FINAL

ENVIRONMENTAL ASSESSMENT

INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN FOR THE NORTHERN ALASKA SITES

AT

ICY CAPE, BARROW, AND POINT MCINTYRE, ALASKA

August 2021

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Abstract

Designation:	Environmental Assessment
Title of Proposed Action:	Integrated Natural Resources Management Plan for the Northern Alaska Sites at Icy Cape, Barrow, and Point McIntyre, Alaska
Project Location:	Northern Alaska Sites at Icy Cape, Barrow, and Point McIntyre, Alaska
Lead Agency for the EA:	Department of the Navy
Affected Region:	Alaska's North Slope Borough and the Coast of the Beaufort and Chukchi Seas
Action Proponent:	Commander, Navy Region Northwest Regional Director for Facilities and Environmental (N4)
Point of Contact:	Northern Alaska Sites INRMP EA Project Manager Naval Facilities Engineering Systems Command Northwest NAVFAC NW EV21 1101 Tautog Circle Silverdale, WA 98315-1101 NWNEPA@navy.mil
Date:	August 2021

Naval Facilities Engineering Systems Command Northwest, a Command of the United States (U.S.) Navy (hereinafter, jointly referred to as the Navy) has prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA), as implemented by the Council on Environmental Quality (CEQ) Regulations and Navy regulations for implementing NEPA. The Proposed Action would adopt and implement the Northern Alaska Sites Integrated Natural Resources Management Plan (INRMP) at Icy Cape, Barrow, and Point (Pt.) McIntyre, Alaska consistent with the military use of the property and the goals and objectives established in the Conservation Programs on Military Installations Act (Sikes Act), as amended. The EA analyzes one Action Alternative (Preferred Alternative) and a No Action Alternative. The Preferred Alternative would implement all objectives and project recommendations of the INRMP in the following natural resource categories: water resources and biological resources. The INRMP would be implemented once it is approved by the Navy and regulatory agencies. The INRMP would be reviewed annually by the Navy and updated as needed; and, the review for operation and effect would be conducted with the agencies at least once every five years. The purpose of and need for the Proposed Action is to comply with the Sikes Act, provide management requirements for species listed under the Endangered Species Act (ESA), and meet the requirements of the U.S. Department of Defense (DOD) and Department of the Navy Instructions. The Proposed Action would provide a programmatic approach to managing natural resources including procedures for reviewing projects, conducting species surveys, and implementing habitat enhancement projects. This EA evaluates the potential environmental impacts associated with the Preferred Alternative and the No Action Alternative to the following resource areas: water resources and biological resources.

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EXECUTIVE SUMMARY

ES.1 Proposed Action

The Proposed Action is to adopt and implement an INRMP for the Navy's northern Alaska sites located at Icy Cape, Barrow, and Pt. McIntyre, Alaska (hereinafter, jointly referred to as the northern Alaska sites), consistent with the military use of the property and the goals and objectives established in the Sikes Act, as amended. The goals of the INRMP are to implement an ecosystem based conservation program that provides accurate data on wildlife, minimizes wildlife disturbance, adds to the regional body of knowledge on wildlife in the Arctic Coastal Plain (ACP) and supports the restoration program goals in a manner that is consistent with the military mission. In preparing the Northern Alaska Sites INRMP, the Navy worked in cooperation with the U.S. Fish and Wildlife Service (USFWS); the Alaska Department of Fish and Game (ADF&G); and the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS). The INRMP reflects the mutual agreement of these parties concerning conservation, protection, and management of fish and wildlife resources on these installations. The Northern Alaska Sites INRMP would be implemented once the Commander, Navy Region Northwest signs it.

ES.2 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to comply with statutory requirements of the Sikes Act. The need for the Proposed Action is to provide management requirements for species listed under the ESA, and meet the requirements of the U.S. DOD and Department of the Navy Instructions. In November 1997, the Sikes Act was amended to require the Secretary of Defense to carry out a program to provide for the conservation and rehabilitation of natural resources on military installations. To facilitate this program, the amendments require the Secretaries of the military departments to prepare and implement an INRMP for each military installation in the U.S. unless the absence of significant natural resources on a particular installation makes preparation of a plan for that installation inappropriate. The conservation program must be consistent with the mission-essential use of the installation and its lands and not cause a net loss of military land use.

