives are listed in the first column and each screening criterion is listed across the columns to the right. Each row provides a color-coded summary of information for the associated alternative listed in the first column. White indicates that the alternatives meets the screening criterion in the column header; gray indicates that it does not. Text within each cell briefly describes how a criterion is or is not met by the associated alternative, along with the letter Y if the alternative meets the criterion, or the letter N if it does not.

Table 2.3-1. Matrix of Considered Alternatives Evaluated with the Screening Criteria

Screening Criteria	Alternative 1: Proposed Action	Action Alternative 2: No Action Alternative
1 – Ensure safe operations of a seaplane base to the community of Hydaburg	Y - The Proposed Action would replace the existing facility with a new float that is designed for the wave environment in Hydaburg and refurbishing the gangway bearing components with a modern design that will minimize friction and prevent damage to the float. The new float will be replaced with a pipe-pile frame which has more strength and durability.	N - The seaplane facility would not be repaired, and it would reach the end of its useful life. This would not meet the purpose and need of the project which is to re-establish strength, longevity, and safety at the seaplane facility.
2 – Funding Availability	Y - The project qualifies for FAA Airport Improvement Program Funding.	N - Funding would not be required if there is no action.
3 – Construction Feasibility	Y - Construction of the Proposed Action would be feasible due to the use of common marine construction methods and practices. Prefabrication of components would occur prior to shipment to the site, as well as a barge would be used to eliminate the need for extensive land-based transportation. This would allow the contractor to easily work through tide cycles.	N - Construction would not occur if there were no action.
4 – Minimization of Environmental Impacts	Y - The project will incorporate a number of measures in order to avoid and minimize potential impacts to Endangered Species Act listed species, marine mammals, and Essential Fish Habitat. These include monitoring during construction and limited the noise produced from pile driving to a level that is below the temporary threshold for fish injury/harassment.	N – Not addressing the needed refurbishment measures at the SPB is anticipated to result in further damage to the facility and area, which may result in a greater scope of work to address the damage. This larger scope of work is reasonably anticipated to result in greater environmental impacts to the project area.

2.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM THIS STUDY

This section describes other alternatives considered and eliminated from further environmental analysis. FAA Order 1050.1, Section 7-1.1(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 considered an alternative location inside of the existing boat harbor in Hydaburg where the seaplane facility would be more protected from wave action. After discussion with the facility users, it was determined that relocating the seaplane facility within the harbor would not allow for enough room for pilots to navigate the planes safely during windy conditions and not ensure the safe operation of a seaplane base to the community of Hydaburg.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

This chapter provides a description of the existing environmental, social, and economic setting for the area that would be affected by the Proposed Action. It provides information to serve as a baseline from which to identify and evaluate environmental changes associated with the implementation of the Proposed Action. The environmental components addressed include relevant natural or human environments likely to be affected by the Proposed Action and alternatives.

The affected environment consists of baseline conditions that are used for analysis of the environmental effects from the alternatives described in Chapter 2. A region of influence (ROI) is described for each resource area. The ROI varies among resources and defines the geographic extent of potential effects from the alternatives on the important elements of that resource. Each section in this chapter delineates its ROI and identifies the topics and resources addressed by that section.

Following the affected environment discussion for each resource is the presentation of environmental consequences or effects of each alternative. Changes to the natural and human environments that may result from the Proposed Action and No-Action Alternative were evaluated relative to the existing environment. FAA Order 1050.1F (2015) and FAA 1050.1 Environmental Desk Reference for Airport Actions (2023) 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. Any mitigation measures identified to reduce or eliminate the impact of an alternative on a resource are identified within the analysis for that resource area. This organization is intended to allow the reader to focus their review on the existing condition and impacts to a particular resource area of concern.

Environmental effects are defined in the CEQ NEPA implementing regulations (40 CFR Chapter V, Subchapter A) as direct, indirect, and cumulative changes to the human environment from the Proposed Action or actions that are reasonably foreseeable.

The qualitative terms used to assess the anticipated impacts associated with each of the alternatives are defined as:

- **None** - No measurable impacts are expected to occur.
- **Less than Significant** - Adverse impacts are expected to occur; impacts would be noticeable and would have a less than significant effect on the resource.

- **Significant** - Adverse impacts are expected to occur; impacts would be obvious and would have serious consequences on the resource.

- **Beneficial -** Beneficial impacts are expected to occur.

3.1.1 RESOURCE AREAS CARRIED FORWARD FOR ANALYSIS

After consideration of the anticipated impacts associated with the Proposed Action and public and agency input provided during scoping, the following resources were identified as having potential impacts in association with the implementation of the Proposed Action and carried forward for detailed analysis in this EA:

- Biological Resources – Fish and Wildlife: Marine Mammals, and Threatened and Endangered Species
- Climate Change
- Coastal Resources – Water Resources, Floodplains
- Cultural Resources
- Other Temporary Construction Impacts

3.1.2 RESOURCE AREAS DISMISSED FROM ANALYSIS

After consideration of the anticipated impacts of the proposed action and other alternatives, the following resources summarized in Table 3 were identified as not having a potential for other than insignificant impacts and are dismissed from further consideration:

Table 3.1.2 - Resources Dismissed from Analysis

Environmental & Human Resource Impact Categories	Evaluation
Air Quality	• The Alaska Department of Environmental Conservation (ADEC) Air Non-Point Mobile Source website (ADEC 2023) indicated the proposed action is not in an air quality maintenance or non-attainment area for National Ambient Air Quality Standards. • No air quality analysis is needed because forecasted operations are less than 1.3 million passengers and less than 180,000 operations annually (FAA 2006). • There are no ADEC-reported PM2.5 or PM10 (i.e., particulate matter 2.5 or 10 microns, respectively) data or concerns with suspended particulate matter in Hydaburg (ADEC 2022b). • Temporary impacts from construction are described in Section 3.7.
Biological Resources (partial) • **Bald Eagles** • **Vegetation** • **Wetlands**	• One bald eagle nest is located approximately 1,600 feet north of the project site. The area between the project and nest is forested with buildings in between. A survey will be conducted, and a bald eagle disturbance permit will be obtained if work occurs within the nesting season (March 1 – August 31) (Appendix B). • The project is located in the subtidal marine environment. There is no eelgrass or special aquatic resources. • There are no wetlands present within the project area.

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. • A review of the U.S. Forest Service, National Park Service, and the Alaska Department of Natural Resources (ADNR), and Alaska Department of Fish and Game Special Area Locator websites indicate there are no state Recreation Areas, Critical Habitat Areas, or public parks in the vicinity of the proposed project. • As discussed in Section 3.6, there are no previously documented cultural resources or properties within the project area.
Farmlands	• There are no prime, unique, state, or locally important farmland as defined by the Farmland Protection Policy Act of 1981 in or near the project area.
Hazardous and Toxic Materials and Waste	• There is one contaminated site per the Alaska Department of Environmental Conservation Contaminated Sites database listed as "Cleanup Complete" at the Hydaburg Cannery Powerhouse. The site is approximately 350 feet from the project site. The project is not anticipated to involve or affect any hazardous materials. • There are no known contaminated sites or hazardous and toxic materials and waste located within the project area.
Land Use	• The proposed action area is located within DOT&PF Right-of-Way that has been designated as a seaplane facility. • No land use conflicts exist.
Natural Resources and Energy	• The proposed action would not change energy requirements for Hydaburg.
Noise	• The proposed action is not expected to increase existing airport noise impacts because the proposed action will not increase the frequency or type of aviation traffic that is serviced by the facility. • Temporary impacts from construction are addressed in Section 3.7. • No noise analysis is needed for this project as it does not meet the noise analysis requirement threshold specified in FAA Order 1050.1 Desk Reference, Section 11.1.2 (FAA 2023).
Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks	• The proposed action would benefit local or regional socioeconomics, children's health and safety, and environmental justice by improving airport operational safety and efficiency in a region with a high population of Alaska Native residents that routinely use the Facility. • No concerns were raised about the potential for the Facility's refurbishment to uniquely or significantly affect the socioeconomic impacts, environmental justice and children's environmental health and safety risks of consulted Tribes (Appendix E). • No changes or shifts in population movement or growth, public service demands, or business and economic activity are expected to result from the proposed action.
Visual Resources	• The proposed action would not change the existing visual character of the existing developed airport or measurably increase light emissions to the surrounding community.

