

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

Sitka Seaplane Base

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Sitka, Alaska

Prepared for:

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On Behalf of the Sponsor:

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DRAFT SUPPLEMENTAL ENVIRONMENT SITKA SEAPLANE BASE SITKA, ALASKA AUGUST 2025

Prepared by DOWL under contract to City and Borough of Sitka					
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This become	es a Federal document when evaluated, sign	ed, and dated by the Re	esponsible FAA Official.		
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ACRONYMS & ABBREVIATIONS

4MP	Marine Mammal Monitoring and Mitigation Plan
	Alaska Administrative Code
	Alaska Department of Environmental Conservation
	Alaska Department of Education and Early Development
	Alaska Department of Fish and Game
	Aviation Environmental Design Tool
	Alaska Heritage Resources Survey
	Alaska Exotic Plant Information Clearinghouse
	Alaska Pollutant Discharge Elimination System
	auxiliary power unit
	Biological Opinion
	City and Borough of Sitka
	methane
	compensatory mitigation plan
	carbon dioxide
	Clean Water Act
	decibels
	Department of Community and Regional Affairs
	distinct population segment
	Environmental Assessment
	Environmental Protection Agency
	Essential Fish Habitat
	Endangered Species Act
	Federal Aviation Administration
	Federal Emergency Management Agency
	formerly used defense sites
	Finding of No Significant Impact
	feet
	gross asset values
	greenhouse gas
	ground service equipment
	Historic American Buildings Survey
	Historic American Engineering Record
	high-density polyethylene
	Hazardous Materials Response Plan
	high tide line
	institutional controls
	Incidental Harassment Authorization
	Information for Planning and Conservation
	kilograms
_	aircraft landing and takeoffs
	mean high water

	Marine Mammal Protection Act
	Memorandum of Agreement
	Magnuson-Stevens Act
	mean sea level
	million tons
MW	megawatts
	nitrous oxide
NAAQS	National Ambient Air Quality Standards
	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOB	Naval Operating Base
NPS	National Park Service
NRHP	National Register of Historic Places
PSOs	Protected Species Observers
RFFA	reasonably foreseeable future actions
RHA	Rivers and Harbors Act
ROD	Record of Decision
SEA	Supplemental Environmental Assessment
SEARHC	Southeast Alaska Regional Health Consortium
sf	square feet
SHPO	State Historic Preservation Officer
Sitka Airport	Sitka Rocky Gutierrez Airport
SolsticeAK	Solstice Alaska Consulting
SPB	Seaplane Base
SPCC	Spill Prevention, Control, and Countermeasures
UAA	University of Alaska Anchorage
	ultra-high-molecular-weight-polyethylene
USACE	U.S. Army Corps of Engineers
	U.S. Census Bureau
USCG	U.S. Coast Guard
	U.S. Fish and Wildlife Service
	United States Geological Survey
	vehicle miles traveled
	Waters of the U.S.

1.0 BACKGROUND

The proposed actions considered by this Supplemental Environmental Assessment (SEA) will occur within the boundaries of lands currently owned by the City and Borough of Sitka (CBS) for the existing Seaplane Base (SPB) and within the boundaries of lands purchases by CBS to accommodate the proposed location for a new SPB. The new SPB would replace the existing and deteriorating SPB which has been in its current location and operational as a SPB for nearly 65 years. CBS has owned, operated, and received Federal grant funding for this location as a SPB base since the 1970s. It was upgraded with Federal grant funding in 1975-1977. Prior to that, the CBS SPB was located at Katlian and Halibut Point Road, originally built in1952.

As shown on **Figure 1**, the existing SPB is located across Sitka Channel from the proposed SPB on Baranof Island. The existing SPB has no potential for expansion. The new SPB would be located near 1190 Seward Avenue on the northwest side of Japonski Island, approximately 1.4 miles west of downtown Sitka, Alaska and approximately 600 miles from Anchorage at Latitude: 57.055418 and Longitude: -135.363889 (Sec. 34 and 35, T55S, R63E, Copper River Meridian, United States Geological Survey [USGS] Quadrangle Sitka A5).

As the lead agency responsible for this Project, the Federal Aviation Administration (FAA) prepared an Environmental Assessment (EA) and issued a Finding of No Significant Impact/Record of Decision (FONSI/ROD) in June 2021 (**Appendix A**). The FONSI/ROD provided a review of the proposed action, mitigation requirements, and the basis for the FAA's finding. This SEA includes updated or new information from the 2021 FONSI ROD. All information from the 2021 FONSI ROD is included in its entirety in **Appendix A**.

The previous proposed action evaluated in the 2021 EA and FONSI/ROD (EA FONSI/ROD) are shown in **Figure 2** and included construction of:

Marine Components (1.65 acres)

- Seaplane float (350 x 46 feet [ft]) with ramps for 14 based seaplanes (4 DE Havilland Beavers and 10 Cessna 206s)
- Transient Loading Float (200 x 30 ft) with capacity for four transient seaplanes (sized for DE Havilland Beavers)
- Drivedown gangway (120 x 12 ft)
- Float Gangway Landing float (120 x 46 ft)
- Pile-supported trestle (240 x 16)
- Future Float Expansion (250 x 50 ft)
- Floating Wave Attenuator north and southeast (if required)
 - North (500 x 20 ft)
 - Southeast (600 x 20 ft)

Upland Base Parking Area and Approach (1.81 acres)

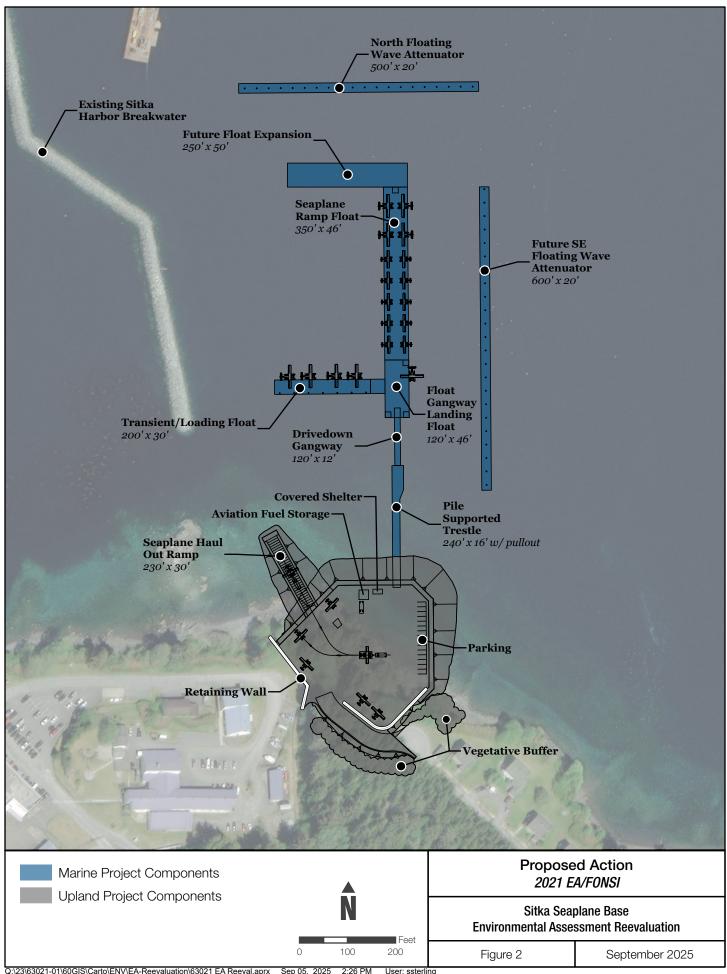
- Seaplane haul out ramp (230 x 30 ft)
- Utilities include electricity, water, and lighting
- 15 Parking spaces
- Security fencing (362 linear ft [lf])
- Vegetative Buffer (0.3 acres)
- Access driveway (200 x 36 ft)
- Covered waiting area and eventual terminal area
- Fuel storage and access facilities
- Accommodations for future expansion, including aircraft maintenance facilities

1.1 Proposed Action

Since issuing the 2021 EA FONSI/ROD, changes to project design have led FAA to determine a SEA is needed. The SEA includes the following updates to the proposed action, to construct a new SPB in Sitka Channel (**Figures 3 and 4**) and deactivate the existing SPB (Proposed Action):

- Updates to Proposed Action (detailed description of Proposed Action is in Section 2.3):
 - Deactivate the existing SPB
 - Minor adjustment of project footprint
- Updating analysis
 - FAA Noise Analysis
 - Section 4(f) Evaluation
 - Climate
- Consultations and permitting
 - Clean Water Act (CWA), Section 404, and Rivers and Harbors Act (RHA) (Section 10)
 - CWA (Section 401 Water Quality Certificate), issued by the Alaska Department of Environmental Conservation (ADEC)
 - National Historic Preservation Act (NHPA, Section 106), State Historic Preservation Office (SHPO, Adverse Effect Mitigation and Memorandum of Agreement [MOA])
 - U.S. Department of Transportation Act (Section 4[f]), FAA (Adverse Effect Mitigation and MOA)
 - Marine Mammal Protection Act (MMPA), National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) Incidental Harassment Authorization (IHA)
 - Endangered Species Act (ESA, Section 7), NMFS (No Jeopardy Finding)
- The Purpose and Need, which can be found in Section 2.0 of **Appendix A**, has not been updated.





2.0 ALTERNATIVES

The 2021 EA FONSI/ROD analyzed two alternatives in detail, the Proposed Action and the No Action Alternative. The purpose of the Proposed Action is to address capacity, safety, and operational and condition deficiencies at the existing Sitka SPB. Seaplanes provide essential transportation services for Sitka residents and regional communities in Southeast Alaska where communities are scattered among islands with no road access or land airports.

The Proposed Action meets the project need, summarized below:

Capacity

The current base has insufficient capacity and space to accommodate current and future demand. The existing SPB has full occupancy and a long waiting list for seaplane owners to rent a slip.

Safety

The existing SPB is located in a congested location with conflicting adjacent uses; has poor, unsafe dock conditions for fueling and maneuvering on the docks; and has congested sea lane and bird hazard conditions. Safety concerns include concentrations of seabirds in and around the operating area, conflicts with boat traffic, lack of adequate taxi lane clearance between the SPB floats and neighboring Sitka Sound Seafoods facility, and submerged rock obstructions adjacent to the floats.

• Deficient Operational Conditions

Timber floats are weathered and have lost their preservative treatment and are losing their floatation capability. Closures have occurred due to a collapsed pile and a damaged transient float. A lack of fueling facilities requires seaplane operators to carry and dispense fuel from small containers. SPB is currently unable to adequately serve commercial traffic because of inadequate vehicle parking, a lack of space to facilitate on-site aircraft maintenance, a drivedown ramp to the floats, a passenger shelter, and equipment storage.

Using FAA SPB planning criteria and aviation user input, other sites were evaluated for their ability to meet the project Purpose and Need, specifically a new site must:

- Meet space requirements needed to adequately address forecast operations capacity meet capacity needs.
- Accommodate safe takeoff, landing, taxiing, and docking operations to meet safety needs.
- Meet identified facility needs, which include a transient dock, haul out dock, on-site
 maintenance facilities, gangways, fueling area, covered passenger waiting area, fueling area, and
 landside vehicle parking.

The Proposed Action is the only site that meets all of these needs. Since 2002, three separate siting analysis studies (**Appendix B**) were developed that ultimately evaluated 12 alternative sites, including the current location of the SPB. Only the proposed site was carried forward to detailed analysis in the EA as the other sites did meet the project purpose and need.

A 2022 siting memo summarized the results from these previous studies and details criteria used to evaluate each alternative and why each alternative, except the proposed location did not meet purpose

and need. More context for this memo is in Section 2.5. This memo, which is also included in **Appendix B**, was provided to consulting parties. After receiving the memo, and during Tribal Consultation, the opportunity was offered for parties to recommend additional sites, additional sites were not offered from consulting parties to study. No new alternatives are proposed.

2.1 Federal Action Requested

Since the 2021 EA FONSI/ROD, the Identification of Federal Action has been updated to "Federal Action Requested" and replaced with the following:

The Federal action requested of the FAA by CBS is to approve the Proposed Action, deactivate the current SPB and fund it under FAA's Airport Improvement Program (AIP). There are no proposed modifications to FAA Design Standards (AC 150-5300-13B) included in this project.

2.2 Public Scoping for the Proposed Federal Action

Since 2021 no additional scoping efforts have occurred, but the FAA has continued to consider comments as they are received. The Public Scoping summary for the 2021 EA FONSI/ROD will be updated with comments received since 2021 and those submitted on the SEA following the closure of the 30-day comment period.

2.3 Proposed Action Alternative

Since the 2021 EA FONSI/ROD, the Proposed Action Alternative has been updated to reflect specific project changes but otherwise has not been significantly modified from its original dimensions or location.

The new Sitka SPB would be located on a 1.8-acre parcel at the end of Seward Street on the northeast end of Japonski Island, which was purchased from the Alaska Department of Education and Early Development (ADEED) and is adjacent to the USCG Air Station Sitka. The Proposed Action is to construct a new SPB in Sitka Channel (**Figures 3 and 4**) and deactivate the existing SPB.

Details and dimensions of the current Proposed Action considered in this SEA consists of the following: Marine Components (0.97 acres)

- Seaplane Ramp Float (417 x 46 ft) to support ten Cessna and four Beaver seaplane berths
- Transient/Loading Dock (175 x 56 ft)
- Drive-Down Float (128 x 68 ft)
- Transfer Bridge (120 x 12 ft)
- Approach Dock (80 x 24 ft) foot approach dock on pile foundation

Upland Base Parking Area and Approach (1.96 acres)

- Seaplane Haulout Ramp (230 x 30 ft)
- Utilities include electricity, water, and lighting

- Security fencing (934 linear ft)
- 14 Parking spaces
- Vegetative Buffer (0.12 acres)
- Access Driveway (200 x 23 ft)
- Covered Shelter

Other Services (locations to be determined at next design phase)

- Aircraft tie-downs
- Maneuvering room
- Fire Truck Access
- Restroom

Existing Seaplane

- Deactivate once new SPB is operational
- Remove existing floats and ramps but leave piles in place

Differences between the 2021 Proposed Action and current Proposed Action is included in Section 1.1 with a comparison of each in **Table 1**.