ES.3 Alternatives Considered

The Navy is considering one action alternative (Preferred Alternative) that meets the purpose of and need for the Proposed Action, and a No Action Alternative. The Preferred Alternative would adopt and implement the INRMP. Under the Preferred Alternative, the Northern Alaska Sites INRMP would implement an ecosystem-based approach to natural resources management that would continue to meet the land use needs of the military mission, comply with the Sikes Act, and initiate actions and projects to meet the natural resources management program goals of the INRMP. The No Action Alternative would not adopt and implement the INRMP.

ES.4 Summary of Environmental Resources Evaluated in the EA

The CEQ regulations, NEPA, and Navy instructions for implementing NEPA, specify that an EA should address those resource areas potentially subject to impacts. In addition, the level of analysis should be commensurate with the anticipated level of environmental impact.

Analysis in this EA addresses the overall natural resources management program in a programmatic context. As management decisions are made and specific project designs are developed, further project- and site-specific NEPA analysis and/or regulatory consultations may be required.

The following resource areas have been addressed in this EA: water resources and biological resources. Because potential impacts were considered negligible or nonexistent, the following resources were not evaluated in this EA: air quality, geological resources, cultural resources, American Indian traditional resources, land use, visual resources, airspace, infrastructure, transportation, noise, public health and safety, hazardous materials and wastes, socioeconomics and environmental justice.

ES.5 Summary of Potential Environmental Consequences of the Action Alternatives

The following is a summary of the potential environmental consequences of the Preferred Alternative and the No Action Alternative:

Water Resources. The Preferred Alternative would implement a water resources management approach that identifies current conditions, evaluates impacts of Navy activities, and determines appropriate actions to reduce shoreline erosion, and protect wetlands and water resources. The new management and monitoring that would take place under the INRMP would result in beneficial effects for wildlife habitat, the control of erosion and an increase in information and data on water quality at the northern Alaska sites. Under the No Action Alternative, the northern Alaska sites would continue to operate without an INRMP, management goals or plans for water resources. This would lead to no change to baseline water resources or increase in the data or studies on water resources at the northern Alaska sites.

Biological Resources. The Preferred Alternative would manage biological resources through an ecosystem-based approach focusing on habitat management to protect and improve essential habitat features and water quality. The INRMP would also emphasize use of a review strategy for proposed actions that could adversely affect biological resources so that impacts could be minimized and resources protected. The No Action Alternative would maintain existing conditions for biological resources and would not require specific resource protection measures.

Those species listed under the ESA, which occur on or in the vicinity of the northern Alaska sites include the polar bear (*Ursus maritimus*), spectacled eider (*Somateria fischeri*), Steller's eider (*Polysticta stelleri*), bowhead whale (*Balaena mysticetus*), ringed seal (*Pusa hispida hispida*) and the bearded seal (*Erignathus barbatus nauticus*). The Preferred Alternative would benefit threatened and endangered species (TES) by acting as a tool to identify, at an early stage, the potential impacts of planned and ongoing Navy actions on the TES. This would provide a basis for altering the actions to prevent or minimize impacts to these resources. The Preferred Alternative would identify projects to assist in conserving and protecting TES through minimizing human-wildlife conflict, following best management practices (BMPs), habitat protection, restoration, monitoring and surveys. Under the No Action Alternative, only surveys required under ESA consultation would be performed and outdated information that may not reflect the current status of species or provide adequate protection, could result in future designations of critical habitat. Designation of critical habitat could result in potential restrictions to mission, as well as mission impacts due to more costly and time-consuming consultation in order to ensure protection of habitat. The Preferred Alternative and No Action Alternative would not result in a significant adverse impact to biological resources.

ES.6 Public Involvement

Regulations from the CEQ direct agencies to involve the public in preparing and implementing their NEPA procedures. A Notice of Availability (NOA) of the draft INRMP and draft EA was published in The Arctic Sounder newspaper on April 8, 2021. The draft INRMP and draft EA were made available for public review on the NAVFAC NW website. The public comment period was from April 8 to May 7, 2021 and no public comments were received. An NOA of the Final EA and Finding of No Significant Impact (FONSI) will be published in The Arctic Sounder and copies of the documents will be made available at https://navfac.navy.mil/NWNEPA.