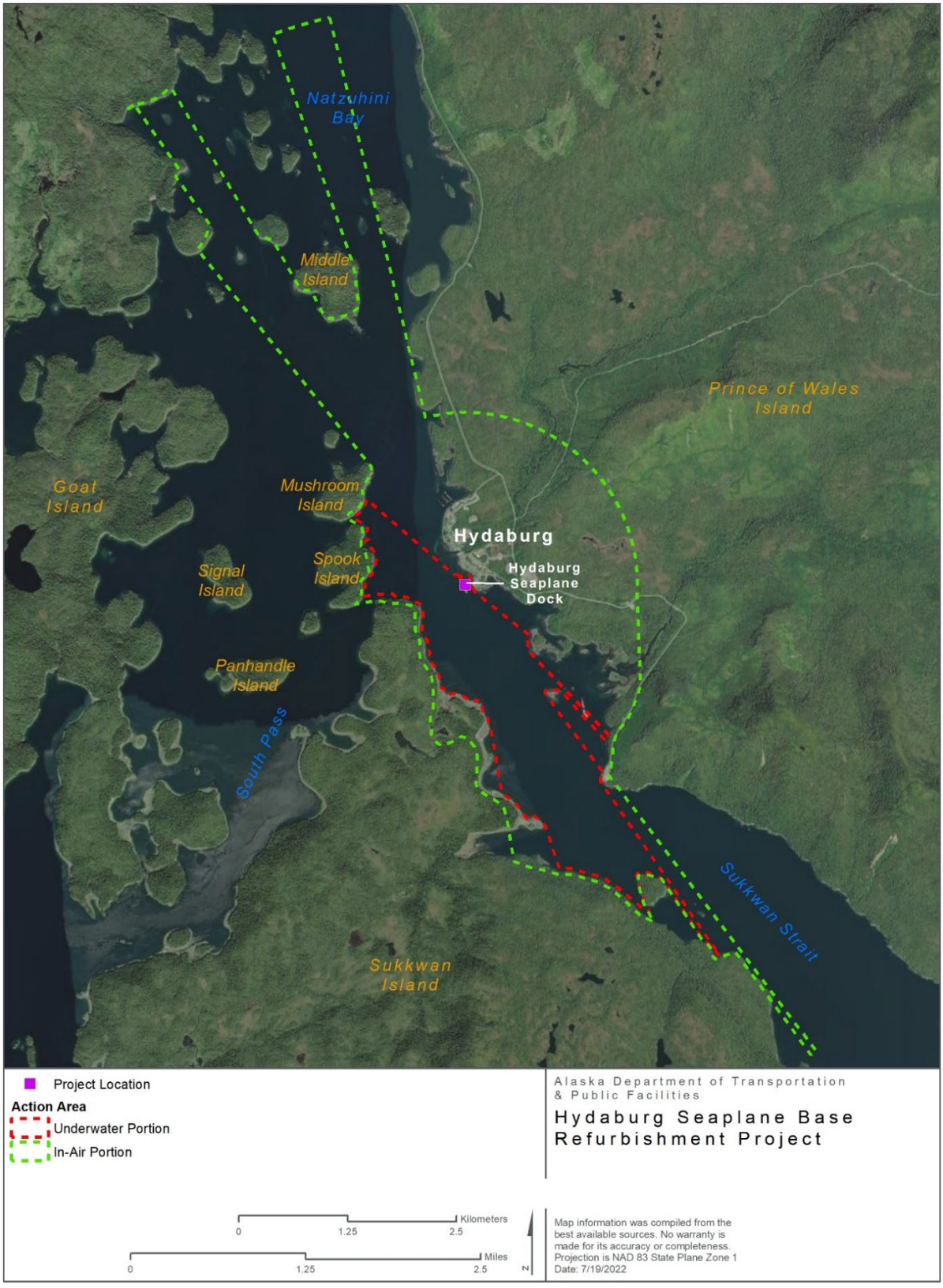
Water Resources (partial) • **Private Drinking Waters** • **Impaired Waters** • **Wild and Scenic Rivers**	• No private drinking water wells are located within the proposed action limits. No sole source aquifers are located in Alaska. • A review of the ADEC Impaired Waters mapper (ADEC 2023) indicated that no impaired water bodies are located in the proposed action area. • No designated state or federal Wild or Scenic rivers are near the proposed action. • Temporary construction impacts are identified in Section 3.7.
Airspace	• The proposed action would not result in any changes to aircraft traffic patterns or increase in aircraft to the project site.

3.2 BIOLOGICAL RESOURCES

3.2.1 AFFECTED ENVIRONMENT

The biological resources applicable in this section include fish and wildlife, including threatened and endangered species as well as other species. As many species are found in the project area are ubiquitous across the waters of Sukkwan Straight, the ROI for biological resources is Sukkwan Straight.

Figure 1 – Biological Resources ROI



3.2.2 FISH

There are four anadromous fish streams located near the proposed action area based on a review of the Alaska Department of Fish and Game's (ADF&G) online Anadromous Waters Catalog (AWC) mapper on June 8, 2023 (ADFG 2022). Table 3.2.3 lists the stream names, ADF&G catalog number, location relative to the project area, and the species present.

Sukkwan Strait is designated as Essential Fish Habitat under the Magnuson-Stevens Fisheries and Conservation Management Act (MSA) for eight species of groundfish and five species of Pacific salmon.

Table 3.2.3 – Anadromous Fish Streams

Stream Name	Anadromous Waters Catalog Number	Location Relative to Project Area	Species Present*
Hydaburg River	103-40-10410	1,200'	CHp, COpr, Pp, SHp
Saltery Creek	103-25-10050	7,600'	CHp, COr, Pp
Unnamed	103-40-10415	1,500'	COr
Unnamed	103-25-10020	3,400'	CHs, Ps
White Good Creek	103-25-10024	4,000'	COr

* CO = coho; P = pink salmon; CH = chum; S = Sockeye; DV = Dolly Varden Trout; p = present; r = rearing; s = spawning

3.2.2.1 APPLICABLE REGULATIONS

The Magnuson-Stevens Fishery Conservation and Management Act is the primary law that governs marine fisheries management in U.S. federal waters.

3.2.2.2 ENVIRONMENTAL CONSEQUENCES

PROPOSED ACTION ALTERNATIVE

The Proposed Action Alternative could have temporary adverse, **less than significant** impacts to fish during construction due to in-water noise and the potential to introduce contaminants into the marine environment during construction. There would be no permanent impacts. If the proposed project was to proceed, impacts would be of a low significance because the impacts are temporary in nature and would occur only during the short construction window. In addition, repairing an existing facility may result in **beneficial** impacts through the maintenance of artificial habitat complexity and shelter for juvenile fish.

DOT&PF consulted with the National Marine Fisheries Service (NMFS), Habitat Conservation Division (HCD) on the Proposed Action Alternative on July 29, 2022 (Appendix C) for temporary impacts to Essential Fish Habitat due to in-water noise during pile driving and the potential to introduce or release contaminants into the marine environment during construction. NMFS HCD determined that the Proposed Action Alternative would not have adverse individual or cumulative effects to EFH for salmon or groundfish.