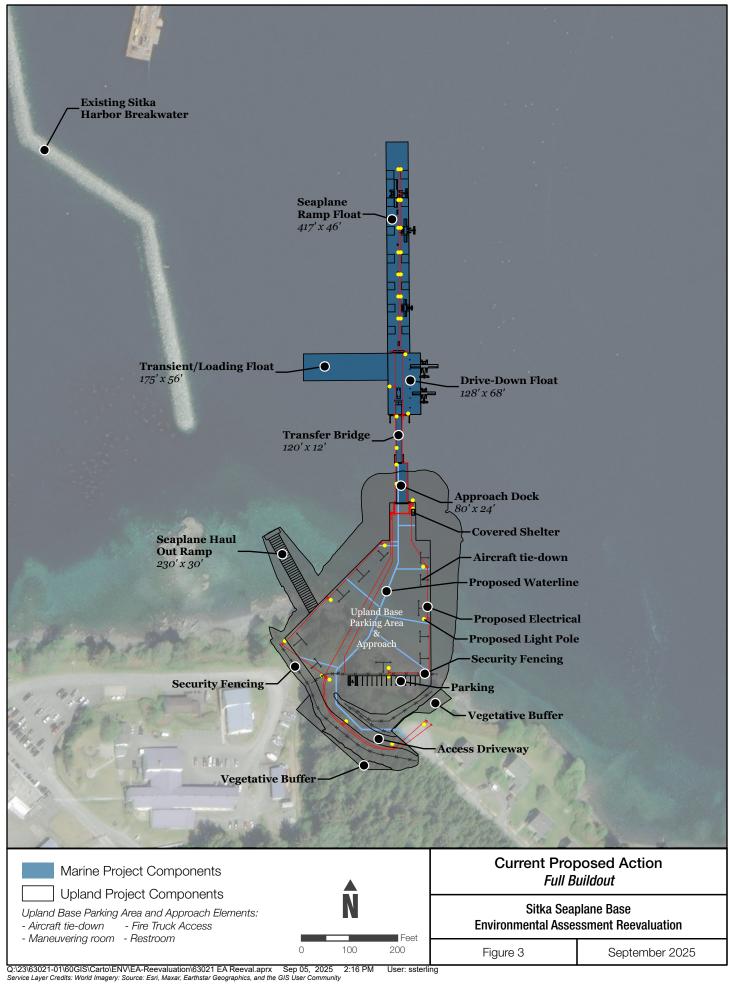




Table 1: Comparison of 2021 and Current Proposed Action

Component	2021 Proposed Action	Current Proposed Action
Marine Components	1.65	0.97
Seaplane float with ramps (sf ^a)	16,100	19,182
Transient Loading Float (sf)	6,000	9,800
Drivedown float(sf)	1,440	8,704
Float Gangway Landing float (sf)	5,520	no longer in project
Pile-supported trestle (sf)	3,840	no longer in project
Future Float Expansion (sf)	12,500	no longer in project
Floating Wave Attenuator north and southeast (sf)	22,000	no longer in project
Transfer Bridge (sf)	not included	1,440
Approach Dock (sf)	not included	1,940
Upland Base Parking Area and Approach (acres)	2.0 b	1.96 b
Seaplane haul out ramp (sf)	6,900	6,900
Utilities	electricity, water, and lighting	electricity, water, and lighting
Parking spaces	15	14
Security fencing (linear ft)	362	934
Vegetative Buffer (acres)	0.3	0.12
Access driveway (sf)	7,200	4,600
Covered waiting area	yes	yes
Fuel storage and access facilities	yes	no
Accommodations for future expansion, including aircraft maintenance facilities	yes	no
Other Actions		
Deactivation of Existing SPB	no	yes
DNR Easement	yes	no
Retaining wall	yes	no
Construction phasing	Half of the entire project first, then the full buildout	Upland Base Parking Area and Approach first, then marine components

^a sf- square-feet

2.4 Permits and Approvals Required

Since the 2021 EA FONSI/ROD, the Permits and Approvals Required has been updated to correct an error – reference to the USFWS ESA is removed as there are no USFWS ESA consultation requirements for the Proposed Action.

^b Quantities reflect usable surface, not fill footprint. The fill footprint is explained in detail in Section 5.11.2.1 Wetlands

2.5 Alternatives Dismissed from Further Consideration

Since the 2021 EA FONSI/ROD, the Alternatives Dismissed from Further Consideration analysis has been updated to address comments from the Sitka Tribe of Alaska to the FAA during government-to-government consultation in November 2021.

To address concerns of alternatives development for the project, the original site selection analysis in the 2002 Sitka Seaplane Base Master Plan was reviewed along with the 2012 Siting Analysis and 2016 Updated Siting Analysis to determine if any of the 13 sites not selected were omitted without cause, if sites other than the preferred site would now be reconsidered based on changing conditions, and if any additional sites could have been evaluated.

This analysis was summarized in a 2022 Technical Memorandum which re-evaluated the Safe Harbor site, as well as summarized all previous siting studies from 2002, 2012, and 2016. The 2022 memo and all siting studies are in **Appendix B**.

The process for alternatives development for the project and site evaluation began in the early 2000's and was documented in the 2002 Master Plan for the SPB. The 2002 analysis originally evaluated 12 different sites based on specific criteria related to sufficient size, safe conditions, access, and proximity to wildlife attractants. The 2012 Master Plan and Siting Analysis included the current preferred alternative and expounded upon two other sites – the existing SPB site (A29) and Eliason Harbor. It evaluated sites using additional criteria including safety and boat conflicts, traffic, facilities, and cost.

The 2016 Updated Siting Analysis further evaluated the three sites analyzed in 2012 and four layout alternatives. The alternatives analysis in both 2012 and 2016 was nearly identical for criteria and results. The only site that was not evaluated in 2012 and 2016 with a detailed explanation is the Safe Harbor Site. Safe Harbor was then re-examined in the 2022 memo, which concluded it would not constitute an improvement over the existing Proposed Action. The identified Proposed Action was reached with focused criteria consideration given the extensive siting analysis studies and iterative refinement during the past two decades and the lack of other identified or recommended sites.

2.6 No Action Alternative

Since the 2021 EA FONSI/ROD, the No Action Alternative has not been updated, with the exception of Section 4.13, therefore there are no changes to the environmental consequences associated with the No Action Alternative. The No Action Alternative is described in Section 3.5 of **Appendix A**.

3.0 GENERAL SETTING

Since the 2021 EA FONSI/ROD, the description of General Setting has been updated to include the following information:

Sitka's marine resources are also abundant, with whale species, seals, sea lions, and sea otters.
 Numerous shellfish can also be found along the coast in Sitka, including edible species like blue mussel and butter clam.

- The Sitka Rocky Gutierrez Airport (Sitka Airport) airport handles a mix of commercial, general
 aviation, and military traffic. The Sitka Airport provides scheduled passenger services operated
 by airlines like Alaska Airlines. It connects Sitka to larger cities such as Juneau, Anchorage, and
 Seattle.
- O'Connell Bridge is the only access to Japonski Island and access to the proposed SPB is via either Seward Avenue or Tongass Drive, which houses a variety of businesses, schools, and medical facilities.
- Sitka Naval Operating Base (NOB) was the U.S. Navy's first air station in Alaska and its former boundaries make up the Sitka Naval Operating Base and U.S. Army Coastal Defenses National Historic Landmark.
- Many of the former military areas along the west shore of the channel have been repurposed
 for institutional uses, including health care and education. The Southeast Alaska Regional Health
 Consortium (SEARHC) is a non-profit health consortium established under the provisions of the
 Indian Self Determination Act serving Southeast Alaska residents.
- The new Mt. Edgecumbe Medical Center Campus (MEMCC) is planned to be a 234,000-square-foot hospital and outpatient facility, scheduled to be built by Fall 2025.

4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter provides a description of the existing environmental, social, and economic setting for the area that would be affected by construction of the Proposed Action. This chapter also presents the environmental effects that would likely result from the implementation of the alternatives presented in Chapter 2. The two alternatives carried forward for full evaluation in this EA are the Proposed Action and the No Build Alternative.

Environmental consequences are described in terms of direct, indirect, and reasonably foreseeable impacts¹. Direct impacts are those that are caused by the action and occur at the same time and place. Indirect impacts are those that are caused by the action but occur later in time or are further removed in distance but are still reasonably foreseeable. Cumulative impacts are those that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (see Section 5.15).

¹ Historically CEQ regulations required consideration of cumulative impacts. In 2023, Congress passed the Fiscal Responsibility Act directed agencies to consider "the reasonably foreseeable environmental effects of proposed agency actions" (42 USC 4332(2)(c). Since the publication of the EA, the CEQ revoked its regulations (40 CFR parts 1500-1508) implementing NEPA, 42 USC 4321 et seq., as amended, in response to Executive Order (E.O.) 14154, Unleashing American Energy. In addition, the Supreme Court issued the Seven County Infrastructure Coalition v. Eagle County, 605 U.S. 975 (2025) ruling on May 29, 2025. As a result of these actions, it is no longer a legal requirement or the policy of the federal government to conduct cumulative impact analyses. In addition, the Seven Counties ruling reinforced the limited scope of NEPA reviews, holding that NEPA does not require an agency to consider environmental effects of other activities and projects "separate in time or place" from the proposed action. Therefore, this Final EA has removed the prior discussion of, and/analysis related to, cumulative impacts.

FAA Order 1050.1F, Environmental Impacts: Policies and Procedures², requires that impacts of a proposed Federal airport project be evaluated for specific resource categories. This is an issues-based environmental assessment; therefore, only those resource categories where the Project impacts were identified as an issue of concern are evaluated in detail. Other resource categories that were not evaluated in detail and the rationale for determining them non-applicable are provided in Chapter 5.1 (Non- Applicable Categories).

4.1 Non-Applicable Categories

In the 2021 EA FONSI/ROD, impacts to several resource categories were not identified and therefore were not carried forward for detailed analysis. The status of each is addressed below.

4.1.1 Air Quality

In the 2021 EA FONSI/ROD, Air Quality was a non-applicable category, however new guidance was issued by FAA in 2024, resulting in the removal of Air Quality from 'Non-Applicable' categories and the addition of a project-specific analysis, which is included in a New Section, Chapter 4.2 Air Quality.

4.1.2 Biological Resources (Plants)

Plants, as a subcategory of biological resources, was not included in the 2021 EA FONSI/ROD. Due to the approximately 1.35 acres of fill placed in terrestrial uplands, plants is a new subsection (4.3.1.1).

4.1.3 Climate

In the 2021 EA FONSI/ROD, Climate was a non-applicable category, however new guidance was issued in 2023, which requires project-specific analysis to assess potential effects, which is included in a New Section, Chapter 4.13, Climate.

4.1.4 Coastal Resources

Coastal Resources remains a non-applicable category.

4.1.5 Farmland

Farmland remains a non-applicable category.

4.1.6 Wild and Scenic Rivers

Wild and Scenic Rivers remains a non-applicable category.

² FAA Order 1050.1G, FAA National Environmental Policy Act Implementing Procedures was published on June 30, 2025. Projects that commence after June 30, 2025 are required to comply with FAA Order 1050.1G, while those projects already underway by that date may follow FAA Order 1050.1F. This Supplement relies upon FAA Order 1050.1F, the Fiscal Responsibility Act of 2023, and current applicable Executive Orders and case law.

4.1.7 Groundwater

Groundwater remains a non-applicable category.

4.2 Air Quality

Since the 2021 EA FONSI/ROD, an Air Quality section has been added. Under FAA guidance in accordance with the Clean Air Act (CAA) an air quality analysis is required when there is a major Federal action. The CAA prohibits Federal action from causing, contributing to, or worsening violations of relevant air quality standards for six criteria pollutants: carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, lead, and particulate matter 2.5, as set forth in the U.S. Environmental Protection Agency (EPA) National Ambient Air Quality Standards (NAAQS). In 2024, FAA published the *Aviation Emissions and Air Quality Handbook* to, among other objectives, ensure air quality assessments meet NEPA requirements by outlining a process to determine when an air quality assessment is needed.

4.2.1 Affected Environment

The Aviation Emissions and Air Quality Handbook outlines an air quality assessment procedure to help determine what depth of analysis is required in accordance with extent of impact from the major Federal action. Sitka does not use the Alaska State implementation plan³ as it is located outside a nonattainment or maintenance area, ⁴ and the Ozone Transport Region.⁵

An air quality analysis is required due to the scope of the new facilities, whereas an exempt action is typically classified as maintenance and upgrades to airport infrastructure. The new SPB facilities have potential to cause a net-increase in criteria air pollutants from (1) expanded aircraft capacity, (2) Increase passenger vehicle capacity, and (3) construction of new facilities.

Screening parameters with Federal action thresholds were used to determine the potential for an adverse impact, see **Table 2**. Thresholds are defined by an annual budget, e.g. the threshold for construction equipment is 125 pieces of equipment in a year which equates to 125 pieces of equipment operating at 16 hours a day, for 356 working days. Construction of the SPB is estimated to require 27 pieces of equipment operating 10 hours a day for 96 working days. Guidance suggests that project emission estimates should be relative to the threshold; the SPB will use 3.7% of the construction emissions budget(threshold).

- FAA Threshold: 125 pieces of equipment x 16 hours x 365 days=730,000 operating hours
- SSB Construction: 27 pieces of equipment x 10 hours x 96 days= 26,920 operating hours
- Proportion of project emissions: 26,920/730,000= 3.7 % x1 25=4.6 Pieces of Equipment

³ A State Implementation Plan (SIP) is a collection of regulations and documents used by a state, territory, or local air district to implement, maintain, and enforce the National Ambient Air Quality Standards, or NAAQS, and to fulfill other requirements of the Clean Air Act.

⁴ Nonattainment areas are distinctly defined geographical areas of the country where the EPA finds the NAAQS are not being attained for one or more of the criteria pollutants

⁵ The Ozone Transport Region is comprised of 10+ East coast states

Table 2: FAA Air Quality Screening for Emissions Inventory

Screening Parameter	FAA Federal Action Threshold	Project Construction Year ⁶	Project Operation Year
Project Variable A (Aircraft Operations). Increase in number of aircraft Landing Takeoffs (LTO) (including changes in GSE and APUs associated with the increase in aircraft operations) as a result of the Federal Action. ⁷	Cause an increase in all aircraft operations of more than 14,000 operations per year	1,090 additional flight LTOs	4,370 additional annual flight LTOs, 57% increase in annual traffic
Project Variable B (Aircraft Taxi Time). Increase in delay or changes to the taxi-in and -out times or taxi distances by on-ground aircraft as a result of the Federal Action.	Cause an increase in aircraft taxi/Idle/delay minutes that exceeds 340,000 minutes	14,500	N/A
Project Variable C (Gross Asset Values [GAV]). Changes in the Vehicle Miles Traveled (VMT) from GAV trips on airport property driven by on-road vehicles that occur as a result of a Federal Action.	Cause an additional 25 million VMT from on-road vehicles per year.	No Increase	58,050 additional on-road miles traveled
Project Variable D (Construction Equipment and/or Ground Support Equipment). Number of pieces of construction equipment that are active and working on the Federal Action, and/or the number of pieces of GSE that will be brought to the airport and operated as a direct result of the Federal Action. This does not include GSE increases due to increases in aircraft operations.	Result in the use of an average of more than 125 pieces of construction equipment during a year.	4.6	No Increase

The Proposed Action does not meet the FAA threshold for conducting an emissions inventory. Accordingly, the three screening parameters that could indicate the potential for project effects to air quality were not applied.

4.2.2 Environmental Consequences of the Alternatives

The Proposed Action is not anticipated to contribute to or worsen violations of NAAQS because the low total impact of facility construction and new operations is so minimal that FAA does not require further analysis or inventory of emissions. The geographical setting and characteristics of the area make it unlikely that an inventory would be required in the future.

⁶ Construction is estimated to be complete in September 2029, increases in traffic were accounted for by extrapolating project operations for the remaining three months of the calendar year

4.2.3 Minimization and Mitigation

No minimization or mitigation actions are proposed or would be required.

4.2.4 Consultation, Permits, and Other Approvals

No consultation, permits, or other approvals related to air quality would be required.

4.3 Biological Resources (Fish and Wildlife)

4.3.1 Affected Environment

4.3.1.1 Plants

Since the 2021 EA FONSI/ROD, the Affected Environment Endangered Species, Critical Habitat, and Marine Mammals Habitat subsection of the Biological Resources section has been updated to include a description of plant habit present in the areas of the Proposed Action above mean high water (MHW). As determined during the wetland delineation, the Proposed Action area is largely forested by western hemlock (*Tsuga heterophylla*) and Sitka spruce (*Picea sitchensis*). The scrub-shrub understory largely consists of stink currant (*Ribes bracteosum*), salmonberry (*Rubus spectabilis*), Sitka mountain ash (*Sorbus sitchensis*), and alder (*Alnus rubra*, *A. viridis*) with an herbaceous layer of false lily of the valley (*Maianthemum dilatatum*) (Appendix F of **Appendix A**). None of the plants identified are species of special status and are all common and widely distributed throughout the region.

4.3.1.2 Marine and Intertidal Habitat

Since the 2021 EA FONSI/ROD, the Affected Environment for Marine and Intertidal Habitat subsection of the Biological Resources section has not been updated due to a lack of additional or different data.