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Final Environmental Assessment

Integrated Natural Resource Management Plan for the Northern Alaska Sites at Icy Cape, Barrow, and Point McIntyre, Alaska

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Abbreviations and Acronyms

Acronym	Definition
ACP	Arctic Coastal Plain
ADF&G	Alaska Department of Fish and Game
Air Force	U.S. Air Force
B.S.	Bachelor of Science
BMP	Best Management Practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CHE/D	Critical Habitat Exemption/Designation
CN	Conservation Program
CNIC	Commander, Navy Installations Command
CP	Conservation Project
CWA	Clean Water Act
DEW	Distant Early Warning
DOD	U. S. Department of Defense
DODI	Department of Defense Instruction
DOI	Department of the Interior
DPS	Distinct Population Segment
EA	Environmental Assessment
EO	Executive Order
ER	Environmental Restoration Program
ERL	Environmental Readiness Level
ESA	Endangered Species Act
FY	Fiscal Year
FONSI	Finding of No Significant Impact
INRMP	Integrated Natural Resources Management Plan
MBTA	Migratory Bird Treaty Act
MMPA	Marine Mammal Protection Act
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
NARL	Naval Arctic Research Laboratory
Navy	U.S. Navy
NAVFAC	Naval Facilities Engineering Systems Command
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NRNW	Navy Region Northwest
NSB	North Slope Borough
NW	Northwest
OPNAVINST	Office of the Chief of Naval Operations Instructions
Pt.	Point
ROI	Region of Influence
S	Survey
SIKES	Sikes Act Improvement Act
Sikes Act	Sikes Act Improvement Act
SGCN	Species of Great Conservation Need
T&E	Threatened and Endangered
TES	Threatened and Endangered Species
U.S.	United States
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

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1 Purpose of and Need for the Proposed Action

1.1 Introduction

Navy Region Northwest, a Command of the U.S. Navy, proposes to adopt and implement an INRMP for the Navy's northern Alaska sites. The INRMP would be implemented once the Commander, Navy Region Northwest signs the INRMP (2021) and would be reviewed annually for assessment of any new projects, resource information, and installation changes. The INRMP is being developed in cooperation with the USFWS, ADF&G, and NMFS. The review for operation and effect would be conducted with these agencies at least once every five years.

The Navy has prepared this EA in accordance with the NEPA, of 1969 (42 U.S. Code [U.S.C.] sections 4321-4370h), as implemented by the CEQ Regulations[1] (40 Code of Federal Regulations [CFR] parts 1500-1508); Navy regulations for implementing the NEPA (32 CFR part 775); and Chief of Naval Operations Instruction 5090.1E, Environmental Readiness Program. Analysis in this EA addresses the overall natural resources management program in a programmatic context. As management decisions are made and specific project designs are developed, further project- and site-specific NEPA analysis and/or regulatory consultations may be required.

1.2 Background

The Navy originally established the Naval Arctic Research Laboratory (NARL) at Barrow in 1947 as a research and exploration hub in the Arctic. Icy Cape and Pt. McIntyre were originally built by the U.S. Air Force (Air Force) as part of the Distant Early Warning (DEW) Line in 1957—a system of long and short-range radar sites built to detect incoming missiles from adversaries. The DEW Line initially consisted of three types of stations: main, auxiliary and intermediate. Icy Cape and Pt. McIntyre served as intermediate sites until 1965, at which time auxiliary stations' detection capabilities improved and intermediate stations became obsolete and were deactivated. The Air Force then transferred the Icy Cape and Pt. McIntyre properties to the Navy to be used as remote field camps for the NARL at Barrow. From these sites, the Navy conducted oil exploration in the National Petroleum Reserve-Alaska and conducted a significant amount of research.

The three facilities were decommissioned after the end of the NARL program in 1981, but the Navy maintains responsibility for environmental restoration efforts under the legal authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. section 9601 et seq.). The Navy has no active missions at these sites with the exception of the environmental restoration efforts.

1.3 Location

The Navy's three northern Alaska sites are located on the North Slope of Alaska on the coast of what is formally known as the ACP (Carter 2010) (Figure 1-1).

[1] On 16 July 2020 CEQ published the final rule updating its regulations for implementing NEPA (85 Federal Register 43304). These regulations became effective on 14 September 2020. However, Department of Navy guidance published on 10 September 2020 directs that action proponents should apply the revised CEQ regulations to any NEPA process commenced after 14 September 2020. Because the NEPA process for the Northern Alaska Sites INRMP EA began prior to 14 September 2020, this EA relies on the previous version of 40 CFR parts 1500-1508 (1978, as amended in 1986 and 2005).