During the agency scoping, USFWS recommended five standard measures for protection of fish during construction. DOT&PF agreed to three of the recommendations. The two measures not accepted for implementation were the use of silt curtains to isolate nearshore in-water construction work to prevent

turbidity and fine sediment from entering the shoreline fish migration areas; and the use of bubble curtains or solid tubes to enclose pilings to suppress sound pressure waves when installing pilings with an impact pile driver. DOT&PF is not able to use silt curtains during construction because they are very difficult and impractical to manage and maintain due to the shallow water depths and tidal fluctuations and associated site constraints at the proposed work locations. Bubble curtains or solid tubes around the pilings are not needed because of the short duration of impact pile installation. Due to the shallow overburden these piles will require rock sockets and will have minimal impact driving. It is anticipated that impact pile driving durations will be very short for final proofing. In addition, the apparatus for implementing bubble curtains is also not standardized nor commercially available. Bubble curtains are a highly customized solution for reducing pile driving source noise, but they are neither practical nor warranted for marine mammal protection or reduction of fish mortality for this particular project. The measures accepted for implementation are listed in Section 3.2.2.3.

NO ACTION ALTERNATIVE

The No Action alternative would have no construction impacts.

3.2.2.3 SUMMARY OF MITIGATIONS

The EFH consultation for the Proposed Action Alternative resulted in the following mitigation and minimizations measures:

- Piles would be removed and installed with a vibratory hammer to the extent practicable.
- The Contractor would be required to develop a Hazardous Materials Control Plan and provide and maintain absorbent boom materials on-site at all times to contain any potential hydrocarbon releases. Equipment on-site would be kept clean and well maintained.

DOT&PF will implement the following USFWS standard measures for protection of fish during construction:

- Avoid activities that disturb subsurface vegetation.
- Drive piles with a vibratory hammer to the extent practicable.
- To the maximum extent possible, DOT&PF will orient the long axis of the docks within degrees of north-south to minimize shading and promote aquatic vegetation growth which serves as nursery areas for juvenile fishes.

3.2.3 THREATENED AND ENDANGERED SPECIES & MARINE MAMMALS

The NMFS Alaska ESA Section 7 and Critical Habitat Mapper tool has identified eight marine mammal species as potentially occurring within the project area: Steller sea lions (*Eumetopias jubatus*), harbor seals (*Phoca vitulina*), harbor porpoises (*Phocoena phocoena*), Dall's porpoises (*Phocoenoides dalli*), Pacific white-sided dolphins (*Lagenorhynchus obliquidens*), killer whales (*Orcinus orca*), minke whales (*Balaenoptera acutorostrata*), and Hawaii Distinct Population Segment (DPS) humpback whales (*Megaptera novaeangliae*), may occur in the Project area. Northern elephant seals (*Mirounga angustirostris*) have been observed nearby in Ketchikan, approximately 75 km from the project site (Tongass Narrows 2023). In addition, USFWS commented to DOT&PF during agency scoping on the Proposed Action that Northern sea otters are known to inhabit nearshore areas around Prince of Wales Island.

Of those, two ESA-listed marine mammal species are identified to be potentially occurring within the project area or have been documented to occur in the region: Mexico DPS of humpback whales

(*Megaptera novaeangliae*) and Western DPS (wDPS) of Steller sea lions (*Eumetopias jubatus*). The project will have no effect on the wDPS of Steller sea lions because they are not known to occur in the project area. Steller sea lions are not discussed further in this document.

NMFS determined that the sunflower sea star is likely to become an endangered species within the foreseeable future throughout its range, which in includes the project area, and on March 16, 2023, published a proposed rule to list the sunflower sea star as a threatened species (88 FR 16212). NMFS did not propose to designate critical habitat at this time.

3.2.3.1 APPLICABLE REGULATIONS

- The Endangered Species Act of 1973 provides a framework to conserve and protect endangered and threatened species and their habitats.
- The Marine Mammal Protection Act of 1972 protects all marine mammals.

3.2.3.2 ENVIRONMENTAL CONSEQUENCES

PROPOSED ACTION ALTERNATIVE

On December 29, 2022, the FAA and DOT&PF initiated formal consultation with NMFS Office of Protected Resource (OPR) and submitted a Biological Assessment (BA), which addressed potential impacts to ESA species under NMFS jurisdiction. The BA is provided in Appendix D and provides preliminary findings on the impact of the proposed action. The BA also provides proposed mitigations to ensure a less than significant impact to listed protected species under Section 7 of the ESA.

The Proposed Action Alternative could have temporary, likely to adversely affect, **less than significant** impacts to ESA-listed marine mammals and non-listed marine mammals protected under the Marine Mammal Protection Act (MMPA) during in-water pile driving construction activities due to in-water noise, as identified within the BA. Direct effects to humpback whales are possible due to underwater noise from pile installation and removal, adverse impacts on abundance and distribution of humpback whale prey, loss or alternation of habitat, disturbance due to construction vessel traffic, and introduction of pollutants into marine waters. There would be no permanent impacts. If the proposed project was to proceed, impacts would be less than significant because the impacts are temporary in nature and would occur only during the short construction window.

As identified in the BA, individuals from the Mexico DPS of humpback whales may occur in the action area and the project may affect individual present in waters exposed to underwater noise during construction. Exposure to project-related underwater noise may result in behavioral harassment of individual Mexico DPS humpback whales. Consequently, DOT&PF's recommendation for the Mexico DPSO humpback whale is "likely to adversely affect." The project may affect Mexico DPS humpback whales because:

- Humpback whales occur in the action area year-round; and
- In-water pile installation and removal may cause temporary displacement of humpback whales from the project area.
- If individuals are present in the action area during pile installation and removal, they may be subject to elevated underwater noise that disrupts normal behavioral patterns.

On March 16, 2023, NMFS proposed listing the sunflower sea star (Pycnopodia helianthoides) as threatened under the ESA. The sunflower sea star was included in the consultation as a proposed threatened species as

it could potentially be found within the project area. Any construction impacts to the sunflower sea star would likely result from direct injury or disturbance due to pile installation and removal. Therefore, for the sunflower sea star, DOT&PF's recommended effect determination is likely to adversely affect.

The Project may affect sunflower sea stars because:

- Sunflower sea stars may occur in the action area during the scheduled construction window; and
- In-water pile installation and removal may cause direct injury or disturbance to sunflower sea stars.

The project is likely to adversely affect sunflower sea stars because we expect that 15 sunflower sea stars will be taken based on the estimated density of sunflower sea stars in the action area and recent nearby surveys of sunflower sea stars attached to piles.

DOT&PF submitted an application on June 17, 2022 for an Incidental Harassment Authorization (IHA) to NMFS OPR for incidental take for small numbers of marine mammals, excluding sea otters which are managed by USFWS, during construction for the Proposed Action Alternative. NMFS OPR declared the application complete and adequate on March 13, 2023. NMFS and DOT&PF coordinated on the monitoring zone sizes which led to OPR publishing the draft IHA in the Federal Register Notice on July 17, 2023.

On December 19, 2023, NMFS issued an ESA Section 7(a)(2) Biological Conference Opinion (BiOp), which concluded the ESA Section 7 consultation process and provided supporting opinion to the preliminary findings and mitigations identified within the FAA and DOT&PF's BA. The BiOp is provided in Appendix D.

The Final IHA was issued to DOT&PF January 2, 2024, and authorized the incidental harassment from September 15, 2024 to September 14, 2025 under a set of conditions, mitigations and monitoring requirements. The IHA can be found in Appendix D.

NO ACTION ALTERNATIVE

The No Action alternative would have no construction impacts.