4.3.1.3 Fish and Essential Fish Habitat

Since the 2021 EA FONSI/ROD, the Affected Environment of Fish and Essential Fish Habitat has not been updated due to a lack of additional or different data.

4.3.1.4 Endangered Species, Critical Habitat, and Marine Mammals

Since the 2021 EA FONSI/ROD, the Affected Environment Endangered Species, Critical Habitat, and Marine Mammals Habitat subsection of the Biological Resources section has been updated. The subsections have been reorganized into ESA-Protected Species and MMPA-Protected Species subsections.

ESA-listed Species

NMFS issued a BO (NMFS Consultation Number: AKRO-2023-02513) to meet the requirements of the ESA for this project. In their BO, NMFS confirmed that no fin whales, North Pacific right whales, or sperm whales are known or expected to occur within or near Sitka Channel. The BO stated that there is no critical habitat in the area. The document also stated that humpback whales and Steller sea lions are expected in the area (**Appendix C**).

Several surveys and project-related marine mammal monitoring efforts have documented humpback whale abundance near the Sitka Channel (**Appendix C**). In general, these surveys, spanning different seasons and locales, support the potential presence of humpback whales in the Sitka Channel area year-round but they are more likely to occur during the summer months (June to August) (Solstice Alaska Consulting [Solstice AK] 2023). Anecdotal information from local residents suggests that humpback whales' utilization of the area is intermittent year-round. The abundance, distribution, and occurrence of humpback whales is dependent on and fluctuates with their prey (**Appendix C**). Based on an analysis of migration between winter mating/calving areas and summer feeding areas using photo-identification, Wade et al. (2021) concluded that whales feeding in Alaskan waters belong primarily to the Hawaii Distinct Population Segment (DPS) (recovered from listing under the ESA), with small numbers from the Mexico DPS (listed as threatened under the ESA) and Western Northern Pacific DPS (listed as endangered under the ESA). Humpback whales in the Southeast Alaska summer feeding area are comprised of approximately 98 percent Hawaii DPS individuals and two percent Mexico DPS individuals (**Appendix C**).

In general, marine mammal surveys in the area, spanning different seasons and locales, show the presence of Steller sea lions in the Sitka Channel area year-round, but note that they are most abundant during January and February. Surveys from 1994 through 2022 documented individuals and groups of Steller sea lions ranging from two or three (most common) to 100 (SolsticeAK 2023). Steller sea lions are also attracted to the project area in summer because fishing charter operations often dump fish carcasses nearby (**Appendix C**). In their 2023 draft Alaska Marine Mammal Stock Assessment, NMFS recognizes the eastern stock (equivalent to the eastern DPS) and the western stock (equivalent to the western DPS) of Steller sea lions (Young et al. 2024). The western stock remains listed under the ESA. In the BO, NMFS estimates that 2.2 percent of the total Steller sea lions in the action area are from the endangered western stock and the remaining 97.8 percent are from the delisted eastern stock (**Appendix C**).⁸

Sunflower sea stars (*Pycnopodia helianthoides*) were proposed for listing as threatened under the ESA in March 16, 2023 because between 2013 and 2017 sea star wasting syndrome killed an estimated 90 percent or more of the population (Lowry 2022). NMFS has not proposed to designate critical habitat for sunflower sea stars at this time. No sunflower sea stars were observed in the project footprint during an intertidal survey conducted in 2020 (SolsticeAK 2020), but the depths and substrate could potentially support their presence. ADF&G completed surveys in and around the Sitka Channel and found average densities of 0.002 sunflower sea stars per square meter (Lowry 2022). In addition, the iNaturalist website catalogs sunflower sea star observations and has several records from recent years (2018 to 2023) in areas south of the Sitka Channel (**Appendix C**).

MMPA-listed Species

In addition to the marine mammals listed above, marine mammal species protected by the MMPA may be found in the Project vicinity.

Although gray whales are not common, they have been recorded within the project action area (SolsticeAK 2023). The Eastern North Pacific stock of gray whales migrate along the western coast of Southeast Alaska and have been observed within and near Sitka Sound from late March to May. The

⁸ The NMFS BO, issued in May 2024, refers to Steller sea lion as eastern and western DPSs because it was issued prior to when the Alaska Marine Mammal Stock Assessment began using eastern and western stocks in place of DPSs.

Eastern North Pacific stock of gray whales is not listed as strategic or depleted under the MMPA (Young et al. 2024).

Minke whales are rare in the action area, but they could be encountered. Their range extends from the ice edge in the Arctic during the summer to close to the equator during winter. They are usually sighted individually or in small groups of two to three, but there are reports of loose aggregations of hundreds of animals (NMFS 2020c). No estimates have been made for the number of minke whales or population trends in the entire North Pacific; however, they are not listed as strategic or depleted under the MMPA (Young et al. 2023).

Killer whales have been observed intermittently and usually in groups of four to eight in the project action area. Transient killer whales, primarily from the West Coast transient stock, occur most frequently in the action area. Less often, whales from the Eastern North Pacific Gulf of Alaska, Aleutian Islands, and Bering Sea transient stock occurs in the action area (SolsticeAK 2023). The populations that are known to occur in Sitka Sound are not listed as strategic or depleted under the MMPA (Young et al. 2023).

Harbor porpoises frequent nearshore waters, but are not common in the Project vicinity. Survey data indicates a typical group size of five porpoises and a maximum group size of eight porpoises (SolsticeAK 2023). Harbor porpoises are not listed as strategic or depleted under the MMPA (Young et al. 2023). Harbor seals are common in the inside waters of Southeast Alaska, including in the vicinity of the Project action area year-round.

According to the Alaska Fisheries Science Center's list of harbor seal haulout locations, the closest documented haulout (CE49A) is located in Sitka Sound approximately 5.5 kilometers west of the Project site, beyond Japonski Island (Alaska Fisheries Science Center 2023). Harbor seals are not listed as strategic or depleted under the MMPA (Young et al. 2023).

Northern sea otters are one of the most common species in the vicinity of Sitka Channel (SolsticeAK 2023). They are present throughout the year, typically alone or in small groups (SolsticeAK 2023). The USFWS has jurisdiction of northern sea otter, and the Southeast Alaska stock, which is found in the action area, is not listed as strategic or depleted under the MMPA.

4.3.1.5 Migratory Birds and Eagles

Since the 2021 EA FONSI/ROD, the Affected Environment of Migratory Birds and Eagle Habitat has been updated. Eagles like to nest near coastlines, rivers, large lakes, or streams with an abundant food supply (e.g., fish). Eagles mostly nest in mature or old-growth forests, in trees with branches capable of supporting a nest weighing up to 1,000 pounds. Nests are often in the tallest tree within 600 ft of a waterbody. Environmental consultant Alaska Biological Research (ABR) has published eagle nest locations within Alaska. A review of this data was conducted on October 11, 2024, to identify the nearest nests to the Proposed Action as listed below (ABR 2024). There are no known active or inactive eagle nests on or within 330 ft of the Proposed Action (USFWS 2020). The nearest documented nest is still approximately 1,800 ft to the south.

4.3.1.6 Invasive Species

Since the 2021 EA FONSI/ROD, the Affected Environment of Invasive Species has not been updated due to a lack of additional or different data.

4.3.2 Environmental Consequences of Alternatives

4.3.2.1 Plants

The Proposed Action would result in the removal of approximately 1.35 areas of forest and understory plants. However, impacts would not impact sensitive or uncommon habitat.

4.3.2.2 Marine and Intertidal Habitat

Since the 2021 EA FONSI/ROD, the Environmental Consequences for Marine and Intertidal Habitat subsection of the Biological Resources section has not been updated due to a lack of additional or different data.

4.3.2.3 Fish and Essential Fish Habitat

Since the 2021 EA FONSI/ROD, the Environmental Consequences of Fish and Essential Fish Habitat (EFH) has been updated. Approximately 2.39 acres of EFH below the high tide line would be permanently filled for upland parking and staging associated with the Project. While eelgrass beds, Peterson Creek, and important fish rearing habitat have been largely avoided by the Project footprint, the SPB's overwater structures will shade approximately 0.97 acres of EFH which could permanently reduce habitat or cause fragmentation of algae beds and inhibit eelgrass development in the area. Construction of the new SPB may temporarily adversely impact EFH due to elevated noise from impact pile-driving activities, increased turbidity, increased vessel traffic, risk of invasive species introduction, and increased risk of accidental spills. The mouth of Peterson Creek (AWC: 113-41-10185) may be directly impacted by propagated noise during construction. Impacts are described in detail in the Project's EFH assessment (Appendix B of the 2021 EA/FONSI, which is in **Appendix A**). **Table 3** details potential adverse impacts to EFH from Project activities (NOAA 2017).

Table 3: Potential Adverse Impacts to EFH and EFH-listed Species from Project Activities

Potential Impact	Discharge of Fill Material	Overwater Structures	Pile-Driving and Temporary Pile Removal	Vessel Traffic
Fish Avoidance/Displacement	X	X	Χ	
Loss or Alteration of Fish Habitat	Х	Х	Χ	
Increase in Turbidity	Х		Χ	
Release of Contaminates		Х	Х	Х
Increased Mechanism of Invasive				X
Species Introduction or Dissemination				
Decrease in Ambient Light		Х		
Change in Wave and Current Regimes	Х	Х		Х

Development of the SPB's upland surfaces into more impervious surfaces (e.g., paved areas, shelter structures, haul out ramp.) could exacerbate local stormwater runoff leading to sedimentation, siltation, and an increase in contaminants and debris in EFH. A decrease in aquatic vegetation and phytoplankton as a result of reduced ambient light from the SPB's overwater structures could indirectly impact fish by reducing prey abundance and habitat complexity (NOAA 2017).

Further, construction activities, such as discharge of fill and noise from pile-driving could injure fish. Injured fish, particularly prey species, may be more susceptible to predation resulting in indirect impacts on other EFH species and disruptions to the local marine system. The proposed floats could change the wave and current regime in the area by disrupting and redirecting or slowing circulation, which may alter localized substrate and detrital materials and impact the nearshore detrital food web. Disruptions to sediment transport from the new SPB's marine structures could act as barriers to natural processes required for algal propagation and fish settlement, foraging, rearing, and spawning (NOAA 2017).

During the February 2025 public notice period for the U.S. Army Corps of Engineers (USACE) Section 404 permit, NMFS staff provided a letter that reiterated the need for conservation recommendations (**Appendix C**). Some of the conservation recommendations were agreed to and incorporated, and however can be found in Final EA Section 5.2.3.1 of **Appendix A**.

4.3.2.4 Endangered Species, Critical Habitat, and Marine Mammals

Since the 2021 EA FONSI/ROD, the ESA-listed Species and Critical Habitat and MMPA-listed Species subsections of the Biological Resources section have been updated.

ESA-listed Species and Critical Habitat

Impacts to ESA-listed marine mammals expected in the action area, humpback whales and Steller sea lions, are discussed below and addressed in detail in the Biological Assessment (**Appendix C**) submitted to NMFS as part of Section 7 formal consultation under the ESA.

ESA Section 7 consultation was completed on May 1, 2024, with NMFS's issuance of a Biological Opinion (BO) (AKRO-2023-02513). After consultation was completed, the Project changed as described in this SEA. Consultation was reinitiated and on December 31, 2024, NMFS agreed that the results of their previous consultation continue to apply. ESA consultation materials, including the BO, are found in **Appendix C**.

In their 2024 BO, NMFS estimates that no more than 14 instances of Level B harassment of humpback whales by noise from pile-driving activities would occur. Less than one whale from the threatened Mexico DPS would be impacted by the Project. The BO also states that humpback whales would be impacted. Project-related vessel noise and that vessel strikes may occur; however, vessel disturbance and noise are likely to be negligible because vessel operators would follow mitigation measures and standard vessel regulations designed to reduce marine mammal vessel strikes. According to the BO, disturbance to seafloor, habitat, and prey resources are not expected to adversely affect humpback whales because these disturbances are temporary, and the action area is not important habitat to humpback whales for foraging, migrating, breeding, or other essential life functions.

Mitigation measures, included in the BO, are expected to minimize the risk of exposure of humpback whales to the potential introduction of pollutants into the action area (**Appendix C**). In addition, NMFS states in the BO that the Project would result in a maximum of 22 instances of Level A harassment and a maximum of 160 instances of Level B harassment of Steller sea lions by noise from pile-driving activities. Less than one individual from the endangered western stock would experience Level A harassment and less than three individuals from the endangered western stock would experience Level B harassment from Project-associated pile-driving activities (**Appendix C**).

Project-related exposure to vessel noise and presence, seafloor disturbance and turbidity, and small oil spills would have a very small impact, and NMFS's BO concludes that these stressors will not result in take of Steller sea lions. The temporary increase in ship traffic due to the Proposed Action is unlikely to result in a vessel strike. The BO also states that application of BMPs would result in very little risk to Steller sea lions from non-biodegradable marine debris entanglements and exposure to oil spills. Approximately 2.39 acres of habitat would be lost due to the placement of fill in marine waters (2.24 acres) and intertidal areas (0.15 acres). Overwater structures (0.97 acres) would be installed offshore. Sitka Channel and the Proposed Action area are not pristine marine waters and are not presently designated critical habitat for any ESA-listed species.

The 2024 BO also states that "take" through harassment and permanent impacts to the marine environment from the Proposed Action would not jeopardize either humpback whales or Steller sea lions as the take numbers are low and the area affected by the Project is a relatively small portion of their available habitat (**Appendix C**).

According to NMFS's BO, approximately 0.025 sunflower sea stars might be struck during pile-driving and a maximum of approximately 24 sunflower sea stars could be crushed during the placement of fill for the parking and staging area. The document states that sunflower sea stars would not be impacted by exposure to in-air noise, in-water noise, and vessel disturbance. Because the number of individuals that could be taken by the Project (approximately 25 individuals) is very small relative to the estimated population of sunflower sea stars (over 600 million), the Project would not jeopardize the continued existence of the species. Further, the BO states that coastal construction in Alaska does not appear to be limiting sunflower sea star recovery and that the Project would no impact the species population growth (Appendix C).

The BO asserts that the Project is not likely to appreciably reduce the likelihood of survival or recovery of humpback whales, western stock Steller sea lions, or sunflower sea stars (**Appendix C**).

MMPA-listed Species

Since MMPA-listed fin whales, North Pacific right whales, sperm whales, or Cuvier's beaked whales, Dall's porpoises, Pacific white-sided dolphins, and northern fur seals are not expected in the Project action area, the Project would not likely adversely affect these species.

Gray whales, minke whales, killer whales, harbor porpoises, harbor seals, and northern sea otters could be adversely affected by habitat loss and construction activities due to the Proposed Action. Impacts to humpback whales and Steller sea lions are explained above.

The placement of fill (2.39 acres) and offshore structures (0.97 acres) would result in impacts to marine mammal habitat. Sitka Channel and the Proposed Action area are not pristine marine waters and are not presently designated critical habitat for any species. Permanent impacts from the Proposed Action are not expected to result in major impacts to marine mammals as the area affected by the Project is a relatively small portion of their available habitat.

Direct effects to marine mammals associated with construction, primarily from impact driving, vibratory driving, down-the-hole, pile-driving, and vessel noise, would have the potential to result in Level B harassment (via disturbance reactions and/or masking) of gray whales, humpback whales, minke whales, killer whales, Steller sea lions, harbor porpoises, harbor seals, and northern sea otters. Level A

harassment of Steller sea lions, harbor porpoises, and harbor seals is expected to occur because these species are common in the Project area.

Note that underwater blasting is not proposed, and landside blasting associated with this project was analyzed and found to not have an impact on marine mammals. Marine mammals could be temporarily displaced from the action area due to elevated noise levels produced by in-water construction. Displacement of either species by noise would be temporary and impacts would be limited to short-term effects on the local population.