1.3.1 Icy Cape

Icy Cape is located approximately 50 miles southwest of the community of Wainwright on the Alaskan northwestern coast of the Chukchi Sea, approximately halfway between Pt. Lay and Wainwright. The property is approximately 156-acres, and consists of two former gravel runways, three former landfills, coastal lagoon and bluff and tundra habitat, and several thaw ponds.

1.3.2 Barrow

The Barrow properties are located at the confluence of the Chukchi and Beaufort Seas four miles northeast of the city of Utqiaġvik and six miles southwest of Pt. Barrow. The Barrow properties consists of a former antenna field (535-acres) and a former runway strip (150-acres). The antenna field parcel consists of primarily undeveloped tundra. The runway parcel has little vegetation and is predominantly covered by imported gravel.

1.3.3 Pt. McIntyre

The Pt. McIntyre site is located 12 miles northwest of Prudhoe Bay, approximately 600 feet south of the Beaufort Sea coast. The site covers approximately 70-acres and consists of marine shoreline, tundra, a thaw pond, a former airstrip, and a graveled area.

Figure 1-1 Vicinity Map for Navy Northern Alaska Sites: Icy Cape, Barrow, and Pt. McIntyre.

1.4 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to meet statutory requirements under the Sikes Act. The need for the Proposed Action is to provide management requirements for species listed under the ESA, and meet

the requirements of the U.S. DOD and Department of the Navy Instructions. In November 1997, the Sikes Act was amended to require the Secretary of Defense to carry out a program to provide for the conservation and rehabilitation of natural resources on military installations. To facilitate this program, the amendments require the Secretaries of the military departments to prepare and implement INRMPs for each military installation in the U.S. unless the absence of significant natural resources on a particular installation makes preparation of a plan inappropriate.

1.5 Scope of Environmental Analysis

This EA includes an analysis of potential environmental impacts associated with the Preferred Alternative and the No Action Alternative. The environmental resource areas analyzed in this EA include water resources and biological resources. The study area analyzed is the three northern Alaska sites.

1.6 Relevant Laws and Regulations

The Navy has prepared this EA based upon federal and state laws, statutes, regulations, and policies pertinent to the implementation of the Proposed Action, including the following:

- National Environmental Policy Act (42 U.S.C. sections 4321–4370h), which requires an environmental analysis for major federal actions that have the potential to significantly impact the quality of the human environment
- CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR parts 1500–1508)
- Navy regulations for implementing NEPA (32 CFR part 775), which provides Navy policy for implementing CEQ regulations and NEPA
- Sikes Act (16 U.S.C. section 670a et seq.), as amended
- Clean Air Act (42 U.S.C. section 7401 et seq.)
- Clean Water Act (CWA) (33 U.S.C. section 1251 et seq.)
- Rivers and Harbors Act (33 U.S.C. section 401 et seq.)
- Coastal Zone Management Act (CZMA) (16 U.S.C. section 1451 et seq.)
- National Historic Preservation Act (NHPA) (54 U.S.C. section 306108 et seq.)
- Endangered Species Act (16 U.S.C. section 1531 et seq.)
- Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (16 U.S.C. section 1801 et seq.)
- Marine Mammal Protection Act (MMPA) (16 U.S.C. section 1361 et seq.)
- Migratory Bird Treaty Act (MBTA) (16 U.S.C. sections 703–712)
- Resource Conservation and Recovery Act (42 U.S.C. section 6901 et seq.)
- Executive Order (EO) 11990, Protection of Wetlands
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low income Populations
- EO 12088, Federal Compliance with Pollution Control Standards
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks
- EO 13175, Consultation and Coordination with Indian Tribal Governments
- Alaska Hazardous Waste Regulations (Alaska Administrative Code Title 18, Chapter 62)

A description of the Proposed Action's consistency with these laws, policies and regulations is presented in Chapter 5 (Table 5-1).

1.7 Public and Agency Participation and Intergovernmental Coordination

Regulations from the CEQ direct agencies to involve the public in preparing and implementing their NEPA procedures. The Navy made the draft INRMP and draft EA available for public review and comment for 30 days, with a NOA published in The Arctic Sounder on April 8, 2021. The draft INRMP and draft EA were posted on the NAVFAC NW website for review and comment. The public comment period on the draft INRMP and draft EA was from April 8 to May 7, 2021 and no public comments were received. An NOA of the Final EA and FONSI will be published in The Arctic Sounder and copies of the documents will be available at https://navfac.navy.mil/NWNEPA.