3.2.3.3 SUMMARY OF MITIGATIONS

Mitigation measures and conditions proposed in the BA, and identified in the BiOp and IHA, are consolidated and defined in the PSMMP in Appendix D. Though the recommended effect determination is likely to adversely affect, the potential for adverse effects to Mexico DPS humpback whales is anticipated to be reduced by the mitigation measures outlined in the PSMMP. This includes some of the following measures:

General Conditions

A) A copy of the IHA must be in the possession of the Holder of the Authorization (Holder), supervisory construction personnel, lead protected species observers (PSOs), and any other relevant designees of the Holder operating under the authority of this IHA at all times that activities subject to this IHA are being conducted.
B) The species and/or stocks authorized for taking are listed in Table 1 of the IHA. Authorized take, by Level A and Level B harassment only, is limited to the species and numbers listed in Table 1 of the IHA.

C) The taking by serious injury or death of any of the species listed in Table 1 of the IHA or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of the IHA. Any taking exceeding the authorized amounts listed in Table 1 of the IHA is prohibited and may result in the modification, suspension, or revocation of the IHA.
D) The Holder must ensure that construction supervisors and crews, the monitoring team, and relevant DOT&PF staff are trained prior to the start of activities subject to the IHA, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. New personnel joining during the project must be trained prior to commencing work.
E) The Holder also must abide by the reasonable and prudent measures and terms and conditions identified within the December 19, 2023 ESA Section 7(a)(2) BiOp.

Mitigation Requirements

A) The Holder must employ PSOs and establish monitoring locations as described in section 5 of the IHA. The Holder must monitor harassment zones identified in Table 2 of the IHA to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions.
B) Monitoring must take place from 30 minutes prior to initiation of pile driving activity (i.e., pre-start clearance monitoring) through 30 minutes post-completions of pile driving activity.
C) Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine that the shutdown zones indicated in Table 2 of the IHA are clear of marine mammals. Pile driving may commence following 30 minutes of observation when the determination is made that the shutdown zones are clear of marine mammals.
D) If a marine mammal is observed entering or within the shutdown zones indicated in Table 2 of the IHA, pile driving activity must be delayed or halted. Pile driving must be commenced or resumed as described in condition 4(e) of the IHA.
E) If pile driving is delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zine indicated in Table 2 of the IHA or 15 minutes have passed without re-detection of the animal.
F) The Holder must use soft start techniques when impact pile driving. Soft start required contractors to provide an initial set of three strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced-energy strike sets. A soft start must be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer.
G) Pile driving activity must be halted (as described in condition 4(d) of the IHA) upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met, entering or within the harassment zone (as shown in Table 2 of the IHA).
H) The Holder, construction supervisors and crews, PSOs, and relevant DOT&PF staff must avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 meters of such activity, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions, as necessary to avoid direct physical interaction.
I) The Holder may utilize a tiered system to identify and monitor the appropriate Level A harassment zones and shutdown zones, based on the daily maximum expected number of piles to be installed or

the maximum expected pile duration, as described within the IHA. DOT&PF must determine the maximum scenario of pile driving possible for a given day at the beginning of each day (according to defined duration intervals, Table 2 of the IHA). This will determine the appropriate Level A harassment isopleth and associated shutdown zone that must be observed by the PSO(s) for that day (Table 2 of the IHA).

Monitoring Requirements

A) Marine mammal monitoring must be conducted in accordance with the conditions in section 5 of the IHA, described below.
B) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following conditions:

I. PSOs must be independent of the activity contractor (for example, employed by a subcontractor) and have no other assigned tasks during monitoring periods.
II. At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization or Letter of Concurrence.
III. Other PSOs may substitute other relevant experience, education (degree in biological science or related field), or training for prior experience performing the duties of a PSO.
IV. Where a team of three or more PSOs is required, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.
V. PSOs must be approved by NMFS prior to beginning any activity subject to this IHA.

C) The Holder must employ at least two PSOs during all pile driving activities. A minimum of one PSO must be assigned to the active pile driving location to monitor for marine mammals and implement shutdown/delay procedures when applicable by calling for the shutdown to the hammer operator. At least one additional PSO should be placed at the best practical vantage point(s) to ensure that the shutdown zones are fully monitored and a much of the harassment zones (as shown in Table 2 of the IHA) are monitored as practicable.
D) PSOs must record all observations of marine mammals, regardless of distance from the pile being driven, as well as the additional data indicated in section 6 of the IHA.
E) Pre-construction surveys will monitor for sunflower sea stars in the construction footprint and surrounding areas.
F) Bi-weekly surveys throughout the season will be conducted to prevent direct injury to sunflower sea stars.

Reporting

A) The Holder must submit a draft report on all monitoring conducted under this IHA within 90 calendar days of the completion of monitoring or 60 calendar days prior to the requested issuance of any subsequent IHA for construction activity at the same location, whichever comes first. A final report must be prepared and submitted within 30 calendar days following receipt of any NMFS comments on the draft report. If no comments are received from NMFS within 30 calendar days of receipt of the draft report, the report shall be considered final.

B) All draft and final monitoring reports must be submitted to recipients identified within section 6(b) of the IHA).
C) The marine mammal report must contain the informational elements described in the Monitoring Plan and within section 6(c) of the IHA.
D) The Holder must record data in an electronic format and submit all PSO datasheets and/or raw sighting data with the draft report, as specified in condition section 6(b) of the IHA.
E) Reporting injured or dead marine mammals: In the even that personnel involved in the construction activities discover an injured or dead marine mammal, the Holder must report the incident pursuant to the process outlined in section 6(e) of the IHA.

DOT&PF, in addition to the conditions and mitigations listed above, agreed to the following recommendations as mitigations from USFWS for northern sea otters:

- There will be Protected Species Observers (PSOs) on-site during construction that will watch for and report on marine mammals including sea otters. Work will only occur when visibility is sufficient for observations.
- A vibratory hammer would be used rather than an impact hammer to reduce the amount of underwater noise produced to the extent practicable.
- Before commencing pile driving, the designated PSO(s) should ensure no otters are within the exclusion zone, or the area where underwater noise produced by pile driving is likely to result in take of otters. The exclusion zone is a circle centered on the activities, and it can have a much smaller radius if vibratory pile driving is used (15 meters (m)) versus impact pile driving (265 m).
- The exclusion zone should be observed by the PSO(s) for 30 minutes prior to starting pile driving and pile driving should not commence if any otters are present in the exclusion zone at the end of this pre-work observation period. If an otter enters the exclusion zone during pile driving, pile driving should cease until the otter leaves on its own.
- Ramp-up procedures should be used when initiating pile driving so any otters in the area can move away from the sound source when noise levels are relatively low.
- For impact pile driving, contractors should provide an initial set of three strikes from the hammer at 40 percent energy, followed by a 30-second waiting period, then two subsequent three-strike sets. For vibratory pile driving, sound should be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This procedure should be repeated two additional times.

- Pre-construction surveys will monitor for sunflower sea stars in the construction footprint and surrounding areas.

- Bi-weekly surveys throughout the season will be conducted to prevent direct injury to sunflower sea stars.

DOT&PF agreed to the following recommendations as mitigations from USFWS for northern sea otters:

- There will be Protected Species Observers on-site during construction that will watch for and report on marine mammals including sea otters. Work will only occur when visibility is sufficient for observations.
- A vibratory hammer would be used rather than an impact hammer to reduce the amount of underwater noise produced to the extent practicable.

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- Ramp-up procedures should be used when initiating pile driving so any otters in the area can move away from the sound source when noise levels are relatively low.
- For impact pile driving, contractors should provide an initial set of three strikes from the hammer at 40 percent energy, followed by a 30-second waiting period, then two subsequent three-strike sets. For vibratory pile driving, sound should be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This procedure should be repeated two additional times.

3.3 CLIMATE

3.3.1 AFFECTED ENVIRONMENT

The FAA 1050.1 Desk Reference, Version 3 (FAA 2023) provides limited guidance for qualitatively or quantitatively evaluating GHGs under the NEPA, though references the FAA Air Quality Handbook (FAA 2015) regarding the establishment of appropriate Green House Gas (GHG) assessment area boundaries. FAA (2023) notes that for project-level actions, the affected environment for climate is defined as the entire geographic area that could be directly or indirectly affected by the proposed project. FAA (2023) further defines the affected area for airport actions as the extent of the project changes (i.e., immediate vicinity of the airport).