Vessel traffic generated during construction could result in vessel strikes of marine mammals; however, the risk of vessel strikes associated with the Proposed Action is low given: 1) vessels transporting Project materials to Sitka will follow well-established, frequently used routes; 2) a limited number of vessel trips would be needed for construction (likely no more than 20 barge trips); 3) within Sitka Channel, vessels must travel under 5 miles per hour, within the no wake zone (CBS Code 13.10.195); and 4) for the limited duration of construction. The likelihood of marine mammals exhibiting behavioral responses due to vessel traffic is low. Most species around the Project area are likely habituated to vessel traffic with the location on the Sitka Channel.

There are no known Steller sea lion or harbor seal rookeries or haulouts near the Project area; therefore, the chances of stress due to increased vessel traffic near critical habitat is unlikely. The probability of Project impacts to marine mammals from accidental spills or other pollution due to construction is very small.

The risk of spills and pollutants related to the Project would be mitigated by implementing BMPs and policies to prevent accidental spills during base construction and operation. There would be no fueling facility associated with the Project. If a spill were to occur, plans would be in place and materials would be available for cleanup activities.

The new SPB has the potential to increase water and air traffic in the Sitka Channel vicinity. The noise attributed to seaplanes operating in the channel has potential to impact marine mammal behavior. Although there are no recorded instances of seaplanes and marine mammal conflicts, landings and takeoffs could result in unsafe conditions for animals in the vicinity; however, it is expected that the animals avoid the area during busy periods. Seaplane strikes could occur but are unlikely to injure large whale species because they are much larger than the seaplanes and because there is no underwater propulsion equipment on the seaplanes. Seaplane strikes of small marine mammals are unlikely due to avoidance and because there is no underwater propulsion associated with seaplanes. Seaplane and marine mammal interactions during seaplane taxiing, takeoff, and landing could also pose a risk to human safety. Steller sea lions, harbor seals, and sea otters have been observed to haul out on floats in Sitka harbors and in other locations throughout Alaska, therefore they may haul out on Project floats. The addition of suitable haul out locations in the area could lead to more marine mammals congregating in the area, which could increase negative human interactions and the potential for unavoidable seaplane and/or vessel strikes.

Hazing of marine mammals from the area, if required, would require NMFS's approval. Impacts to marine mammal prey species, such as krill, walleye pollock, Pacific herring, and salmon, are expected to be minor and temporary. The most likely impact to fish and krill from the Project would be temporary behavioral avoidance and displacement from the immediate area from elevated noise levels caused by construction and seaplane operations. The area in which any disruptions to prey species would occur is

relatively small compared to the available foraging habitat around Sitka. Further, mitigation measures would be implemented to reduce impacts of noise on habitat. Therefore, indirect effects on marine mammals during the Proposed Action are not expected to be substantial.

CBS requested and was issued IHAs for the take of marine mammals under NMFS's jurisdiction (**Appendix D**). The IHAs authorized specific numbers of Level B takes of gray whales, humpback whales, minke whales, killer whales, Steller sea lions, harbor porpoises, and harbor seals and specific numbers of Level A takes of Steller sea lions, harbor porpoises, and harbor seals.

The IHAs are valid for one year only and will expire on June 30, 2026, and will need to be reauthorized. An IHA was sought from USFWS for northern sea otters; however, the process was suspended because of Project construction timing. CBS will restart the MMPA/IHA process with NMFS and USFWS about a year prior to construction of the Project.

4.3.2.5 Migratory Birds and Eagles

Since the 2021 EA FONSI/ROD, the Environmental Consequences of Migratory Birds and Eagle Habitat has not been updated, however elements related to mitigation have been moved to 4.3.3.3.

4.3.2.6 Invasive Species

Since the 2021 EA FONSI/ROD, the Environmental Consequences of Invasive Species Habitat has not been updated.

4.3.3 Minimization and Mitigation

4.3.3.1 Fish and Essential Fish Habitat

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation subsection of the Essential Fish Habitat section has not been updated.

4.3.3.2 Endangered Species, Critical Habitat, and Marine Mammals

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation subsection of the Endangered Species, Critical Habitat, and Marine Mammals Habitat section has not been updated.

4.3.3.3 Migratory Birds

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation subsection of Endangered Species, Critical Habitat, and Marine Mammals Habitat has changed to include new mitigation measures. If active bald or golden eagle nests are found within the Project area, a primary zone of a minimum 330 ft would be maintained as an undisturbed habitat buffer around nesting eagles. If bald eagle nests are documented within 0.5 mile during the pre-construction survey, CBS would consult with USFWS prior to the start of construction for any nests within 660 ft of the cut and fill limits or 0.5 mile of pile-driving.

4.3.3.4 Invasive Species

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation of Invasive Species Habitat has not been updated.

4.3.4 Consultations, Permits, and Other Approvals

Since the 2021 EA FONSI/ROD, the Consultations, Permits, and Other Approvals subsection of the Biological Resources Section has been updated. Formal consultation under the ESA for species under NMFS jurisdiction was completed through May 1, 2024, and a Biological Opinion issued by NMFS (Appendix C).

NMFS concluded the Proposed Action is likely to adversely affect, but not likely to jeopardize the continued existence of threatened Mexico DPS humpback whales (Megaptera novaeangliae), endangered western DPS Steller sea lions (Eumetopias jubatus) and proposed sunflower sea stars. NMFS concluded the Proposed Action is not likely to adversely affect the endangered North Pacific right whales (Eubalaena japonica), fin whales (Balaenoptera physalus), and sperm whales (Physeter macrocephalus) and is not likely to destroy or adversely modify designated critical habitat for North Pacific right whale, Mexico DPS humpback whale, or Steller sea lion. No critical habitat has been designated for fin or sperm whales, and none is currently proposed for sunflower sea stars, therefore none will be affected.

An MMPA IHA was issued by NMFS May 3, 2024, for takes of marine mammal under NMFS's jurisdiction (gray whale, humpback whales, minke whale, killer whales, harbor porpoise, harbor seal, and Steller sea lions (**Appendix C**). The IHA will expire in 2026, therefore another IHA will be obtained prior to construction.

ESA consultation with USFWS was not required as northern sea otters are not listed under ESA in Southeast Alaska and short-tailed albatross (*Phoebastria albatrus*) are not found nearshore and the project would have no effect on them. A MMPA IHA for the take of sea otters will be obtained from USFWS prior to construction.

4.4 Historical, Architectural, Archaeological and Cultural Resources

4.4.1 Affected Environment

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of Historical, Architectural, Archaeological and Cultural Resources section has been updated in subsequent sections to add the existing SPB into the study area. The study area has been expanded to include the existing SPB and a 65-decibel (dB) noise level contour for the proposed SPB.

4.4.1.1 Tlingit History

Since the 2021 EA FONSI/ROD, the Affected Environment of Tlingit History subsection of the Historical, Architectural, Archaeological and Cultural Resources section has been updated to include a description of additional survey, including subsurface testing, to address the Sitka Tribe of Alaska's concern for potential burials in the study area.

In May 2024, an additional archaeological field investigation of the project area was completed after concerns were raised by Sitka Tribe of Alaska regarding the potential presence of human remains at the

location (DOWL 2025). The investigation identified additional historic cultural resources but did not locate evidence for human remains.

4.4.1.2 World War II History

Since the 2021 EA FONSI/ROD, the Affected Environment of World War II History subsection of the Historical, Architectural, Archaeological and Cultural Resources section has been updated to include an NPS update to the documentation of the Sitka NOB, new information collected in 2022 and 2024, and a new subsection, Post-World War II History. In September 2024 the National Park Service released updated documentation for the Sitka Naval Operating Base and U.S. Army Coastal Defenses National Historic Landmark which clarified the NHL's historic context compared to the original nomination in 1984. The 2024 NHL update did not include SIT-01115 in the updated NHL boundary. SIT-01115 is outside the NHL boundary and is not a contributing resource to the NHL. Since 2021, two additional cultural resources identification efforts were conducted within the project area. Results of archaeological monitoring in 2022 and additional cultural resource surveys in 2024 identified an additional nine cultural resource features, originally recorded as SIT-01124, listed below.

- 1. Gun Emplacement (Pollnow 2022)
- 2. Raised Circular Feature (Pollnow 2022)
- 3. Rockery Wall (Pollnow 2022)
- 4. Rectangle Depression (DOWL 2025)
- 5. Stacked L-Shaped Wall (DOWL 2025)
- 6. Circular Pit with Log Covering (DOWL 2025)
- 7. Square Depression (DOWL 2025)
- 8. Privy Pit (DOWL 2025)
- 9. Connecting Trenchworks (DOWL 2024)

4.4.1.3 Post-World War II History

Following World War II and the closure of the Sitka NOB in 1944, many of the buildings, structures, and facilities on Japonski Island were transferred to the Bureau of Indian Affairs for the operation of the Mount Edgecumbe Boarding School which opened in 1947. Other facilities which opened on Japonski Island in the vicinity of the proposed new SPB include the Southeast Alaska Regional Health Consortium (SEARHC) and the USCG Air Station Sitka, as well as the development and expansion of the Sitka Airport, all of which display and continued use and development of Japonski Island following WWII. Two sites (SIT-01124 and SIT-01172) are attributed to this post-WWII era. During the eligibility evaluation of the nine features documented by Pollnow in 2022 and DOWL in 2024, DOWL found that only one feature (the gun emplacement) could be attributed to the WWII period. The gun emplacement was incorporated into SIT-01115 due to its spatial and temporal association with the observation post already listed at that Alaska Heritage Resources Survey (AHRS) number. The remaining eight features have been retained as SIT-01124. DOWL evaluated the eligibility of SIT-01124 for listing in the National Register of Historic Places and the analysis recommended that SIT-01124 is not significant under any Criteria A through D and further has lost integrity in the areas of design, materials, workmanship, feeling, and association. Based on the analysis, DOWL recommended that SIT-01124 is not eligible for listing in the National Register of Historic Places (NRHP). The existing SPB, assigned AHRS number SIT-

01172, also dates to the Post-World War II period in Sitka. A dock first appears at the location in 1945 but was reconstructed in the 1970's and has undergone several additions and subtractions of materials since. DOWL's evaluation of SIT-01172 did not find it significant under any Criteria A through D and a loss of integrity in the aspects of design, materials, workmanship, feeling, and association. DOWL recommends SIT001172 is not eligible for listing in the NRHP. On July 1, 2025, SHPO concurred with the determination of eligibility for SIT-01115 (remains eligible), SIT-01124 (not eligible), and SIT-01172 (not eligible) (**Appendix E**).

4.4.2 Environmental Consequences of the Alternatives

Since the 2021 EA FONSI/ROD, the Environmental Consequences section of the Historical, Architectural, Archaeological and Cultural Resources section has been updated to include the existing SPB into the project study area.

4.4.2.1 Tlingit Cultural Uses and Resources

Since the 2021 EA FONSI/ROD, the Environmental Consequences of Historical, Architectural, Archaeological and Cultural Resources (Tlingit Cultural Uses and Resources) has been updated to describe culturally sensitive areas identified by the Sitka Tribe of Alaska.

During government-to-government meetings in 2021 and 2023 the Sitka Tribe of Alaska shared concerns regarding two unchanged and accessible beaches left on the island, which are to the west of the proposed SPB site. The first is an unnamed stretch of beach between Seward Drive and breakwater and the second is John Brown Beach located on the other side of the USCG base. Access to both beaches from either the base or from Seward Avenue on base has been restricted due to changes in USCG security protocols following the attack on September 11, 2001. Access to the unnamed beach is currently only possible through parking at the Seward Avenue turnaround to the east of the proposed SPB site, follow a dirt road, and then follow the fence line to the beach via restricted Coast Guard property at low tide.

In addition, the Sitka Tribe of Alaska shared that Japonski Island and the surrounding area has historically been an important cultural area to the Tribe for fish camps and harvesting food as tribal families lived and camped in the area in the summer. Education, subsistence and fishing camps currently occur at two locations adjacent to Japonski Island on Baranof Island. In response to the two cultural areas and to determine if noise from SPB operations would impact subsistence activities, the updated noise analysis included the two sites identified by the Sitka Tribe of Alaska as important for annual cultural education camps and subsistence activities (identified in the noise report as "Eliason Harbor 1 and 2" as sensitive noise study receptors. The noise report (**Appendix G**) concluded Eliason 1 will be in a relatively quiet location. Eliason Harbor 2, however, is the only location where the average sound level is higher and that is due to Eliason Harbor 2's proximity to the new water lane. Despite the increased noise level, it remains below the 65 dB DNL putting the new Sitka SPB within the compatible land use guidelines.

4.4.2.2 World War II Historic Resources

Since the 2021 EA FONSI/ROD, the Environmental Consequences subsection of Historical, Architectural, Archaeological and Cultural Resources (World War II Historic Resources s) has been updated to clarify the role of noise impacts and historic properties.

The 2021 EA FONSI/ROD stated that impacts to the cultural resources include noise impacts, however, noise impacts from SPB operations are not considered an impact category for the NHL as a quiet soundscape is not a defining characteristic.

4.4.3 Minimization and Mitigation

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation of Historical, Architectural, Archaeological and Cultural Resources has been updated to reflect new information and re-written for clarity.

To avoid visual effects to SIT-00079, CBS has modified site design by lowering the elevation of the apron and developing an interpretive panel to be placed at the boundary between the NHL and the new SPB. Prior to the award of Federal funds, CBS will coordinate with the FAA and NPS to develop a scope of services and execution plan. SHPO and STA will be invited to review the plan. The panel will be developed to industry standards by or under the supervision of a Secretary of the Interior-qualified historian. Panels will include a discussion of seaplane history and continuing use in Southeast Alaska, Sitka, focusing on the region's long history of reliance on seaplanes including the importance of military seaplanes in WWII at the NOB, the demarcation between the Officer's Housing and the new Sitka Seaplane Base, and the role of U.S. Army Coastal Defense Network structures. Panel content will be developed with signatory and concurring party input.

Impacts to previously undocumented WWII artifacts will be addressed by implementing an inadvertent discovery plan (IDP). Under the IDP, if cultural resources are found during construction, work would be halted and the SHPO, Tribe, and consulting parties notified. Work on the site would not restart until appropriate agency consultation occurred.

Consultation with Sitka Tribe of Alaska is underway to address archaeological and tribal monitoring during ground disturbance on the site and IDP protocols in case of discovery of Tribally sensitive cultural resources. FAA has agreed to engage archaeological and tribal monitors during ground disturbing construction activities.

Section 106 consultation has been reinitiated to determine appropriate mitigation to address the adverse effect to SIT-01115. Completion of the Section 106 process is anticipated in Fall 2025 once consultation on the MOA complete and a signed copy is filed with Advisory Council on Historic Preservation. The draft MOA is included in **Appendix E**. Mitigation measures will be updated in the Final SEA.

4.4.4 Consultation, Permits, and Other Approvals

Since the 2021 EA FONSI/ROD, the Consultation, Permits, and Other Approvals subsection for the Historical, Architectural, Archaeological and Cultural Resources section has been updated to include SHPO finding of adverse effect.

On July 1, 2025, SHPO concurred that the Proposed Action would result in an adverse effect to SIT-01115.

4.5 Hazardous Materials, Solid Waste, and Pollution Prevention

4.5.1 Affected Environment

Since the 2021 EA FONSI/ROD, the Affected Environment of Hazardous Materials, Solid Waste, and Pollution Prevention has changed as sites were removed and added, and new subsections were added.