In compliance with the Sikes Act, the Navy developed the INRMP cooperatively with the USFWS, NMFS, and ADF&G. The Navy provided the draft INRMP and draft EA to the Arctic Slope Regional Corporation and to the eight federally recognized Native villages and village corporations in the North Slope region: the Village of Anaktuvuk Pass, the Native Village of Atqasuk, the Native Village of Barrow (Iñupiat Community of the Arctic Slope), the Native Village of Kaktovik (Barter Island), the Native Village of Nuiqsut (Nooiksut), the Native Village of Pt. Hope, the Native Village of Pt. Lay, and Wainwright Traditional Council for review and comment. The Navy consulted with the eight federally recognized Native villages and their corporations in the North Slope region for the Proposed Action.

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2 Proposed Action and Alternatives

2.1 Proposed Action

The Proposed Action is to adopt and implement an INRMP for the northern Alaska sites. The Proposed Action would adopt and implement an ecosystem based conservation program that provides for conservation and rehabilitation of natural resources in a manner consistent with the military mission that would result in no net loss in the capability of the properties to support the military mission.

2.2 Alternatives Carried Forward for Analysis

This EA analyzes two alternatives: a No Action Alternative and the Preferred Alternative, which would adopt and implement the INRMP.

2.2.1 No Action Alternative

Under the No Action Alternative, the Northern Alaska Sites INRMP would not be adopted and implemented, and the northern Alaska sites would not be managed in compliance with the Sikes Act. Ongoing management practices used for natural resources would continue with no changes. The No Action Alternative would not meet the purpose of and need for the Proposed Action; however, as required by NEPA, the No Action Alternative is carried forward for analysis in this EA. The No Action Alternative will be used to analyze the consequences of not undertaking the Proposed Action and will serve to establish a comparative baseline for analysis.

2.2.2 Adopt and Implement the Northern Alaska Sites INRMP (Preferred Alternative)

The Preferred Alternative is to adopt and implement an INRMP for the northern Alaska sites that is consistent with both the military use of the property and the Sikes Act, as amended. The Preferred Alternative would include the major initiatives listed below (Navy 2021a).

- Minimize human-wildlife conflict.
- Improve and protect habitat on the three northern Alaska sites.
- Share new data from biological surveys with management partners, which include USFWS, NOAA, ADF&G, North Slope Borough, Alaskan Native Villages and Corporations, and neighboring landowners such as the Air Force in order to contribute to the regional body of scientific knowledge of the ACP.
- Follow federal and state environmental guidelines, regulations and BMPs outlined in the INRMP while performing restoration activities and natural resources work at the northern Alaska sites. BMPs can be found in INRMP objectives 1.1, 2.1, and their associated strategies (Navy 2021a).

In addition to meeting the purpose and need, the Preferred Alternative would include meeting the Northern Alaska Sites INRMP goals and objectives described below in Table 2-1. These goals and objectives inform management strategies and provide benefits to threatened and endangered species through the sharing of data from surveys and monitoring actions, and habitat improvement.

Table 2-1 Northern Alaska Sites INRMP Goals and Objectives

Goal 1: Support restoration program managers by providing accurate information of fauna occurrence on the Navy's northern Alaska sites, which would minimize wildlife disturbance and feed into the regional body of knowledge of the wildlife of the Arctic Coastal Plain.	
Objective	**Description**
Objective 1.1	Minimize and avoid human-wildlife conflict to the maximum extent practicable, while ensuring the Navy can complete its mission.
Objective 1.2	Better define what species are present on or near Navy sites, when or how frequently they are present, and where they occur onsite.
Goal 2: Ensure no net loss of wetlands on the Navy's northern Alaska sites over the next 20 years, either in extent or in functionality, given adequate climate conditions.	
Objective	**Description**
Objective 2.1	Minimize adverse impacts to wetland habitats due to Navy activities.
Objective 2.2	Increase the areal extent of tundra habitat on Navy property by five percent by 2030.
Objective 2.3	Identify potential impacts to Navy sites due to projected climate change, using scientifically robust models.