3.3.2 ENVIRONMENTAL CONSEQUENCES

PROPOSED ACTION ALTERNATIVE

Construction/Temporary Impacts: The proposed action alternative's GHG emissions inventory and analysis for the project was conducted by licensed professional civil engineers (structural and construction). Inventory and analysis methods incorporated available data regarding equipment, fuel consumption rates, and best estimates of equipment operation and practices factored into a deterministic or bottom-up approach (Appendix H). Types of GHGs analyzed were carbon dioxide, methane, and nitrous oxide. To estimate CO2 emissions, the following factors were used: diesel; one gallon burned emits 10.21 kilograms (kg) of CO2 (EPA 2023); one gallon burned emits 6.41 grams (g) of CH4 (EPA 2023); one gallon burned emits 0.17 g of N2O (EPA 2023); gasoline – One gallon burned emits 8.78 kg CO2 emitted (EPA 2023); and Production of steel – Production of one metric ton of steel emits 1.27 metric tons of CO2 (IEA 2020). Sources of emissions included in the analysis were: 230-ton crawler crane (pile driving/removal, drilling); generators; weld machines; gasoline-powered skiffs; diesel impact hammer (pile driving); diesel vibratory hammer with power generator; and barge operations (mobilization/demobilization).

Construction for the project is assumed to take 36 working days, with most equipment being operational each day of construction. Using the EPA conversions of gasoline and diesel to CO2 emissions listed above in Section 2.1, total fuel consumption during construction will result in 89.5 metric tons of CO2 emissions. This is equivalent to the emissions from 19.9 gasoline-powered vehicles being driven for a

year (EPA 2023).

Indirect effects considered included steel production and transport of materials (barging). Steel production for the project would result in 114.6 metric tons of CO2 emissions. This is equivalent to energy use of 14.4 homes for one year (EPA 2023), or 10 percent of the population for the City of Hydaburg. Seattle is approximately 750 miles (652.2 nautical miles) from Hydaburg. Two roundtrips (four one-way trips total) are estimated to be required: one roundtrip for equipment and one roundtrip for materials. Each barge trip will take an estimated 108.7 hours with an average fuel consumption of 43 gal of diesel per hour (Calculator Academy 2023). Total fuel consumption is estimated to be 19,565 gal for all four trips. A five percent contingency was added for unaccounted weight which would lead to a decrease in estimated fuel efficiency, resulting in a total fuel consumption of 20,543 gal. In addition to CO2 emissions from diesel, CH4 and N2O were accounted for in the mobilization and demobilization analysis (i.e., transportation) through CO2e4. In other aspects of the GHG analysis CH4 and N2O emissions are negligible and discounted from GHG inventory. The transport of materials and equipment emissions will result 214.08 metric tons CO2e. This is equivalent to the energy use for 27 homes for one year (EPA 2023), or 18.6 percent of the population for the City of Hydaburg.

The analysis determined that the proposed action alternative would cause a measurable net-increase in GHG emissions for the 2024 construction year due to steel production, transport, and operation of heavy machinery during construction.

Operational/Ongoing Impacts: Due to the project not expanding seaplane capacity and the nature of the refurbishment to continue current operations, no change is expected to long term sustained GHG emissions. Climate factors such as sea level change, water quality, and severe weather events are an increasing hazard for the seaplane base infrastructure.

Overall, the potential monetary damages for the Proposed Action Alternative are estimated to be between $7,109.06 and $70,672.42

NO ACTION ALTERNATIVE

The No Action Alternative would result in no additional impacts to climate over current conditions. However, the facility would likely fall into disrepair and would no longer be useable.

3.3.3 SUMMARY OF MITIGATIONS

There are no climate change mitigations. However, the following design considerations would provide sea level and water quality resiliency to the structure:

- Sea level resiliency - Cap-beam elevations on the float restrain structure would be designed to provide a minimum of 10 feet of vertical clearance between the beams and the gangway deck and float;
- Sea level resiliency – pile tension anchors would be designed for increased uplift acting on the float restrain piles;
- Sea level resiliency – the gangway bottom chords and edge of the float would be designed with consideration of potential contact between the two due to maximum sea-level rise; and
- Water quality resiliency – steel components would be hot-dipped galvanized with welded anodes on each of the steel piles to provide adequate passive cathodic protection.

3.4 COASTAL RESOURCES

3.4.1 WATER RESOURCES

3.4.1.1 AFFECTED ENVIRONMENT3

The existing facility is located within Sukkwan Straight which is considered waters of the U.S. Refer to **Figure 1 – Biological Resources ROI.**

3.4.1.2 APPLICABLE REGULATIONS

- Section 10 of the Rivers and Harbors Act (30 Stat 1151; 33 U.S.C. 403)
- Section 404 of the Clean Water Act

3.4.1.3 ENVIRONMENTAL CONSEQUENCES

PROPOSED ACTION ALTERNATIVE

The Proposed Action Alternative would refurbish the existing facility within waters of the U.S. and could have temporary likely to adversely affect, **less than significant impacts** to waters of the U.S. during in-water pile driving construction activities. Impacts include temporary turbidity during pile driving and in-kind replacement of the facility.

NO ACTION ALTERNATIVE

The No Action Alternative would have no additional impacts to waters of the U.S.

3.4.1.4 SUMMARY OF MITIGATIONS

The project would obtain a U.S. Army Corps of Engineers Nationwide Permit for approximately 0.0033 acres of work in tidal waters. All conditions would be complied with. Once the Nationwide Permit is issued, the need for further environmental impact analysis would be assessed to ensure that the issuance of the permit does not invalidate the environmental impact analysis within this EA.

3.4.2 FLOODPLAINS

3.4.2.1 AFFECTED ENVIRONMENT

The City of Hydaburg, Alaska is not a participant in the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP). No other sources for floodplain mapping for the City of Hydaburg have been identified. Flooding sources adjacent to Hydaburg Seaplane facility are the marine tidal waterbody and local drainage areas. No nearby riverine flooding sources have been identified.

3.4.2.2 APPLICABLE REGULATIONS

- Executive Order 11988, Floodplains
- U.S. Department of Transportation (DOT) Order 5650.2, Floodplain Management and Protection.

3.4.2.3 ENVIRONMENTAL CONSEQUENCES

PROPOSED ACTION ALTERNATIVE

The Proposed Action Alternative would encroach into the coastal floodplain but **would not have impacts** because it would not create or increase the flood risk to the welfare of the community. There has been no (FEMA) documented coastal floodplain mapping or assessment done to determine the extent of the flooding (storm surge elevations) and/or wave action at this location caused by coastal storm events. Flood elevations are determined by the wave action seen during a coastal storm event of statistical significance (typically the 100-year storm, or those with an annual exceedance probability of 1%). Flood elevations during a storm of this magnitude are typically only influenced by a significant coastal structure as they are designed to stop wave action and dissipate the energy generated during those events, resulting in a change in wave patterns seen on the shoreline (example: large dikes, levees, or sea walls beginning at the shoreline and extending from the sea floor to the surface for a great length). Smaller structures such as the proposed one would have a no effect on floodplain elevations during these storms as they are not designed to dissipate energy, and wave action of any significance would pass through the structure unaffected. Due to the nature of seaplane facilities being in the ocean, encroaching into the coastal floodplain is unavoidable.

NO ACTION ALTERNATIVE

The No Action Alternative encroaches into the coastal floodplain similar to the proposed action alternative.

3.4.2.4 SUMMARY OF MITIGATIONS

No mitigation measures are proposed or would be required.