4.5.1.1 ADEC Documented Sites

Since the 2021 EA FONSI/ROD, the analysis area has been updated to reflect the addition of the existing SPB in the project area and to refine the search radius to 1,500 feet. Hazardous waste site databases are and managed by the ADEC or the Federal government and were reviewed to determine if any reported sites are within 1,500 ft of the project. This search radius is based on ADEC requirements for dewatering permits and approved contaminated sites management plan prior to construction. Only sites managed by ADEC that have a status of "active" or IC are subject to this requirement. **Table 4** shows which sites evaluated in 2021 have been removed and sites added in 2024, and **Figure 5** shows location of current contaminated sites within 1,500 ft of the Project.

Table 4: Contaminated Sites on Japonski Island

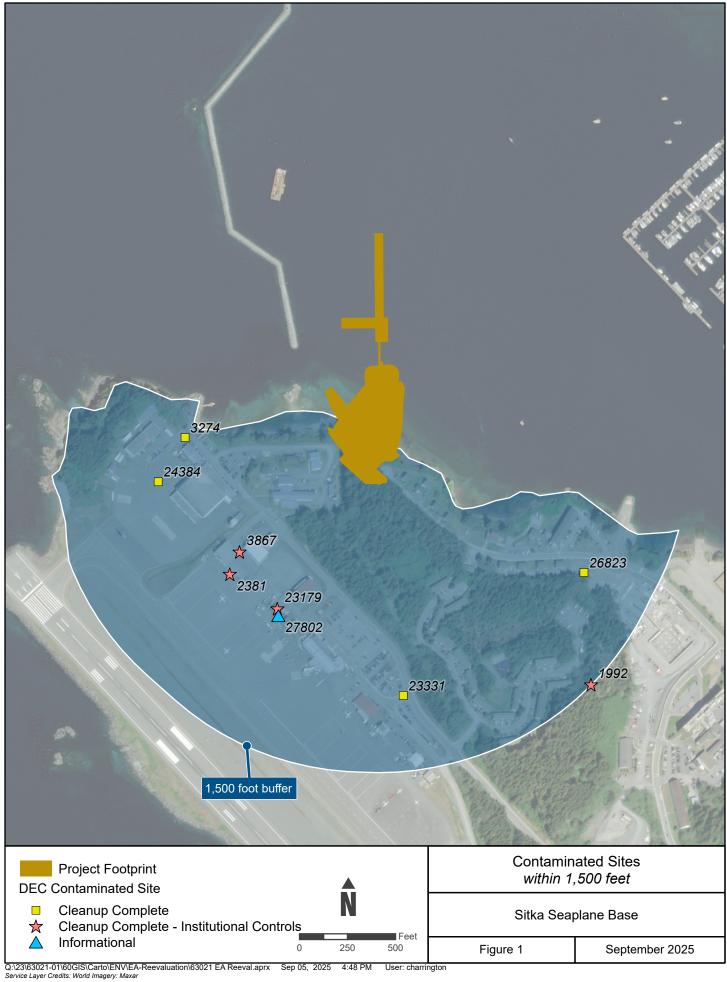
2021 Site Name	Hazard ID	Cleanup Status	Comparison
Sitka Tank Farm	900	Active	New Site due to omission in 2021
Sitka NOB - Area F -Tank Farm No. 2	1992	Complete-IC	Remains - common to both
Mountain Aviation	2381	Complete-IC	Remains - common to both
USCG Japonski Island Base	3274	Complete	Removed from Current Analysis (Cleanup Complete)
Residence - Observatory St. HHOT	3277	Complete-IC	New Site due to the addition of existing base
ADOT&PF Sitka - Airport S&C Building	3867	Complete-IC	Remains - common to both
ADOTPF - Sitka Airport Maintenance Station	23179	Complete-IC	Remains - common to both
Avis Rent A Car -Sitka	23331	Complete	Removed from Current Analysis (Cleanup Complete)
USCG Air Station – Sitka	24384	Complete	Removed from Current Analysis (Cleanup Complete)
SEARHC - Mount Edgecumbe Hospital, Tank ME-3	24558	Complete	Removed from Current Analysis (Cleanup Complete)
Sitka NOB - Area E - Millerville Housing	25735	Complete	Removed from Current Analysis (Cleanup Complete)
Sitka NOB - Area G - Igarotte Housing Area	25736	Complete-IC	Removed from Current Analysis (Greater than 1,500 ft)
Sitka NOB - Area H -Seaplane Dock	25737	Complete	Removed from Current Analysis (Cleanup Complete)
Sitka NOB - Area K Tank Farm No. 3	25738	Complete-IC	Removed from Current Analysis (Greater than 1,500 ft)

2021 Site Name	Hazard ID	Cleanup Status	Comparison
Mount Edgecumbe Hospital USTs 2 & 3	26709	Complete	Removed from Current Analysis (Cleanup Complete)
SEARHC Mount Edgecumbe Bldg 211A	26823	Complete	Removed from Current Analysis (Cleanup Complete)

4.5.1.2 Formerly Used Defense Site

There are 10 sites associated with the Sitka NOB authorized for restoration as a Formerly Used Defense Site (FUDS), identified Mt. Edgecumbe/Sitka NOB Property No. F10AK0496. Of these sites, three sites have documented hazardous, toxic, and/or radioactive waste. The FUDS site is located largely on the southern portion of Japonski Island, with the nearest area located approximately 1/3 mile to the south between Lifesaver drive and Tongass Drive (USACE 2009). Documentation for Japonski indicates the intense use of the island by the military, was concentrated in the southern part of the island. The USACE began environmental work at the site in 1991 and in 2009, the final decision document was issued that stated the proposed response actions meet ADEC requirements for cleanup of petroleum contaminated sites.

Coordination with the USACE for the FUDS site was conducted in 2021(but not included in the EA) and concluded there is no known FUDS contamination at the proposed SPB site (**Appendix H**).



4.5.2 Environmental Consequences of the Alternatives

Since the 2021 EA FONSI/ROD, the Environmental Consequences subsection of Hazardous Materials, Solid Waste, and Pollution Prevention was updated to characterize site conditions on the proposed SPB site to understand potential risk of encountering hazardous materials.

The risk of encountering hazardous materials on the 1.8-acre parcel acquired to accommodate the new SPB is low due to the site conditions and historic use.

Site Conditions

During cultural fieldwork and the geotechnical investigation, site conditions were documented as having the following characteristics: Substrate of gravel and cobbles and buried woody debris; Soils are generally no deeper than three feet below ground surface in most places; and bedrock is encountered at less than two feet below ground surface. The deepest bedrock was observed 6 feet below ground surface. Because of the prevalence of shallow bedrock, the site would not provide sufficient subsurface available for belowground storage, such as underground storage tanks.

Historic Use

As described in Section 5.4, two features were identified that were constructed during WW-II; an observation post and a gun emplacement. In addition, 7 other features were identified, however field work and investigations conducted in 2020 and 2024 did not identify any evidence associating these features with the NOB or being constructed during WWII: Raised circular feature; Two rectangular depressions (not indicative of a structure); Rectangular pit (similar to a privy); L-shaped stacked log wall; Circular pit (not indicative of a structure); Trench network which connects two of the rectangular depressions.

These features are more likely linked to post-WWII training exercises associated with the Cold War, operations of the Mount Edgecumbe School, or other activities not associated with the Sitka NOB and U.S. Army Coastal Defense Network on Japonski Island. This conclusion is based on the following factors:

- The lack of materials, artifacts, or other evidence of these 8 features prevented definitive linking to WWII activities. For the gun emplacement, small munitions and small mortar may have been used, however that is not a hazardous material. Further, based on field site visit, nothing was found such as drums or metal debris (aside from the metal pipe which was part of the gun emplacement). Aside from the military use, the property has remained undeveloped.
- A 1945 map of Japonski Island does not show any facilities at the proposed SPB site. Historic
 images of the location show an area cleared of vegetation with a road and utility pole lines
 transecting the area. Other than the observation post, no buildings or other structures are
 visible.
- Aerials from 1965 and 1979 show the area as being vegetated, bisected a well-established road, and a small structure approximately 300 feet to the northwest, that is the same size and shape as a building currently present on Seward Avenue.

These features do not indicate the existence of structures or storage facilities indicating there was likely no storage of contaminated or hazardous materials.

4.5.3 Minimization and Mitigation

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation of Hazardous Materials, Solid Waste, and Pollution Prevention has been updated as the Proposed Action no longer includes bulk fuel storage.

All construction waste would be managed and disposed of in accordance with all state and Federal solid-waste-management laws and regulations. If contaminated soil or groundwater is encountered during construction, the contractor shall immediately notify CBS and stop work until coordination on the appropriate response occurs with ADEC.

4.5.4 Consultation, Permits, and Other Approvals

No consultation, permits, or other approvals related to hazardous materials would be required.

4.6 Land Use

4.6.1 Affected Environment

Since the 2021 EA FONSI/ROD, the Affected Environment for Land Use has not been updated.

4.6.2 Environmental Consequences of the Alternative

Since the 2021 EA FONSI/ROD, the Environmental Consequences of Land Use has been updated to reflect analysis related to acquisition of the ADEED parcel.

The 1.8 acre parcel purchased from ADEED in 2022 was originally part of a larger property with USCG restrictions and a drainage easement. However, prior to acquisition, the parcel was re-platted to re-align the USCG ROW parcel to encompass all of the existing USCG encroachments inside of the original lot. There are therefore no encroachments on the parcel now.

4.6.3 Minimization and Mitigation

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation subsection of the Land Use section has not been updated.

4.6.4 Consultation, Permits, and Other Approvals

Since the 2021 EA FONSI/ROD, the Consultation, Permits, and Other Approvals subsection of the Land Use section has not been updated.

4.7 Department of Transportation Act, Section 4(f)

4.7.1 Affected Environment

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of the Section 4(f) Resources section has been updated to include new information collected in 2022 and 2024.

During monitoring of geotechnical investigation in 2022, Sea Level Consulting identified several features which were recorded in the AHRS as SIT-01124. DOWL confirmed the presence and location of the features and obtained additional documentation during field investigation in 2024. In addition to the features identified in 2022, DOWL documented six additional features in 2024. One feature (gun emplacement) identified by Sea Level Consulting and further documented by DOWL was reassigned to SIT-01115 due to its spatial and temporal association with the observation post. SIT-01124 has been evaluated and recommended as not eligible for listing in the NRHP.

4.7.2 Environmental Consequences of the Alternative

The Section 4(f) Evaluation memo was updated to reflect additional alternatives analysis and sent separately to the Department of the Interior, in compliance with FAA guidance, on January 3, 2025, for consultation on site alternatives selection. Comments were received from SHPO and NPS with recommendations for updates to the Section 4(f) Evaluation memo. As a result, the Section 4(f) Evaluation memo was updated to reframe the discussion about effects to NHL and other clarifications were made. The Section 4(f) Evaluation memo was subsequently updated again to add additional site design alternatives to determine if avoidance of the observation post was feasible. Several alternatives to either avoid or minimize impacts to the observation post and gun emplacement were evaluated, including options to retain or the observation post through apron reconfiguration or moving the observation post to a different location. Avoidance and minimization measures are not feasible or prudent and the demolition of the observation post and gun emplacement constitute a Section 4(f) use.

Analysis is ongoing until Section 106 is completed. Continued consultation for mitigation measures will be directly with SHPO, the agency with jurisdiction because the 4(f) property is considered a historic property. The current draft of the Section 4(f) memo is included in **Appendix F**.

4.7.3 Minimization and Mitigation

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation subsection of the Section 4(f) resources section has been updated to reflect ongoing consultation.

Mitigation measures would be implemented as avoidance and minimization measures are not possible. Relocating the observation post (SIT-01115) to publicly accessible locations was evaluated for its potential to withstand stabilization, movement and re-establishment. Relocation of the observation post to either a new location near the existing site or on the apron would require the use of cranes, jacks, temporary shoring, and heavy transportation equipment. If the structure was cast directly on bedrock, which is likely given observed surface conditions, removal of the full foundation would not be practical. In that case, the structure could only be partially relocated by separating the walls and roof from the floor slab. This process would involve saw cutting at the base of the walls, disconnecting the superstructure from the foundation, and then transporting the walls and roof as a unit to a newly constructed foundation. Even with this approach, temporary shoring and strengthening measures would not eliminate the probability of structural failure during lifting and transportation due to the age and condition of the materials in the structure. Partial relocation would also require de-construction and would not likely survive movement.

Successful relocation of the observation post has a low probability of success because the observation was built to remain in one place and not designed to withstand transportation forces and the risk of structural failure during moving is high. Moving the structure would subject it to forces and stresses it

was never designed to accommodate, including lifting, bending, and vibration loads not present in its original wartime context.

4.7.4 Consultation, Permits, and Other Approvals

Since the 2021 EA FONSI/ROD, Consultation, Permits, and Other Approvals subsection for the Section 4(f) resources section has been updated to reflect current evaluation efforts for SIT-01124 and SIT-01172. NPS has clarified that SIT-01115 is outside the NHL boundary and is not a contributing resource to the NHL and thus SIT-01115 is not within the jurisdiction of NPS. DOWL has prepared a recommendation of eligibility for SIT-01124 and SIT-01172 and SHPO concurred on July 1, 2025 that neither are eligible. In addition, SHPO concurred on SIT-01115 as an individual property but was silent on its contribution to the NHL (**Appendix E**).

4.8 Natural Resources and Energy Supply

4.8.1 Affected Environment

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of the Natural Resources and Energy Supply section has not been updated.

4.8.2 Environmental Consequences of the Alternative

Since the 2021 EA FONSI/ROD, the Environmental Consequences subsection of the Natural Resources and Energy Supply section has not been updated.

4.8.3 Minimization and Mitigation

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation subsection of the Natural Resources and Energy Supply section has not been updated.

4.8.4 Consultation, Permits, and Other Approvals

Since the 2021 EA FONSI/ROD, Consultation, Permits, and Other Approvals subsection for the Natural Resources and Energy Supply section has not been updated.

4.9 Noise and Noise-Compatible Land Use

4.9.1 Affected Environment

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of the Noise and Noise-Compatible Land Use section has been updated to reflect the addition of two sensitive receivers.

Japonski Island contains the Sitka Airport and the USCG's Air Station Sitka. The proposed SPB is approximately one-half mile east of the Sitka Airport runway and approximately 1,000 feet east of the USCG base. Existing noise contours from Sitka Airport operations end approximately 1,200 feet to the west of the proposed SPB noise contours.

Seaplanes have historically used this corridor beginning in 1937 with the establishment of Alaska's first military seaplane base on Japonski Island. Seaplanes have continuously used this corridor since that time and currently take off and land on Sitka Channel from the existing SPB south and east of the proposed site. Noise-sensitive receptors, such as Mount Edgecumbe High School, SEARHC health care facilities, student dormitories, two subsistence/ fishing camps, and a school staff residence are located on Japonski Island in the vicinity of the proposed site. It has been reported that existing seaplane operations in the channel sometimes interfere with class activities at Mount Edgecumbe High School and activities in the SEARHC facilities.

Aircraft operations were estimated based on interviews and surveys of pilots that had signed papers indicating interest in basing aircraft at the new SPB. Most pilots indicated that they would use their aircraft only seasonally for private use, but there were three pilots that would potentially provide commercial service year-round. Based on the surveys and interviews, peak day operations were conservatively estimated at 92 operations. Each take off and each landing count as one operation. This assumes that all aircraft operators and transient operations were operating on the peak day, which is unlikely; therefore, the estimate of operations is conservative.

4.9.2 Environmental Consequences of the Alternative

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of Noise and Noise-Compatible Land Use section has been updated.

Sound is a physical phenomenon consisting of pressure fluctuations that travel through a medium, such as air, and are sensed by the human ear. Noise is considered unwanted sound that can disturb routine activities (e.g., sleep, conversation, student learning) and can cause annoyance.