2.3 Alternatives Considered but Not Carried Forward for Detailed Analysis

Additional alternatives were not considered or carried forward for detailed analysis in this EA as they did not meet the purpose and need.

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3 Affected Environment and Environmental Consequences

This chapter presents a description of the environmental resources and baseline conditions that require analysis to determine the potential effects of implementing either of the alternatives and an analysis of the potential direct and indirect effects of each alternative.

All potentially relevant environmental resource areas were initially considered for analysis in this EA. In compliance with the NEPA, the CEQ, and Department of Navy guidelines, the discussion of the affected environment (i.e., existing conditions) focuses only on those resource areas potentially subject to impacts. Additionally, the level of detail used in describing a resource is commensurate with the anticipated level of potential environmental impact.

"Significance" as used in NEPA (40 CFR section 1508.27), requires considerations of both context and intensity. Context means that the significance of an action must be analyzed in several contexts such as society as a whole (e.g., human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of a proposed action. For instance, in the case of a site-specific action, significance would usually depend on the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant. Intensity refers to the severity or extent of the potential environmental impact, which can be thought of in terms of the potential amount of the likely change. In general, the more sensitive the context, the less intense a potential impact needs to be in order to be considered significant. Likewise, the less sensitive the context, the more intense a potential impact would be expected to be significant.

This section includes water resources and biological resources. The potential impacts to the following resource areas are considered to be negligible or non-existent and are therefore not analyzed in detail in this EA:

Air Quality: Effects on air quality from implementation of the Preferred Alternative and No Action alternative would be limited to mobile sources and temporary in nature. As described in 40 CFR section 51.851, Determining Conformity of General Federal Actions to State or Federal Implementation Plans (the "General Conformity Rule"), all federal actions occurring in air basins designated in nonattainment or in a maintenance area must conform to an applicable implementation plan (USEPA 2017). The North Slope Borough, where the northern Alaska sites are located, is not classified as a nonattainment or maintenance area for any criteria pollutants. As a result, the Conformity Rule is not applicable at the northern Alaska sites. Implementation of activities under either the Preferred Alternative or No Action Alternative would have a negligible impact on air quality, including criteria pollutants and hazardous air pollutants. The U.S. Environmental Protection Agency (USEPA) recommends that agencies consider 25,000 metric tons of carbon dioxide equivalent (CO_2e) emissions on an annual basis as a reference point below which a quantitative analysis of greenhouse gas is not recommended unless it is easily accomplished based on available tools and data. Minimal or no greenhouse gas increase would result from the Preferred or No Action Alternatives. Therefore, air quality and greenhouse gases require no further analysis.

Cultural Resources: For both Alternatives, the Navy would consult under section 106 of the NHPA when appropriate if natural resources management actions were to affect cultural resources. The Northern Alaska Sites INRMP does not propose actions that would affect historic properties, buildings, structures, landscape, or land use patterns. Therefore, no further analysis is needed.

American Indian Traditional Resources: Alaska Native groups are represented by Regional Corporations established in 1971 under the Alaska Native Claims Settlement Act. Alaska Native Claims Settlement Act settled land and financial claims made by Alaska Natives and provided for the establishment of Regional Corporations to administer those claims and foster economic development. The Arctic Slope Regional Corporation is the designated native corporation for this area. In addition, distinct from the Regional Corporation, there are eight federally recognized Alaska Native villages and their village corporations in the North Slope region: the Village of Anaktuvuk Pass, the Native Village of Atqasuk, the Native Village of Barrow (Iñupiat Community of the Arctic Slope), the Native Village of Kaktovik (Barter Island), the Native Village of Nuiqsut (Nooiksut), the Native Village of Pt. Hope, the Native Village of Pt. Lay, and Wainwright Traditional Council. Alaska Native entities have use of state fisheries for commercial, subsistence, and ceremonial activities. Co-management agreements exist between Alaskan Natives and NMFS on the harvest of marine mammals (NOAA 2020; USFWS 2020b). The Navy consulted with the local Native Alaskan villages and their corporations for the Proposed Action. The actions in the Preferred Alternative are not expected to affect access to, reduce, or degrade, harvestable resources. Therefore, no further analysis is needed.

Land Use: The Preferred Alternative and No Action Alternative would result in no change to, or inconsistencies with, existing land use designations. Therefore, no further analysis is needed.