3.5 CULTURAL RESOURCES

3.5.1 AFFECTED ENVIRONMENT

Effects to cultural resources are generally predicated on them being within or nearby a proposed action location, and thus affected by proposed action impacts or activities at or near that location. The ROI for impacts to cultural resources at the Facility is the seaplane base property, construction barge staging area, and adjacent pier for access during construction. This ROI approximates the project's Area of Potential Affect (APE).

On August 19, 2022, DOT&PF reviewed the Coast Survey's Automated Wreck and Obstruction Information System, and no known submerged wrecks and obstructions were found to be present within or near the APE. On November 22, 2022, DOT&PF reviewed the Alaska Historic Resources Survey (AHRS) and associated reports. Information identified is described below.

Hydaburg (CRG-00027), an indigenous archaeological site documented in 1972, is described as a "petroglyph and village site presently covered by the contemporary village of Hydaburg." The AHRS information is focused on middens and petroglyphs in the broader area. None of these resources have been identified in the project area; the area has also been disturbed by the previous industrial activities from cannery construction and operation as well as previous seaplane float construction.

The former Hydaburg Cannery (CRG-00668), which was determined eligible for the National

Register of Historic Places (NRHP) in 2016 under Criterion A for association with the commercial fishing industry, is in the immediate vicinity of the APE. During its period of significance, 1936-1965, this property consisted of the cannery, cold storage buildings, and a web house (net storage) building. At the time of the NRHP eligibility determination in 2016, the only remaining elements were the web house, constructed in 1959, and a portion of a ramp where a weather station sits (Gotschall 2015:15). A portion of the APE overlaps with the AHRS boundary of the Hydaburg Cannery (CRG-00668), but does not overlap with the Cannery's contributing features, the web house and the dock portion; rather, the APE is adjacent to these features (Attachment E – Cultural Resources).

According to DOT&PF As-built plans, the existing seaplane facility was constructed with new materials in 1994. It replaced an earlier seaplane facility which was connected to the City Dock pier closer to the shoreline, and which was subsequently removed. The current seaplane facility is not of sufficient age for NRHP consideration and has no association with the former Hydaburg Cannery (CRG-00668).

On March 31, 2023, the FAA made a finding that there would be no adverse effects to historic properties by the Proposed Action Alternative. The finding letter was sent to the following consulting parties: State Historic Preservation Office; Hydaburg Cooperative Association; Haida Corporation; Central Council of the Tlingit and Haida Indian Tribes of Alaska; Sealaska Corporation; Sealaska Heritage Institute; and City of Hydaburg. The State Historic Preservation Officer concurred with the finding of No Historic Properties Adversely Affected on April 27, 2023. No other responses were received.

3.5.2 APPLICABLE REGULATIONS

- National Historic Preservation Act of 1966 (NHPA), as Amended (54 U.S.C. § 300101) et seq.
- Archaeological Resources Protection Act (ARPA) of 1979 (16 U.S. C. §470aa.)
- Alaska Historic Preservation Act (AHPA), Alaska Statute 41.35

3.5.3 ENVIRONMENTAL CONSEQUENCES

3PROPOSED ACTION ALTERNATIVE

The Proposed Action Alternative would have **no adverse effects** because the project is an in-kind replacement that would not involve the historic properties adjacent the area of direct impact. Consequently, there is no potential for any indirect effects in the surrounding community to either Hydaburg (CRG-00027) or the former Hydaburg Cannery (CRG-00668). The SHPO concurred with this determination.

NO ACTION ALTERNATIVE

The No Action alternative would have no impacts on historic properties because the proposed activity would not involve the historic properties adjacent the area of direct impact, and there is no potential for indirect impacts to historic properties further away.

3.5.4 SUMMARY OF MITIGATIONS

No mitigation measures are proposed or would be required.

3.6 OTHER TEMPORARY CONSTRUCTION IMPACTS

Construction impacts are not a unique environmental category under NEPA, though FAA guidance (FAA 2023) notes they should be addressed within each relevant environmental impact category chapter. Construction activities are considered temporary in nature because such activities no longer occur on-site once the project is complete. Construction activities may temporarily induce the following environmental effects depending on numerous factors, such effects include but are not limited to: air quality/dust control, heavy equipment emissions, storm water runoff containing sediment and/or spilled or leaking petroleum products, as well as noise (FAA 2007). While these impacts have been discussed in other sections for environmental categories brought forward for full analyses, other temporary, minor, and insignificant construction impacts are provided in this section to inform the public of their effects to environmental categories dismissed from further review in Table 3.1.2 of Section 3.1. This section is also a basis for development of a robust environmental commitment suite (See Section 5.2 to more fully avoid and minimize temporary and minor impacts).

3.6.1 ENVIRONMENTAL CONSEQUENCES

PROPOSED ACTION ALTERNATIVE

- AIR QUALITY IMPACTS - The operation of heavy equipment may cause temporary air quality impacts due to the suspension of airborne particulates. These impacts are anticipated to be temporary, adverse and **less than significant**.
- NOISE IMPACTS - Pile driving would occur over approximately 26 days within the two-month construction window. Noise impacts due to construction are anticipated to be temporary, adverse and **less than significant**.
- WATER QUALITY IMPACTS - Construction equipment has the potential to leak hydrocarbons or hydraulic fluids into marine waters. These impacts are anticipated to be temporary, adverse and **less than significant**.

NO ACTION ALTERNATIVE

The No Action Alternative would result in **no temporary construction impacts** to the proposed action area.

3.6.2 SUMMARY OF MITIGATIONS

The following environmental commitments would be included as part of the Proposed Action Alternative to reduce temporary construction impacts:

- Pile driving activities would occur only during the day.
- The Contractor would share a project schedule with the community prior to beginning work.
- The Contractor would follow a Hazardous Materials Control Plan and follow BMPs to ensure the potential to leak hydrocarbons or hydraulic fluids into marine waters is minimized.

4 CUMULATIVE IMPACTS

4.1 PROCESS FOR IDENTIFICATION OF CUMULATIVE IMPACTS

There are **no foreseeable cumulative impacts** associated with this project because there has only been one project that repaired a pile since the Facility was constructed in 1994 and there are no future projects anticipated once the Facility is reconstructed. Other projects within Hydaburg have not been near the Facility. The Council on Environmental Quality (CEQ) Regulations define a cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person

undertakes such other actions" (see 40 Code of Federal Regulations [CFR] § 1508.7). Cumulative impacts can be viewed as the total combined impacts on the environment of the proposed action or alternative(s) and other known or reasonably foreseeable actions.

An irreversible or irretrievable commitment of resources refers to impacts on or losses to resources that cannot be recovered or reversed. Per FAA Order 1050.1 and as stated in 40 Code of Federal Regulations (CFR) § 1502.16 of the Council on Environmental Quality (CEQ) Regulations, the FAA must identify as part of the environmental consequences discussion in an Environmental Impact Statement (EIS), any irreversible or irretrievable commitments of resources which would be involved in the proposed action or reasonable alternative(s), should they be implemented. Discussion of irreversible or irretrievable commitments of resources is not required in an Environmental Assessment (FAA 2023).

4.2 IDENTIFIED PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

There are no foreseeable actions to make any further infrastructure improvements to the Facility for quite some time aside from general maintenance. The Facility will continue to operate as it has since 1994 with no perceivable cumulative impacts nor irreversible/irretrievable commitment of resources anticipated to occur.

4.2.1 PAST ACTIONS

The Facility was constructed in 1994. One of the steel piles at the facility broke off during a storm in 2021 and was repaired in 2022. Table 4.3 lists other projects that have occurred nearby in Hydaburg.