Aviation noise primarily results from the operation of fixed and rotary wing aircraft, such as departures, arrivals, overflights, and engine run-ups. There is also special noise sensitivities defined in FAA Order 1050.1F as areas where noise interferes with normal activities associated with its use. Noise sensitive areas may include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and some cultural and historical sites. For areas around an existing or proposed airport, identification of noise sensitive areas, or receptors, is important to establish if these areas may fall within a future noncompatible land use. A noncompatible land use is a land use exposed to aircraft noise in excess of the thresholds established in 14 CFR Part 150. For example, for residential uses, schools, and hospitals, the non-compatibility threshold is 65 dB. Below 65 dB DNL is compatible with all land uses. The 65 dB threshold was established in the 1970s and informed by social surveys and research on community annoyance and health effects related to noise exposure. Studies indicated that a significant portion of the population begins to report annoyance and other adverse effects at this noise level⁹.

For aviation analyses, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of Day Night Average Sound Level (DNL), the FAA's primary noise metric. DNL accounts for the noise levels of all individual aircraft events, the number of times those events occur, and the period of day/night in which they occur. These noise

⁹ FAA is currently engaged in a Noise Policy Review, as directed in FAA Reauthorization Act of 2024. As part of the review, The FAA is looking at the current use of DNL or Day-Night Average Sound Level as the primary noise metric for assessing cumulative aircraft noise exposure. https://www.faa.gov/noisepolicyreview

metrics logarithmically average aircraft sound levels at a location over a complete 24-hour period, with an adjustment added to noise events occurring from 10:00 p.m. and up to 7:00 a.m. the following morning. The DNL metric is still used even though seaplanes do not generally operate in at night.

The noise analysis prepared in support of the 2021 EA FONSI/ROD was not approved by FAA due to a non-standard substitution for the fleet mix and use of peak day operations. The FAA ultimately approved the non-standard substitution, and a new analysis was developed using average daily operations instead of peak day. However, this analysis was also not approved due to not receiving prior approval to run the study using the Hard Ground Attenuation option, which was used because water-based takeoffs and landings will attenuate noise as if it's non-vegetated/paved terrestrial surface. The final, approved noise study was re-submitted January 31, 2024, once FAA formally gave approval for use of Hard Ground Attenuation (**Appendix G**).

In addition, during Government to Government (G2G) consultation, two additional noise receptors were identified and subsequently added to the analysis. Refer to Section 5.3 for how consultation addressed the addition of sensitive noise receptors.

FAA's Aviation Environmental Design Tool (AEDT) tool was used for this analysis and is a comprehensive software system used to model aircraft performance in space and time to estimate fuel consumption, emissions, and noise.

The tool uses detailed databases and algorithms to simulate the noise produced during these different phases, including operations like climbing, which can contribute significantly to the overall noise footprint of an airport environment. AEDT noise modeling used to support evaluation of the Proposed Action included various phases of aircraft operation, including takeoff, climbing, cruise, descent, approach, and landing.

In addition, the 2024 Noise Analysis included new sensitive receptors, including Eliason Harbor 1 and 2 - sites used by Sitka Tribe of Alaska for education purposes during culture camps which involve school age children, as shown in **Table 5**.

Receptor #	Receptor Name	Elevation MSL (ft)	New to 2024 Analysis
1	Mt. Edgecumbe HS	15	
2	Mt. Edgecumbe Housing	21	
3	SEARHC Hospital – Existing Location	21	
4	SEARHC Hospital – New Location	21	
5	SEARHC Community Health Services	20	
6	Building 1200-1202	11	yes
7	Eliason Harbor 1	0	yes
8	Eliason Harbor 2	0	yes

Table 5: Sensitive Receptors in the Project Area

The 2024 Noise Analysis resulted in a decrease, or shift, in sensitive noise receptor DNL exposure between the proposed water lane and the future no action/existing alternatives for all but two sensitive receptors. This is mainly attributed to the movement of the water lane further into the Western Anchorage (which lies immediately to the east of the breakwaters) and which puts a larger amount of

space between the operations area and the receptors. The waterlane moved because in 2002, the Sitka Seaplane Base Master Plan identified risks associated with the existing waterlane and the need for relocation. This waterlane, or general route seaplanes use to access the area, has been in existence since the 1930s and noise associated with seaplanes has been a sustained impact associated with that current and historical waterlane use.

The 2016 Updated Siting Analysis provided an approximate location for a waterlane west of the existing waterlane but an exact location was not defined. As part of the SPB project in Fall 2020, planners determined the proposed, waterlane location to minimize taxi distance and user conflicts. It should be noted, however, that the chosen runway ends only represent the furthest extent from the water lane midpoint that operations can occur. As such, there is a slight variability in overall noise exposure. Runway 12W's threshold is positioned in such a way that pilots taxiing in a straight line towards Eliason Harbor will find themselves in line with Runway 12W's threshold, poising the new water lane to be in a relatively quieter location than prior. Receptor 8: Eliason Harbor 2, is the only location where the average sound level is higher; this is due to Eliason Harbor's proximity to the new water lane. **Table 6** summarizes these results.

	•		•	•
Receptor #	Receptor Name	Existing/No Action: Noise Level (dB)	Proposed: Noise Level (dB)	Change in Noise Level (dB)
1	Mt. Edgecumbe HS	61	58	-3
2	Mt. Edgecumbe Housing	53	51	-2
3	SEARHC Hospital – Existing Location	52	50	-2
4	SEARHC Hospital – New Location	55	52	-2
5	SEARHC Community Health Services	55	52	-2
6	Building 1200-1202	53	53	0
7	Eliason Harbor 1	60	59	1
8	Eliason Harbor 2	54	63	+9

Table 6: Noise Level Differences of Observed Sensitive Receptors in the Project Area

Despite the increased noise level at Receptor 8, all receptors remain below the 65 dB DNL putting the new Sitka SPB within the compatible land use guidelines from Table 1, Appendix A of Title 14 CFR Part 150 (Appendix G).

Although vehicles accessing the SPB would slightly increase traffic on Seward Avenue, overall noise levels are not expected to increase substantially as traffic would be spread throughout the week and cars would be traveling at a slow speed on Seward Avenue. Therefore, the Proposed Action would not substantially increase traffic noise, particularly inside and no noise analysis was conducted to evaluate noise from traffic.

4.9.3 Minimization and Mitigation

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation subsection of the Noise and Noise-Compatible Land Use section has been updated.

Per FAA Order 1050.1F, mitigation is required when the 65 DNL impacts sensitive noise receptors. Because no sensitive noise receptors are within the 65 DNL, no noise mitigation is required. However, in recognition that changes in noise patterns are a community concern, the 2002 Airport Master Plan proposed to minimize noise impact to what became the Proposed Action in the analysis. Specifically, the layout was modified and designed to minimize noise by rotating and orienting the layout away from nearby SEARCH buildings, using natural terrain as screening.

In addition, although not required, CBS has committed to developing a Fly Friendly program for the new SPB. CBS would work with adjacent landowners and pilots to develop measures to minimize impacts to the facilities located along Seward Avenue. This would include public education provided to pilots to request certain behaviors to reduce aircraft noise level. This program could include, but is not limited to, observed quiet hours and encouraged practices such as utilizing lowest RPM while maintaining safe operation of aircraft. In addition, a construction blast plan would be developed and would incorporate measures to reduce the potential for adverse noise impacts. CBS intends to coordinate with NPS, SEAHC, and the Alaska Department of Education and Early Development (ADEED) on the Fly Friendly program and the blast plan.

4.9.4 Consultation, Permits, and Other Approvals

Since the 2021 EA FONSI/ROD, the Consultation, Permits, and Other Approvals subsection of the Noise and Noise-Compatible Land Use section has not been updated.

4.10 Socioeconomic Impacts and Children's Environmental Health and Safety Risk¹⁰

4.10.1 Affected Environment

4.10.1.1 Socioeconomic Impacts

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of the Socioeconomic Impacts has not been updated.

4.10.1.2 Children's Environmental Health & Safety Risk

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of the Children's Environmental Health & Safety Risk section has not been updated.

¹⁰ FAA Order 1050.1G, FAA National Environmental Policy Act Implementing Procedures was published on June 30, 2025. Projects that commence after June 30, 2025 are required to comply with FAA Order 1050.1G, while those projects already underway by that date may follow FAA Order 1050.1F. This Supplement relies upon FAA Order 1050.1F, the Fiscal Responsibility Act of 2023, and current applicable Executive Orders and case law. Historically Environmental Justice was addressed, but under new Executive Orders, an Environmental Justice Analysis is not required.

4.10.2 Environmental Consequences of the Alternative

4.10.2.1 Socioeconomic Impacts

Since the 2021 EA FONSI/ROD, the Environmental Consequences subsection of the Socioeconomics section has not been updated.

4.10.2.2 Children's Environmental Health & Safety Risk

Since the 2021 EA FONSI/ROD, the Environmental Consequences subsection of the Children's Environmental Health & Safety Risk section has been updated to include a discussion about local traffic patterns and the potential for effects on emergency vehicle access along Seward Avenue.

A traffic analysis was conducted in 2021 to determine if the anticipated increase in traffic to the new SPB would require a Traffic Impact Analysis (TIA) and concluded the increase would be 12 one-way trips daily (Appendix E in **Appendix A**).

Since traffic analysis is typically not required for development that generates trips below 100 trips during peak hour, a detailed TIA was not required. Although the new SPB will result in a minor increase in traffic, access driveways were not designed to accommodate aircraft transport as there is an existing haulout area, located at the Sitka Airport, and adequate space will exist on the new SPB to facilitate maintenance and repair work.

In the rare occurrence an aircraft requires towing down Seward Avenue, it will require more than one lane and as such would be subject to CBS oversize vehicle movement permits. The permit would likely restrict use of both lanes of Seward Avenue to low use timeframes, such as between midnight and early morning. In addition, the permit would require mitigation in the special use permit to further reduce the chance of any impacts to emergency vehicles.

4.10.3 Minimization and Mitigation

Since the 2021 EA FONSI/ROD, Minimization and Mitigation subsection of the Children's Environmental Health & Safety Risks section has not been updated.

4.10.4 Consultation, Permits, and Other Approvals

Since the 2021 EA FONSI/ROD, the Consultation, Permits, and Other Approvals subsection of the Children's Environmental Health & Safety Risks section has not been updated.

4.11 Visual Impacts

4.11.1 Affected Environment

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of the Visual Impacts section has not been updated.

4.11.2 Environmental Consequences of the Alternative

Since the 2021 EA FONSI/ROD, the Environmental Consequences subsection of the Visual Impacts section has not been updated.

4.11.3 Minimization and Mitigation

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation subsection of the Visual Impacts section has been updated.

A blast plan for construction would be developed and coordinated with NPS, SEARHC, and Mount Edgecumbe High School to incorporate measures to monitor and minimize the potential for blasting effects on the structures on Seward Avenue. The proposed vegetative buffer has been reduced from 0.3 to 0.12 acres. In addition, moving marine components farther north and lowering the upland area in elevation to mitigate the change in the nature of the view from development to the south do not affect impacts to the observation post.

4.11.4 Consultation, Permits, and Other Approvals

Since the 2021 EA FONSI/ROD, the Consultation, Permits, and Ather Approvals subsection for the Visual Impacts section has not been updated.

4.12 Water Resources

4.12.1 Affected Environment

4.12.1.1 Wetlands

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of the Wetland section has not been updated.

4.12.1.2 Floodplains

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of the Floodplain section has not been updated.

4.12.1.3 Surface Water

Since the 2021 EA FONSI/ROD, the Affected Environment subsection of the Surface Water section has not been updated.

4.12.2 Environmental Consequences of the Alternative

4.12.2.1 Wetlands

Since the 2021 EA FONSI/ROD, the Environmental Consequences subsection of the Wetlands section has been updated.

Of the approximately 3.86-acre gravel pad constructed to support the Base Parking Area and Approach, 2.45 acres would impact jurisdictional resources, and 1.35 acres of gravel would be placed in terrestrial uplands. In addition, material would be excavated from the side slopes above Sitka Channel to level the proposed fill pad.

Of the 2.45 acres of impact in areas under jurisdiction of the CWA, 0.06 acres of impacts are a result of fill or excavation in wetlands above HTL, 0.15 acres are a result of fill of intertidal waters between HTL and MWH, and 2.24 acres are a result of fill in marine waters below MHW.

In addition, the following marine components would be permitted under Section 10 of the RHA:

- Seaplane Ramp Float (417 x 46 ft) to support ten Cessna and four Beaver seaplane berths
- Transient/Loading Dock (175 x 56 ft)
- Drive-Down Float (128 x 68 ft)
- Transfer Bridge (120 x 12 ft)
- Approach Dock (80 x 24 ft) foot approach dock on pile foundation

The proposed compensatory mitigation plan (CMP) was submitted on April 2, 2024, to support the application and concluded the project would need to purchase 0.5 palustrine credits and 14 estuarine credits from the Natzuhini Bay Mitigation Bank in order to offset the impacts of the project to wetlands within the project area.

A USACE Section 404/10 individual permit application was submitted on December 5, 2024, and a final signed permit would be obtained prior to any disturbance of or fill in WOUS.

A Section 401 Water Quality certification was issued in December 2023, but subsequently rescinded. A new Section 401 Water Quality certification was requested through the ADEC on December 5, 2024, and issued on March 21, 2025.

The public comment period for the Section 404/10 application closed on March 12, 2025, resulting in four comments, which are summarized in **Appendix H**. A CMP for wetland and marine impacts has been developed calling for purchase of 24.4 credits from the Natzuhini Bay Mitigation Bank. Once the CMP is approved and the MOA is signed, the final signed permit would be issued. All permit applications and correspondence related to Section 404/401 permits are in **Appendix H**.

4.12.2.2 Floodplains

Since the 2021 EA FONSI/ROD, the Environmental Consequences subsection of the Floodplains section has been updated.

The Project would result in 3.38 acres of fill within the Coastal High Hazard Area but not result in impeded flows. Consultation with CBS and a CBS Development Permit would be required to ensure compliance with the National Flood Insurance Program.

4.12.2.3 Surface Water

Since the 2021 EA FONSI/ROD, the Environmental Consequences subsection of the Surface Water section has been updated.

Approximately 3.34 acres of Sitka Channel and adjacent intertidal areas would be affected by the Project. Of these 3.34 acres, 2.39 acres are from fill placed in Sitka Channel and 0.06 acres are from fill placed in intertidal areas and approximately 0.97 acres are from construction of floating/anchored elements (wave attenuator(s), floats) and pile-supported trestles.

4.12.3 Minimization and Mitigation

Since the 2021 EA FONSI/ROD, the Minimization and Mitigation subsection of the Surface Water section has not been updated.

4.12.4 Consultation, Permits, and Other Approvals

Since the 2021 EA FONSI/ROD, the Consultation, Permits and Other Approvals subsection of the Surface Water section has not been updated.

4.13 Climate

Since the 2021 EA FONSI/ROD, the Climate section has been added.

A complete climate analysis is in **Appendix I**, which summarizes and quantifies greenhouse gas (GHG) emissions, their effects and describes resilience and adaptation of the project to the physical effects of Climate.

4.13.1 Affected Environment

Six GHGs are regulated under the CAA. They include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

4.13.1.1 GHG Emissions

The project is only anticipated to emit CO_2 , CH_4 , and N_2O and to estimate project emissions for these GHG, the following factors were used:

- One gallon of diesel emits:
 - 10.21 kilograms (kg) of CO2 (EPA 2023)
 - 6.41 grams (g) of CH4 (EPA 2023)
 - 0.17 g of N₂O (EPA 2023)
- Gasoline one gallon burned emits 8.78 kg CO2 emitted (EPA 2023)
- Aviation gasoline one gallon burned emits:
 - 8.31 kg CO2 (EPA 2023)

- .11 g of N2O (EPA 2023)
- 7.06 g of CH₄ (EPA 2023)
- Production of steel Production of one metric ton of steel emits 1.27 metric tons of CO2 (IEA 2020)
- Production of asphalt -- Production of one metric ton of asphalt emits 52.1 kg CO2e (NAPA 2022)
- Production of Aluminum Production of one metric ton of aluminum emits 16 metric tons of CO2

An inventory and analysis for the project incorporated available data regarding equipment, fuel consumption rates, and best estimates of equipment operation and practices factored into a deterministic or bottom-up approach.