Visual Resources: The Preferred Alternative and No Action alternative would have no impact on visual resources. The INRMP does not propose activities that could affect natural vistas and view sheds. Therefore, no further analysis is needed**.**

Airspace: The Preferred Alternative and No Action Alternative would have no impact on airspace and therefore, no further analysis is needed.

Noise: Under either Alternative, noise from activities would primarily be generated from equipment and vehicles temporarily used in survey work. Noise would be minimal and short-term and would not change the long-term noise environment. Therefore, no further analysis is needed.

Infrastructure: The Preferred Alternative and the No Action Alternative would not cause significant changes to the current infrastructure at the northern Alaska sites**.**

Transportation: The Preferred Alternative and No Action Alternative are not expected to involve activities that affect traffic patterns or alter or create new transportation routes in the air, land or sea, therefore, no further analysis is needed.

Public Health and Safety: The Preferred Alternative and No Action Alternative involve no activities or operations with the potential to affect the safety, well-being or health of members of the public, therefore, no further analysis is needed.

Hazardous Materials and Wastes: The Preferred Alternative and No Action Alternative would not change current hazardous materials or hazardous waste conditions and management, therefore no further analysis is required.

Socioeconomics: The Preferred Alternative and No Action Alternative involve no activities that could affect population, income, or housing of populations, and therefore socioeconomics requires no further analysis

Environmental Justice: The Preferred Alternative and No Action Alternative would have no adverse human health or environmental effects and therefore would have no disproportionately high and

adverse human health or environmental effects on minority and low-income populations. As a result, no further analysis is needed for environmental justice.

3.1 Water Resources

This discussion of water resources and their physical characteristics includes surface water, wetlands and shorelines.

Surface water resources generally consist of wetlands, lakes, rivers, and streams. Surface water is important for its contributions to the economic, ecological, recreational, and human health of a community or locale.

Wetlands are jointly defined by USEPA and U.S. Army Corps of Engineers (USACE) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands generally include swamps, marshes, bogs and similar areas (33 CFR section 328.3(b), effective 23 December 2019).

Shorelines include fresh bodies of water. Physical dynamics of shorelines include channel movement and hydrological systems, flooding or storm surge areas, erosion and sedimentation, water quality and temperature, presence of nutrients and pathogens, and sites with potential for protection or restoration. Shoreline ecosystems are vital habitat for multiple life states of many fish, birds, reptiles, amphibians, and invertebrates. Different shore zones provide different kinds and levels of habitat, and when aggregated, can significantly influence life. Organic matter that washes onto the shore, or "wrack," is an important component of shoreline ecosystems, providing habitat for invertebrates, soil and organic matter, and nutrients to both the upland terrestrial communities and aquatic ecosystems.

3.1.1 Regulatory Setting

Wetlands are currently regulated by the USACE under section 404 of the CWA as a subset of all "Waters of the U.S.". Waters of the U.S. are generally defined as (1) traditional navigable waters, (2) wetlands adjacent to navigable waters, (3) non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow perennially or have continuous flow at least seasonally (e.g., typically 3 months), and (4) wetlands that directly abut such tributaries (33 CFR section 328.3(a), effective 23 December 2019).

Section 404 of the CWA authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredge or fill into wetlands and other Waters of the U.S. Any discharge of dredge or fill into Waters of the U.S. requires a permit from the USACE.

Section 10 of the Rivers and Harbors Act provides for USACE permit requirements for any in-water construction. USACE and some states require a permit for any in-water construction. Permits are required for construction of piers, wharfs, bulkheads, pilings, marinas, docks, ramps, floats, moorings, and like structures; construction of wires and cables over the water, and pipes, cables, or tunnels under the water; dredging and excavation; any obstruction or alteration of navigable waters; depositing fill and dredged material; filling of wetlands adjacent or contiguous to waters of the U.S.; construction of riprap, revetments, groins, breakwaters, and levees; and transportation of dredged material for dumping into ocean waters.

The Coastal Zone Management Act of 1972 provides assistance to states, in cooperation with federal and local agencies, for developing land and water use programs in coastal zones. Actions occurring

within the coastal zone commonly have several resource areas that may be relevant to the Coastal Zone Management Act. The state of Alaska does not have a Coastal Management Program.