Table 4.3 – Past Actions

FAA or Non-FAA Action	Project	Date Completed
FAA Action	Hydaburg Seaplane Base Construction	1994
Non-FAA Action: Hydaburg Cooperative Association	Saltery Point Road Construction	6/15/2010
Non-FAA Action: Hydaburg Cooperative Association	Hydaburg Harbor Replacement	8/20/2013
Non-FAA Action: City of Hydaburg	Sewer Upgrade	6/22/2021
Non-FAA Action: AK DOT&PF State Project	Hydaburg Seaplane Facility Repairs	6/2/2022

4.2.2 PRESENT AND REASONABLY FORESEEABLE FUTURE ACTIONS

There are no present or reasonably foreseeable future actions associated with this Facility aside

from general maintenance.

4.3 CUMLATIVE IMPACTS TO RESOURCE AREAS

There are **no cumulative adverse impacts** to resource areas as a result of this project. Resources areas include fish streams and one material site. The project would not impact fish streams and would not use any material sites; therefore there are no cumulative impacts.

4.3.1 LIST OF RESOURCE AREAS INCLUDED IN ANALYSIS

There are four anadromous fish streams that are the main subsistence food for most Higdáa Gándlaay (Hydaburg) residents per correspondence from Sealaska Heritage Institute (Appendix B). The project is not adjacent to the streams and would not impact the fish streams.

There is one material site approximately 0.25 miles from the project site. The project does not require use of the material site.

5 CONCLUSION

The Hydaburg Seaplane Base Refurbishments have been discussed and analyzed throughout this Environmental Assessment and the FAA has determined that there will be no significant adverse impacts as a result of this project. A Finding of No Significant Impact (FONSI) will be prepared. The Protected Species and Marine Mammal Monitoring Plan describes monitoring procedures for affected marine species and mitigation actions that will be implemented during pile installation and removal. The overall goal of the Protected Species and Marine Mammal Monitoring and Mitigation Plan is to comply with the IHA and Biological Opinion (BiOp) during in-water pile installation and removal by monitoring the project area and documenting all marine mammals potentially exposed to noise at or above established thresholds; minimizing impacts to marine mammals through mitigation measures; and collecting data pertaining to marine mammal exposures (takes), occurrence, and behavior of marine mammals in the Project area. The plan will be followed during pile driving and removal activities thus ensuring that there are no significant impacts to endangered species as a result of the project.

5.1 SUMMARY TABLE OF ENVIRONMENTAL IMPACTS

Table 5.1 provides a summary of the environmental resource categories identified for analysis and the potential environmental impacts from the Proposed Action Alternative and No Action Alternative.

Table 5.1 – Environmental Impacts

Environmental Resource		Proposed Action Alternative	No Action Alternative
Biological Resources	Fish	Less than significant. There would be temporary impacts to Essential Fish Habitat due to in-water noise during pile driving and the potential to introduce or release contaminants into the marine environment during construction.	None.
	Marine Mammals	Less than significant. There would be temporary impacts to marine mammals during in-water pile driving construction activities due to in-water noise.	None.

		Marine mammal monitoring would occur during project construction.	
	Threatened and Endangered Species	Less than significant. There would be temporary impacts to listed marine mammals and sunflower sea stars (a candidate species) during in-water pile driving construction activities due to in-water noise. Protected species monitoring would occur during project construction.	None.
Climate		Less than significant. Due to the project not expanding seaplane capacity and the nature of the refurbishment to continue current operations, no change is expected to long term sustained GHG emissions.	The No Action Alternative would result in no additional impacts to climate over current conditions. However, the facility would likely fall into disrepair and would no longer be useable.
Coastal Resources	Water Resources	Less than significant. Refurbishment of the Facility would occur within Waters of the U.S. A USACE permit would be obtained.	None.
	Floodplains	None. Refurbishment of the Facility would encroach into the coastal floodplain but would not have impacts because it would not create or increase the flood risk to the welfare of the community.	None.
Transportation and Traffic		Less than significant. Refurbishment of the Facility would not increase surface traffic congestions or cause a degradation of level of service provided since no road closures are expected. There would not be an increase in aircraft operations. The facility would be closed for approximately three months during construction.	None.
Cultural Resources		None. The Proposed Action Alternative would have no adverse effects to historic properties.	None.
Other Temporary	Air Quality Impacts	Less than significant. The operation of heavy equipment	None.

Construction Impacts		may cause temporary air quality impacts due to the suspension of airborne particulates	
	Noise Impacts	Less than significant.	None.
	Water Quality Impacts	Less than significant.	None.

5.2 SUMMARY OF MITIGATIONS

The Proposed Action will adhere to all federal, state, and local laws. In addition, construction of the Proposed Action will include measures to avoid, minimize, and mitigate potential environmental impacts through standard operating procedures and best management practices. The following are proposed environmental commitments that arose from coordination with regulatory agencies. In addition to the environmental commitments the proposed project will adhere to all permit stipulations that may arise during the permitting process.

Table 5.2 – Summary of Mitigations

Environmental Resource		Proposed Action Alternative
Biological Resources	Fish	• Piles would be removed and installed with a vibratory hammer to the extent practicable. • The Contractor would be required to develop a Hazardous Materials Control Plan and provide and maintain absorbent boom materials on-site at all times to contain any potential hydrocarbon releases. Equipment on-site would be kept clean and well maintained. • Avoid activities that disturb subsurface vegetation. • To the maximum extent possible, DOT&PF will orient the long axis of the docks within degrees of north-south to minimize shading and promote aquatic vegetation growth which serves as nursery areas for juvenile fishes.
	Marine Mammals	Mitigation measures are outlined in the Protected Species Monitoring and Mitigation Plan (PSMMP) in Appendix D. Northern sea otters: • There will be Protected Species Observers on-site during construction that will watch for and report on marine mammals including sea otters. Work will only occur when visibility is sufficient for observations. • A vibratory hammer would be used rather than an impact hammer to reduce the amount of underwater noise produced to the extent practicable. • Before commencing pile driving, the designated PSO(s) should ensure no otters are within the exclusion zone, or the area where underwater noise produced by pile driving is likely to result in take of otters. The exclusion zone is a circle centered on the activities, and it can have a much smaller radius if vibratory pile

		driving is used (15 meters (m)) versus impact pile driving (265 m). • The exclusion zone should be observed by the PSO(s) for 30 minutes prior to starting pile driving and pile driving should not commence if any otters are present in the exclusion zone at the end of this pre-work observation period. If an otter enters the exclusion zone during pile driving, pile driving should cease until the otter leaves on its own. • Ramp-up procedures should be used when initiating pile driving so any otters in the area can move away from the sound source when noise levels are relatively low. • For impact pile driving, contractors should provide an initial set of three strikes from the hammer at 40 percent energy, followed by a 30-second waiting period, then two subsequent three-strike sets. For vibratory pile driving, sound should be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This procedure should be repeated two additional times.
	Threatened and Endangered Species	Mitigation measures are outlined in the Protected Species Monitoring and Mitigation Plan (PSMMP) in Appendix D. This includes some of the following measures: • Before impact or DTH pile installation begins, the Contractor will employ a soft start or ramp-up procedure. • During pile installation and removal, various shutdown zones will be implemented to avoid the potential for humpback whales to be exposed to injurious underwater noise. • Vessels used in the construction of the Project will follow established transit routes and will travel at slow speeds (less than 10 knots) while in the action area. Additionally, all vessels will avoid marine mammals by at least 10 meters (32.8 feet) and cease operations to the extent safely practicable when a marine mammal approaches within 10 meters. The Project will also abide by the Humpback Whale Approach Regulations (81 FR 62018) and not approach humpback whales within 91.4 meters (100 yards). Therefore, the potential for humpback whales to be struck by vessels is so unlikely as to be discountable. • Pre-construction surveys will monitor for sunflower sea stars in the construction footprint and surrounding areas. • Bi-weekly surveys throughout the season will be conducted to prevent direct injury to sunflower sea stars.
Biological Resources – Other from Agency Scoping		• Install anti-perching devices on facilities/equipment where birds may commonly nest or perch. Cap pipes and cover/seal all small dark spaces where birds may enter and become trapped. • A bald eagle survey will be conducted and a bald eagle disturbance permit will be obtained if work occurs within the nesting season (March 1 – August 31).
Other Temporary	Noise Impacts	Pile driving activities would occur only during the day. The Contractor would share a project schedule with the community prior to beginning work.