4.13.1.2 Resiliency

This Climate analysis places the project setting into the context of climate and evaluates design resiliency for the build alternative under a changing climate. Applicable climate factors were identified through a review of the FEMA national risk assessment for Sitka City and Borough, Alaska (FEMA n.d 2020) and consulting hazards identified by the City and Borough of Sitka in their Multi-Hazard Mitigation Plan (CBS 2010).

Climate factors were dismissed from further analysis when environmental factors were not at risk of being further compounded by a changing climate, like earthquakes, or are not anticipated as a natural hazard for the project area, such as landslides or increased runoff from glacial melt. Determining project resiliency is based on an evaluation of how projected impacts of climate may affect the project's foreseeable design life.

The following are climate factors identified as those that could pose a hazard to the Proposed Action

- Increased Sea Level: In Sitka, sea level is projected to change between -.59 (low) and 2.28 (high) feet from 2024 to 2080.
- Water Quality: water quality conditions could cause substantial changes in corrosion products and rates while chemically attacking the steel components in the SPB.
- Mixed Precipitation and Snow Loading: The warming climate is anticipated to generally result in warmer springs, more precipitation falling as rain than snow. These conditions will generally lead to increased glacial melt and increased freshwater temperatures.

4.13.2 Environmental Consequences

4.13.2.1 Proposed Action

GHG Emissions

For the project life, ¹¹ direct emissions could result in a net-increase of:

- 13,240,024.73 metric tons of CO2
- 13.56 metric tons of N2O
- 11.5 metric tons of CH4
- Indirect emissions from upstream and downstream emissions, coupled with the direct emissions of the project will result in a total of 14,536,945.6 metric tons of CO₂e emitted as a result of the new Sitka SPB (**Table 7**). This is equivalent to 3,390,819 gasoline-powered passenger vehicles driven for one year.

Phase	Fuel Use (gal)	CO ₂ e Emissions (metric tons)
Mobilization/Demobilization	27,802	283
Material Production	-	413.3
Construction	17,351	215.4
Operations	26,516	17,658,637.8
Totals:	71,669	17,659,549.5

Table 7: Summary of CO₂e emissions from fuel consumption

Resiliency

- Increased Sea Level: An increased high tidewater elevation could have several effects on the SPB structures, such as:
 - Lateral wave forces may be applied at a higher elevation to the float restraint structure which could increase the overturning forces on the restraint structure; infrastructure may not be designed to withstand increased lateral wave forces
 - Decreased vertical clearance between the cap beams at the top of the float restraint structure and the float deck and steel gangway deck
 - Gangways may strike the float deck if the slope angle between them decreases
 - Sediment transport processes may increase rates of aggradation in the basin under the SPB float.
 - Aggradation of sediment around marine structures is common and may require periodic dredging of the basin to prevent the float from grounding at low tide. This will require mudline measurements during the life of the SPB float to ensure that excavation or dredging projects are programmed prior to sediment buildup becoming a risk to the float.
- Water Quality: These water quality conditions could cause substantial changes in corrosion
 products and rates while chemically attacking the steel components in the SPB facility. To
 improve resiliency, the steel components should be hot-dipped galvanized and provided with
 welded anodes on each of the steel piles to provide adequate passive cathodic protection. Hot-

¹¹A typical design life for seaplane base infrastructure is 35 to 40 years, however they are frequently kept in operation for additional years. An estimated 50-year design life for the Proposed Action was used in the analysis.

- dip galvanizing provides approximately 10 to 15 years of protection for the steel, and the additional cathodic protection system can greatly increase the protection for the steel. The cathodic protection anodes are self-sacrificing and will require periodic measurements and eventual replacement to provide effective protection during the structure's design life.
- Mixed Precipitation and Snow Loading: The American Society of Civil Engineers publication,
 "Minimum Design Loads for Buildings and Other Structures," recommends designing the float
 for a ground snow load of 30 pounds per square foot for a 50-year storm event. The proposed
 float has a pedestrian live-load design of 50 pounds per square foot which exceeds the probable
 snow load and will provide sufficient live load capacity to clear snow from the float after a large
 snowfall event.

4.13.2.2 No Action

Substantive sources of emissions for the existing SPB are eight aircraft and ground access vehicles. The No Build alterative would result in 32,411.4 (million tons) MT of CO2 for fuel consumption, incorporating LTOs and ground vehicles and 39,764.0 MT of CO_2 e when accounting for CH_4 and N_2O emissions from aviation gasoline consumption.

5.0 COORDINATION

5.1 Agency Correspondence

Since the 2021 EA FONSI/ROD, the Agency Correspondence section has not been updated.

5.2 Section 106 Consultation

Since the 2021 EA FONSI/ROD, the Section 106 Consultation section has been updated to include updated information from 2024 fieldwork.

Reinitiation of the Section 106 process began October 2022, with new initiation letters. Additional consultation updates were submitted in April 2024 and February 2025. Completion of the Section 106 process is anticipated in Fall 2025 once a public comment period is completed and signatories execute the MOA and is filed with Advisory Council on Historic Preservation.

In response to requests for monitoring from the Sitka Tribe of Alaska, DOWL completed an archaeological field investigation in March 2022 and May 2024 which resulted in the identification of additional features attributed to SIT-01124. One feature initially attributed to SIT-01124 was reassigned to SIT-01115. The remaining features assigned to SIT-01124 were evaluated for a recommendation of eligibility. DOWL's recommendation is that SIT-01124 is not eligible for listing in the NRHP. Consultations regarding SIT-01124 are ongoing.

5.3 Government to Government Consultation

This section was not included in the 2021 EA FONSI/ROD and has been added.

Per FAA Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures, and Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, Federal agencies will consult with American Indian and Alaska Native Tribes before taking any action that may significantly or uniquely affect them. [FAA 1210.20 at Paragraph (7)(b)(2)]. It is the Federal agency's responsibility to ensure that consultation is meaningful and timely (E.O. 13175, §5).

The FAA initiated G2G consultation with relevant tribal entities in 2020 and G2G consultation is ongoing. Invitations to participate in G2G consultation were sent to Hoonah Indian Association, Organized Village of Kake, Yakutat Tlingit Tribe, and Sitka Tribe of Alaska. The Sitka Tribe of Alaska requested G2G consultation on April 21, 2021, and April 20, 2022.

Meaningful consultation provides an opportunity for Federally-recognized Tribes to provide timely input and have their views taken into consideration in Federal decision making. The Sitka Tribe of Alaska conveyed concerns related to impacts to marine mammals, noise, subsistence activities, general siting of the SPB, and cultural resources. Key correspondence conducted from 2022 to 2024 is included in **Appendix J**.

The Sitka Tribe of Alaska expressed concern for potential noise from in-water work to affect marine mammals, subsistence fish, in particular herring spawning. The Tribe also expressed concern for potential noise from aircraft to affect traditional use of adjacent land for subsistence activities, specifically a cultural camp. In response to these concerns raised throughout consultation with the Tribe, a new noise analysis was conducted that included three news sensitive noise receptor locations: the new SEARHC/Mt. Edgecumbe Medical Center and "Eliason Harbor 1 and 2" sites.

The Eliason receptors were classified as noise sensitive locations due to their use by the Sitka Tribe of Alaska for education purposes during culture camps which involve school age children (detailed in Section 4.9.2 and **Appendix G**. Noise effects to marine mammals were evaluated in the Biological Assessment, submitted to NMFS in August 2023 (detailed in Section 4.3.2 and **Appendix C**).

The project area is subject to noise from a variety of anthropogenic sources, including marine vessels, seafood processing, shoreline and dock construction, aircraft, and land vehicles. Direct and indirect effects that may arise from the Proposed Action include noise associated with pile-driving and operation of support vessels during construction activities. Underwater and in-air noise from pile-driving and removal is anticipated to rise above ambient noise levels and radiate into Sitka Channel from the construction of the proposed SPB. The Biological Assessment concluded the Proposed Action is likely to adversely affect the ESA-listed Mexico DPS humpback whales and WDPS Steller sea lions due to the noise associated with the pile-driving. Noise associated with the project may reach levels exposing Mexico DPS humpback whales and WDPS Steller sea lions to Level A and B harassment under the ESA.

However, mitigation measures described in **Appendix C and D** would be implemented throughout the duration of the project to reduce exposure to noise associated with pile-driving. These mitigation measures include minimization of construction noise, marine mammal monitoring, safety radii, clearing the safety radii, soft-starts procedures, and shut-down procedures to minimize takes. In conjunction with this Biological Assessment, CBS is applying for an IHA to take four ESA-listed WDPS Steller sea lions and two ESA-listed Mexico DPS humpback whale by Level B harassment, and 2 WDPS Steller sea lions by Level A harassment.

The Sitka Tribe of Alaska also expressed interest in reconsidering the location of the SPB site due to potential for vehicle traffic and seaplane noise to impact the new SEARHC facility. The Sitka Tribe of Alaska requested pursuing an alternative site location.

In response to the Tribe's concerns, CBS completed a comprehensive analysis that re-examined all past siting evaluations and the Section 4(f) evaluation included an updated siting analysis that similarly re-examined the past siting evaluations as described in Section 4.7. The siting of the project was evaluated in a memo (**Appendix B**) that re-evaluated past siting studies, using the following criteria for determining site options:

- Must be available to purchase
- Must be on an existing roadway
- Must have favorable wind conditions
- Must be protected from harsh waves and sea swells
- Must have adequate depth, with no obstacles such as rocks
- Must not be in proximity to wildlife attractants
- Needs to have room for expansion over current facility
- Land component needs to have favorable topography and space for parking
- Needs to have room to maneuver safely
- Needs to have favorable traffic
- Costs must be reasonable
- Historic, cultural, and natural resources; including wildlife must be reviewed under strict adherence to NEPA and NHPA in consultation with each authority having jurisdiction (SHPO, DNR, USACE, USFWS, NOAA NMFS, etc.)

Analysis was completed for 13 different sites. The Section 4(f) analysis further analyzed two additional areas along the shoreline and the use of Blue Lake to determine feasible and prudent alternatives and concluded these sites were not further considered due to substantial physical limitations (**Appendix F**).

The Sitka Tribe of Alaska also conveyed concerns about the potential impacts to burials and cultural resources on Japonski Island. Tribal members conveyed that efforts to repatriate human remains occurred during projects at Sitka Airport and requested the opportunity to provide a tribal representative to be on-site during ground-disturbing activities. The Sitka Tribe of Alaska recommended the development of an MOA to address inadvertent discoveries. A stipulation to develop an inadvertent discovery plan in coordination with the Sitka Tribe of Alaska has been added to the Section 106 MOA. In addition, a new archaeological survey was conducted in 2024 (detailed in Section 5.4) and the Sitka Tribe of Alaska were invited to participate and/or observe the survey.

5.4 Endangered Species Act Consultation

Since the 2021 EA FONSI/ROD, consultation under Endangered Species Act has been updated to reflect recent consultation. After previous consultation was completed, the Proposed Action changed, as described in Chapter 1.1, and therefore consultation was reinitiated and on December 31, 2024, NMFS

agreed that the results of their previous consultation prevailed. Section 7 consultation with NMFS was completed on May 1, 2024, with the issuance of a BO (AKRO-2023-02513). ESA consultation materials, including the BO, are found in **Appendix C**.

5.5 Public Scoping

Since the 2021 EA FONSI/ROD, the Public Scoping section has not been updated as there were no new notices or scoping activities that occurred in support of the SEA.

5.6 Public Input on Draft EA

Since the 2021 EA FONSI/ROD, the Public Input on Draft EA has not been updated but will be for the Final EA once the public review of the draft SEA has occurred.

6.0 PREPARERS OF THE SEA

Table 8 provides the list of preparers.

Table 8: List of Preparers of the SEA

Name and Job Title	Affiliation and Role	Expertise Applied to Document
Kristi Ponozzo Environmental Protection Specialist	FAA NEPA Approval	NEPA
Kendall Campbell Environmental Protection Specialist/Tribal Liaison	FAA Reviewer	NHPA Section 106
Joseph Bea Airport Manager	CBS Reviewer	Project Design
Jenny Liljedahl, PE Project Manager	CBS Reviewer	Project Design
Aaron Christie, PE Project Manager	DOWL Contributor	Project Design
Theresa Dutchuk Senior NEPA Specialist	DOWL Reviewer	NEPA
Emily Creely, PWS Environmental Specialist	DOWL Author	NEPA
Jake Anders/Emily Corley Cultural Resource Manager	DOWL Subject Matter Expert	Cultural Resources NHPA
Josh Grabel, PWS Environmental Specialist	DOWL Subject Matter Expert	Wetlands, CWA
Robin Reich Biologist	DOWL Subject Matter Expert	Protected Species and Habitat ESA; MSA

7.0 REFERENCES

- ABR. 2024. Documented Eagle Nest Sites. Accessed October 11, 2024: https://eagle.abrinc.com/
- Alaska Department of Environmental Conservation (ADEC). 2020. Contaminated Sites Database. Accessed July 31, 2020: https://dec.alaska.gov/spar/csp/.
- Alaska Department of Fish and Game (ADF&G). 2019. Letter Re: Proposed Sitka Seaplane Base Environmental Assessment Scoping Comments.
- ADF&G. 2020a. Alaska Fish Resource Monitor Mapper. Accessed 5/16/2020: https://adfg.maps.arcgis.com/apps/MapSeries/index.html?appid=a05883caa7ef4f7ba17c99274f 2c198f.
- ADF&G. 2020b. Anadromous Waters Catalog (mapper). Accessed June 20, 2020: https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=maps.displayViewer.
- Alaska Exotic Plant Information Clearinghouse (AKEPIC). 2020. Alaska Exotic Plant Information Clearinghouse database. Alaska Natural Heritage Program, University of Alaska, Anchorage. Accessed August 12, 2020: http://aknhp.uaa.alaska.edu/maps/akepic/.
- Alaska Fisheries Science Center. 2023. Geospatial dataset describing observed haul-out locations used for coastal aerial surveys of harbor seals in Alaska. Accessed at https://services2.arcgis.com/C8EMgrsFcRFL6LrL/arcgis/rest/services/pv_cst_haulout/FeatureSer ver on August 22, 2023.
- Allen, A. and R.P. Angliss. 2012. Alaska marine mammal stock assessments, 2012. NOAA Tech Memo. NMFS-AFSC- 245, 14 pp. Accessed May 2020: https://www.fisheries.noaa.gov/webdam/download/98865780.
- Berhow, M. (editor). 2020. American Seacoast Defenses: A Reference Guide. CDSG Press, McLean, VA. Big Blue Charters. 2020. Halibut Fishing. Accessed September 25, 2020: https://bigbluecharters.com/ halibut-fishing
- Big Blue Charters. 2020. Halibut Fishing. Accessed September 25, 2020: https://bigbluecharters.com/halibut-fishing/.
- Bush, J.D. 1944. Narrative Report of Alaska Construction 1941–1944. U.S. Army, Alaskan Department, Construction Division.
- Cowardin 1979: Cowardin, L.M.; V. Carter, F. C. Golet, and E. T. La Roe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. Wetland Classification System, Jamestown: U.S. Department of the Interior.
- City and Borough of Sitka (CBS). 2010. Hazard Mitigation Plan. Prepared by the City & Borough of Sitka. WHPacific. April 10, 2010.