Construction Impacts	Water Quality Impacts	The Contractor would follow a Hazardous Materials Control Plan and follow BMPs to ensure the potential to leak hydrocarbons or hydraulic fluids into marine waters is minimized.

6 LIST OF AGENCIES CONTACTED

Agency scoping was conducted and sent to agencies that have jurisdiction over resources within or near the project area. Scoping materials included a letter and site plans. The letter was sent on April 4, 2022 (Appendix B). Table 6.0 shows the agencies contacted and the summary of responses received.

Table 6.0 – Summary of Agency Responses

Agency	Date	Summary of Agency Response to Scoping
USACE	April 5, 2022	• The proposed work would require authorization for the Corps.
Sealaska Heritage Institute	April 11, 2022	• The project is located near four anadromous streams. The project should bear in mind that sockeye salmon are the main subsistence food for most Hydaburg residents. • Concerns include a) important cultural objects nearby (intertidal stone traps), and b) the potential affects the project would have on salmon.
ADEC – Air Quality Division	April 12, 2022	• The proposed project is not located in a non-attainment or maintenance area for air quality control under the Clean Air Act. Therefore, it does not require an applicability analysis under the General Conformity regulations. • Any construction activities should follow all reasonable precautions in accordance with 18 AAC 50.045(d) to prevent particulate matter from being emitted into the ambient air.
NMFS – Alaska Protected Resource Division	April 14, 2022	• There are two listed species that could occur near the project site: Mexico DPS Humpback whales (*Megaptera novaeangliae*) and western DPS Steller sea lions. • There is no critical habitat for Mexico DPS humpback whales in Southeast Alaska. • If there are project specific vessels that would not be occurring but for this project, there may be additional listed species to consider depending on the transit route.
USFWS	May 5, 2022 and August 11, 2023	**Northern Sea Otter** Northern sea otters are known to inhabit nearshore areas around Prince of Wales Island and are protected under the Marine Mammal Protection Act (MMPA). To reduce the potential for take of sea otters, USFWS requested DOT&PF to take appropriate avoidance and minimization measures. Specific recommendations include: • There will be Protected Species Observers on-site during construction that will watch for and report on marine

		mammals including sea otters. Work will only occur when visibility is sufficient for observations. • A vibratory hammer would be used rather than an impact hammer to reduce the amount of underwater noise produced to the extent practicable. • Before commencing pile driving, the designated PSO(s) should ensure no otters are within the exclusion zone, or the area where underwater noise produced by pile driving is likely to result in take of otters. The exclusion zone is a circle centered on the activities, and it can have a much smaller radius if vibratory pile driving is used (15 meters (m)) versus impact pile driving (265 m). • The exclusion zone should be observed by the PSO(s) for 30 minutes prior to starting pile driving and pile driving should not commence if any otters are present in the exclusion zone at the end of this pre-work observation period. If an otter enters the exclusion zone during pile driving, pile driving should cease until the otter leaves on its own. • Ramp-up procedures should be used when initiating pile driving so any otters in the area can move away from the sound source when noise levels are relatively low. • For impact pile driving, contractors should provide an initial set of three stikres from the hammer at 40 percent energy, followed by a 30-second waiting eriod, then two subsequent three-strike sets. For vibratory pile driving, sound should be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This procedure should be repeated two additional times. **Fish and Fish Habitat** USFWS recommends DOT&PF consider the following additional standard measures for protection of fish, wildlife, and their habitats: • Use silt curtains to isolate nearshore in-water construction work to prevent turbidity and fine sediment from entering shoreline migration areas where juvenile fish and returning salmon typically migrate. • Avoid project activities, particularly those that disturb subsurface vegetation, in areas of eelgrass and kelp growth. Eelgrass and kelp provide rearing and refugia habitat for a wide variety of small and juvenile marine fish and invertebrate species. • Use a vibratory hammer to drive pilings, rather than an impact hammer, to reduce the potential for internal injury (e.g., hemorrhaging) or death (acute) to fish from pressure sound waves. • Use bubble curtains or solid tubes to enclose pilings to suppress sound pressure waves when installing pilings with

		an impact pile driver. Sound waves that exceed 206 decibels can physically harm or kill fish. Bubble curtains (streams of bubbles produced by an aerator apparatus) and solid barriers can absorb sound waves and reduce sound pressure. • To the maximum extent possible, orient the long axis of docks within 10 degrees of north-south to minimize shading and promote aquatic vegetation growth which serves as nursery areas for juvenile fishes. **Migratory Birds** • Minimize human presence near nesting birds during construction and maintenance actions. • During the bird breeding season and to the maximum extent practicable, avoid installing lights offshore or within 0.8 kilometer (km) of the coast. Limit construction activities to the time between dawn and dusk to avoid the illumination of adjacent habitat areas. If construction activity time restrictions are not possible, use down shielding or directional lighting to avoid light trespass into bird habitat. Minimize the use of high-intensity lighting, steady-burning, or bright lights. • Install anti-perching devices on facilities/equipment where birds may commonly nest or perch. Cap pipes and cover/seal all small dark spaces where birds may enter and become trapped. **Eagles** • USFWS recommends completing work outside the eagle nesting season (March 1 to August 31). If it is not possible to complete work outside the nesting season and if the nest is greater than 660 feet from the project, then the project is unlikely to bother eagles to the degree that causes nest abandonment, and an incidental take permit would not be recommended. If the nest is closer than 660 feet, or if explosives could be used, then an incidental take permit may be needed and we recommend reaching out to the Service for further coordination. • Pile driving has the potential to impact bald eagles within a half-mile radius. If pile driving might take place during the nesting period, USFWS recommends DOT&PF contract a biologist experienced with conducting raptor surveys and undertake a survey in the half-mile radius around the pile driving zone. o Surveys should be conducted during the egg incubation period, between April 15 and May 15, when adults will be regularly attending nests and easiest to sight. o Helicopters offer the most effective platform for conducting this work.

		○ USFWS appreciates nest locations being recorded using WGS84 datum, and submitted to the Service along with nest status. ○ If a survey reveals in-use nests are located within a half mile of the pile driving site, or within 660 feet of other activities and temporal avoidance is not an option, USFWS recommends applying for an incidental eagle take permit.

7 LIST OF PREPARERS

Preparer	Title and/or Role
Kristi Warden	FAA, Alaska Region, Airports Division, Director
Rodney Clark	FAA, Alaska Region, Airports Division, Deputy Director
Laura Sample	FAA, Alaska Region, Airports Division, Regional Environmental Program Specialist
Heather Arneson	FAA, Alaska Region, Airports Division, Community Planner
Jessica Wuttke-Campoamor, P.E.	FAA, Alaska Region, Airports Division, Project Manager
Misty Butler, P.E.	DOT&PF, Project Manager
Christy Gentemann	DOT&PF, Regional Environmental Manager (Design)
Ben Storey	DOT&PF, Regional Environmental Manager (PD&E)

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APPENDICES

Copies of correspondence to and from agencies and persons contacted during the preparation of the EA will be available in the administrative record and may be included in the EA as appendices.

- Appendix A - Figures
- Appendix B - Agency Coordination
- Appendix C - Essential Fish Habitat Consultation
- Appendix D - Endangered Species Act Consultation
- Appendix E – Section 106 Consultation
- Appendix F – Public Involvement
- Appendix G – Floodplain
- Appendix H – Climate Change Analysis

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- Table 3.2.3 - Anadromous Fish Streams
- Table 4.3 - Past Actions
- Table 5.1 - Environmental Impacts
- Table 5.2 - Summary of Mitigations

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