- CBS. 2012. Municipal Sanitary Sewer Master Plan. Prepared for the City and Borough of Sitka by DOWL HKM. October 2012.
- CBS. 2014. Interim Solid Waste Management Plan Report; Background, Current Condition and System Assessment. Prepared for the City and Borough of Sitka by Hittle & Associates, Inc. June 2014.
- CBS. 2018a. Sitka Comprehensive Plan: Technical Plan Public Hearing Draft. February 2018.
- CBS. 2018b. Comprehensive Electrical Load Analysis and Load Development Plan. Prepared for the City and Borough of Sitka by Shaw Environmental, Inc. June 2018.
- CBS. 2020a. City and Borough of Sitka Harbor Department. New Sitka Seaplane Base (SPB) Ex. Forecast Annual Operations Updated 10/21/2020. Unpublished data.
- CBS. 2020b. City and Borough of Sitka Harbor Department. Accessed September 26, 2020: cityofsitka.com/government/departments/harbor/index.html.
- Department of Community and Regional Affairs (DCRA). 2020. Sitka, Alaska. DCRA Information Portal. Accessed September 25, 2020: https://dcced.maps.arcgis.com/apps/MapJournal/index.html?appid=2ded44ad6dd4456fbe353f 1292e285c2.
- DOWL Engineers (DOWL). 1989. Offshore Geophysical Investigation for Proposed Small Boat Harbor, Sitka, Alaska. Contract No. DACW85-99-D-001. Prepared for U.S. Army Corps of Engineers, Alaska District. April 1989.
- DOWL HKM (DOWL). 2012. Siting Analysis; Sitka Seaplane Base. Prepared for City and Borough of Sitka. June 2012.
- DOWL. 2016. Updated Siting Analysis; Sitka Seaplane Base. Prepared for City and Borough of Sitka. November 2016.
- DOWL. 2025. Cultural Resources Report. Proposed New Sitka Seaplane Base. Prepared for City and Borough of Sikta. May 2025.
- Federal Aviation Administration (FAA). 2020a. Airport Master Record, FAA Form 5010-1, for A29. August 13, 2020.
- Federal Emergency Management Agency (FEMA). 2020. National Flood Hazard Layer. FIRM 02220C0411D. Accessed July 24, 2020: https://msc.fema.gov/portal/home.
- Hastings, K.M, Rehberg, M.J., O 'Corry-Crowe, G.M, Pendleton, G.W., Jemison, L.A., and Gelatt, T.S. 2019. Demographic consequences and characteristics of recent population mixing and colonization in Steller sea lions, Eumetopias jubatus. Journal of Mammalogy. 21(1):1–14, 2019. DOI:10.1093/mammal/gyz192.
- HDR. 2002. Sitka Seaplane Base Master Plan. Prepared for City & Borough of Sitka. HDR Alaska, Inc. August 2002.

- Jemison, L. A., G. W. Pendleton, L. W. Fritz, K. K. Hastings, J. M. Maniscalco, A. W. Trites, and T. S. Gelatt. 2013. Inter-population movements of Steller sea lions in Alaska with implications for population separation. Plops ONE 8:e70167.
- Laist, D., A. Knowlton, J. Mead, A. Collet, and M. Podesta. 2001. Collisions between ships and whales. Marine Mammal Sci. 17(1): 35-75.
- Lowry, D., S. Wright, S,M. Neuman, M,D. Stevenson, D,J. Hyde, J,M. Lindeberg, M,N. Tolimieri, N,S. Lonhart, S, S. Traiger, S, and R. Gustafson. 2022. Endangered Species Act Status Review Report: Sunflower Sea Star (Pycnopodia helianthoides). Final Report to the National Marine Fisheries Service, Office of Protected Resources. October 2022. 89 pp. Accessed March 29, 2023: https://www.fisheries.noaa.gov/resource/document/endangered-species-act-status-review-report-sunflower-sea-star.
- National Marine Fisheries Service (NMFS). 2010. Sitka Marine Invasive Species Bioblitz; Presenter Linda Shaw, National Marine Fisheries Service. Held June 12-14, 2010.
- NMFS. 2013. Occurrence of western distinct population segment Steller sea lions East of 144° W. longitude. NOAA, National Marine Fisheries Service, Alaska Region, Juneau, AK. 3 pp. Accessed May 25, 2020: https://alaskafisheries.noaa.gov/sites/default/files/wdps_sect7guidance1213final.pdf.
- NMFS. 2016. Occurrence of Distinct Population Segments (DPSs) of Humpback Whales off Alaska.

 National Marine Fisheries Service, Alaska Region. Revised December 12, 2016. Accessed May 25, 2020: https://alaskafisheries.noaa.gov/sites/default/files/ humpback_guidance.pdf.
- NMFS. 2018. 2018 Revisions to: Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0): Underwater Thresholds for Onset of Permanent and Temporary Threshold Shifts. U.S. Dept. of Commerce, NOAA. NOAA Technical Memorandum NMFS-OPR-59, 167 p. Accessed May 25, 2020: https://www.fisheries.noaa.gov/resource/document/technical-guidance-assessing-effectsanthropogenic- sound-marine-mammal-hearing
- NMFS. 2019. Letter Re: Sitka Seaplane Base Scoping Comments.
- NMFS. 2020a. Habitat Conservation Essential Fish Habitat Mapper. Accessed May 25, 2020: https://www.habitat.noaa.gov/application/efhmapper/index.html.
- NMFS. 2020b. Alaska Endangered Species and Critical Habitat Mapper Web Application. Accessed May 13, 2020: https://alaskafisheries.noaa.gov/portal/apps/ webappviewer/index.html.
- NMFS. 2020c. Minke Whale Species Profile. Accessed May 25, 2020: https://www.fisheries.noaa.gov/species/minke-whale
- National Oceanic and Atmospheric Administration (NOAA). 2017. NOAA Technical Memorandum NMFS-F/AKR-14: Impacts to Essential Fish Habitat from Non-Fishing Activities in Alaska. Accessed September 11, 2019: https://www.fisheries.noaa.gov/resource/document/impacts-essential-fish-habitat-non-fishingactivities-alaska.

- NOAA. 2020a. U.S Coast Pilot 8, Chapter 12. 307-325 p. Accessed May 28, 2020: https://nauticalcharts.noaa.gov/publications/coast-pilot/files/cp8/CPB8_C12_WEB.pdf.
- NOAA. 2020b. Tides and Currents: Sitka, AK. Accessed May 28, 2020: https://tidesandcurrents.noaa.gov/stationhome.html?id=9451600.
- NOAA. 2024. Ocean Acidification. Accessed April 16, 2024: https://www.noaa.gov/education/resource-collections/ocean-coasts/ocean-acidification#:~:text=Because%20of%20human%2Ddriven%20increased,the%20ocean%20becomes%20more%20acidic.
- National Park Service (NPS). 2020. Draft National Historic Landmark Nomination: Sitka Naval Operating Base and U.S. Army Coastal Defenses.
- North Pacific Fishery Management Council (NPFMC). 2018. Fishery Management Plan for the Salmon Fisheries in the EEZ off Alaska. Accessed May 13, 2020: https://www.npfmc.org/wpcontent/PDFdocuments/fmp/Salmon/SalmonFMP.pdf.
- NPFMC. 2019. Fishery Management Plan for Groundfish of the Gulf of Alaska. Accessed May 13, 2020: https://www.npfmc.org/wp-content/PDFdocuments/fmp/GOA/ GOAfmpAppendix.pdf.
- Nuka Research and Planning Group (Nuka). 2012. Southeast Alaska Vessel Traffic Study. Revision 1.

 Accessed 2012:

 https://dec.alaska.gov/spar/ppr/docs/Southeast%20Alaska%20Vessel%20Traffic%20Study.pdf
- Nuka 2019 Nuka Research and Planning Group (Nuka). 2019. Southeast Alaska Vessel Risk Analysis Report to Alaska Department of Environmental Conservation October 2019. Accessed 10/20/2020: https://dec.alaska.gov/media/20765/191030-seak-vessel-traffic-risk-analysisfinal.pdf.
- Neilson, J.L., C. Gabriele, A. Jensen, K. Jackson, and J. Straley. 2012. Summary of Reported Whale-Vessel Collisions in Alaskan Waters. Journal of Marine Biology, vol. 2012, Article ID 106282, 18 pages, 2012. doi:10.1155/2012/106282.
- Panigada, S., G.N. Di Sciara, M.Z. Panigada, S. Airboldi, J.F. Borsani and M. Jahoda. 2005. Fin whales (Balaenoptera physalus) summering in the Ligurian Sea: distribution, encounter rate, mean group size and relation to physiographic variables. J. Cetacean Res. Mgt. 7(2): 137-145.
- Sill, L. A. and D. Koster. The Harvest and Use of Wild Resources in Sitka, Alaska, 2013. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 423, Douglas.
- Smithsonian. 2024. Marine Invasions Research. Accessed April 16, 2024: https://serc.si.edu/media/press-release/new-invasive-bryozoan-alaskan-waters
- Solstice Alaska Consulting, Inc (SolsticeAK). 2018. Marine Mammal Observations from O'Connell Bridge Lightering Float in September 2018.
- SolsticeAK. 2020. Essential Fish Habitat Assessment prepared for City and Borough of Sitka, Sitka Seaplane Base Project.

- SolsticeAK. 2023. Endangered Species Act Section 7 Biological Assessment for Listed Species under the Jurisdiction of the National Marine Fisheries Service. City and Borough of Sitka, Sitka Seaplane Base Sitka Channel, Sitka, Alaska. August 2023, Revised October 2023.
- Straley, Jan and Katy Pendell. 2017. Marine Mammal Report-Silver Bay Project. J. Straley Investigations PO Box 273 Sitka, AK 99835.
- Straley, J. M., J. R. Moran, K. M. Boswell, J. J. Vollenweider, R. A. Heintz, T. J. Quinn Ii, B. H. Witteveen, and S. D. Rice. 2018. Seasonal presence and potential influence of humpback whales on 130 Draft Biological Report Humpback Whale Critical Habitat wintering Pacific herring populations in the Gulf of Alaska. Deep Sea Research Part II: Topical Studies in Oceanography 147:173-186.
- Turnagain Marine Construction (Turnagain). 2017. Marine Mammal Monitoring Forms from monitoring of Silver Bay in October and November 2017 during construction of the City and Borough of Sitka's Gary Paxton Industrial Park (GPIP) Dock. Logs submitted to National Marine Fisheries Service by Turnagain Marine Construction.
- Turnagain. 2018. DB Brightwater Shipboard Oil Pollution Emergency Plan (SOPEP). Anchorage AK.
- United States Army Corps of Engineers (USACE). 2011. Finding of No Significant Impact and Environmental Assessment for Channel Rock Breakwater, Corrective Navigation Improvements. Accessed 5/13/2020: https://www.poa.usace.army.mil/Portals/34/docs/civilworks/currentproj/Sitka%20EA_ver%201 0%20Mar%2011.pdf.
- USACE. 2012. Deficiency Correction Evaluation Report and Finding of No Significant Impact with Environmental Assessment: Navigation Improvements Channel Rock Breakwaters Sitka Harbor, Alaska. Accessed 5/13/2020: https://www.poa.usace.army.mil/Portals/34/docs/civilworks/currentproj/Sitka%20DCER%2021 %20March%202012.pdf.
- USACE. 2009. Final Decision Document. Mt. Edgecumbe/Sitka Naval Operations Base. Japonski Island, Sitka, Alaska. FUDS Property No. F10AK0496. September 2009.
- United States Census Bureau (USCB). 2020. U.S. Census Bureau QuickFacts: Alaska and Sitka City and Borough, Alaska. Accessed 9/18/2020: https://www.census.gov/quickfacts/.
- United States Fish and Wildlife Service (USFWS). 2019. Information for Planning and Consultation (IPaC). Accessed October 2019: https://ecos.fws.gov/ipac/location/ I4SEAZXVJZCE3BCIGFQBBFBEZI/resources.
- USFWS. 2020. Documented Eagle Nest Sites. Accessed May 6, 2020: https://seakgis.alaska.edu/.
- U.S. Geological Survey (USGS). 1995. Overview of Environmental and Hydrogeologic Conditions at Sitka, Alaska. U.S. Geologic Survey. Open-File Report 95-345. Prepared in cooperation with the Federal Aviation Administration. August 1995.
- Wade, P.R., T. Quinn II, J. Barlow, C. Baker, A. Burdin, J. Calambokidis, P. Clapham, E. Falcone, J. Ford, C. Gabriele, R. Leduc, D. Mattila, L. Rojas-Bracho, J. Straley, B. Taylor, R. Urbán, D. Weller, B.

- Witteveen, and M. Yamaguchi. 2016. Estimates of abundance and migratory destination for North Pacific humpback whales in both summer feeding areas and winter mating and calving areas. Paper SC/66b/IA21 submitted to the Scientific Committee of the International Whaling Commission, June 2016, Bled, Slovenia.
- Wade, P. R. 2021. Estimates of abundance and migratory destination for North Pacific humpback whales in both summer feeding areas and winter mating and calving areas. National Marine Fisheries Service, Alaska Fisheries Science Center, Seattle, WA. Paper submitted to the International Whaling Commission SC/68C/IA/03.
- Wahrhaftig, Clyde. 1965. Physiographic divisions of Alaska. Geological Survey Professional Paper 482. Windward Project Solutions (Windward). 2017. Marine Mammal Monitoring Forms from monitoring of Sitka Channel and Middle Channel in January 2017 during replacement of Petro Marine's South Sitka Channel Fuel Dock. Report submitted to National Marine Fisheries Service on November 7, 2017.
- Windward Project Solutions (Windward). 2017. Marine Mammal Monitoring Forms from monitoring of Sitka Channel and Middle Channel in January 2017 during replacement of Petro Marine's South Sitka Channel Fuel Dock. Report submitted to National Marine Fisheries Service on November 7, 2017.
- Yehle. 1974. Reconnaissance Engineering Geology of Sitka and Vicinity, Alaska.
- Young, N.C., A.A. Brower, M.M. Muto, J.C. Freed, R.P. Angliss, N.A. Friday, B.D. Birkemeier, P.L. Boveng, B.M. Brost, M.F. Cameron, J.L. Crance, S.P. Dahle, B.S. Fadely, M.C. Ferguson, K.T. Goetz, J.M. London, E.M. Oleson, R.R. Ream, E.L. Richmond, K.E.W. Shelden, K.L. Sweeney, R.G. Towell, P.R. Wade, J.M. Waite, and A.N. Zerbini. 2024. DRAFT Alaska Marine Mammal Stock Assessments, 2023. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-XXX. 99 p.
- Zouhar, Kris. 2019. Rubus spectabilis, salmonberry. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/plants/plants/shrub/rubspe/all.html [2020, June 1].

APPENDIX A: 2021 FINDING OF NO SIGNIFICANT IMPACT AND ENVIRONMENTAL ASSEESSMENT

APPENDIX B: 2022 SITING ANALYSIS MEMO AND SITING STUDIES

APPENDIX C: NMFS ENDANGERED SPECIES ACT CONSULATION, BIOLOGICAL ASSESSMENT AND BIOLOGICAL OPINION

APPENDIX D: NMFS INCIDENTAL HARASSMENT AUTHORIZATION

APPENDIX E: SECTION 106 CONSULTATION DOCUMENTATION AND DRAFT MEMORANDUM OF AGREEMENT

APPENDIX F: SECTION 4(F) EVALUATION

APPENDIX G: 2024 NOISE STUDY

APPENDIX H: USACE PERMIT

APPENDIX I: CLIMATE EVALUATION

APPENDIX J: GOVERNMENT-TO-GOVERNMENT CORRESPONDENCE