EO 11990, *Protection of Wetlands,* requires that federal agencies adopt a policy to avoid, to the extent possible, long- and short-term adverse impacts associated with destruction and modification of wetlands and to avoid the direct and indirect support of new construction in wetlands whenever there is a practicable alternative.

3.1.2 Affected Environment

The following discussions provide a description of the existing conditions for each of the categories under water quality resources at the northern Alaska sites.

3.1.2.1 Wetlands

The northern Alaska sites are located on the ACP situated on the North Slope of Alaska (Carter 2010). The ACP is underlain with permafrost, which prevents snowmelt and other surface waters from fully penetrating, creating a perched water table. This condition results in the wetlands that cover most of the North Slope despite the low total annual precipitation (Tarnorcai 2009; Arguez et al. 2019).

Wetlands make up 73.8 percent of the total land area for all three northern Alaska sites (USFWS 2020a; ADF&G 2006; Hall et al. 1994). Pt. McIntyre is 82.5 percent wetlands, Icy Cape is 63 percent wetlands and at Barrow the runway area is 7.8 percent wetlands and the antenna field area is 94.1 percent wetlands (USFWS 2020a). The areas that are not designated as wetlands are typically former Navy runways, roads and pads that had been elevated or covered in gravel to avoid inundation. The Navy has not performed ground-based wetland surveys and all data on wetlands are from the USFWS National Wetland Inventory, which used high-altitude aerial imagery to identify wetlands (USFWS 2020a). The majority of the wetlands in the ACP are palustrine wetlands; soils become saturated during the summer thaw and from precipitation (Hall et al. 1994). Other wetland types that exist at northern Alaska sites include Estuarine and Marine Deepwater, Estuarine and Marine Wetland, Freshwater Emergent Wetland, and Freshwater Ponds.

3.1.2.2 Surface Waters

The freeze-thaw cycle of soils creates unique geographic features called polygons and thermokarsts on the North Slope geographic region, which influence surface waters. During the spring, when the subsidence zone thaws, water fills cracks, which freeze again come winter and create ice wedges further enlarging these cracks and waterways. This creates a network of lakes, rivers, ponds and streams that make up nearly 30 percent of the land area of the ACP (McEwen & Butler 2018; McNab & Avers 1996). The ponds and pools are a result of the consolidation of the of the freeze-thaw cycle over time (Huryn & Hobbie 2012). Icy Cape has a shallow lagoon behind the barrier island with a network of interconnected circular ponds and tidelands next to the Navy's site. The Icy Cape Creek drainage runs north through the middle of the site, the head of the drainage is truncated by the former gravel airstrip, which is 15-meters above sea level. The Barrow property's surface water features include Imikpuk Lake, Middle Salt Lagoon and the North Salt Lagoon. Pt. McIntyre is protected by barrier islands extending one mile from the shoreline; the inland waterway is Gwydyr Bay. The surrounding land at Pt. McIntyre consists of small thaw ponds.

3.1.2.3 Shorelines

All three parcels are in direct proximity to the Arctic Ocean. The Chukchi Sea lies west of Pt. Barrow, while the Beaufort Sea lies east. Icy Cape is on the Chukchi coast, while Pt. McIntyre is on the Beaufort coast. The Barrow runway parcel parallels the Chukchi coast, and is in close proximity to the confluence of the two seas. The Navy manages approximately 1.75 miles in total along the Arctic coast. Icy Cape is protected from the Chukchi Sea by barrier islands and the shoreline is backed by a 7-meter high terrace that rises to the upland area. Barrow does not have barrier islands but shares boundaries with the Chukchi Sea, Middle Salt Lagoon, Imikpuk Lake and North Salt Lagoon. Pt. McIntyre's coast is protected by barrier islands one mile off the shoreline; the inland waterway is called Gwydyr Bay.

One of the most serious threats to the Navy's mission and its real estate holdings is coastline erosion. This process has been exacerbated by loss of shorefast ice that historically protected shorelines from fall storm surges. In July 2019, storms caused large sections of bluff along the Chukchi Sea coast to slough off the coastline. The Pt. McIntyre property's shoreline erosion rate over the course of approximately 50 years was between 0.3 and 5.0 meters per year, whereas Icy Cape and Barrow were 0 to 2.0 meters per year (Gibbs and Richmond 2015).

3.1.3 Environmental Consequences

This analysis of water resources looks at the potential impacts on surface water, wetlands and shorelines. The analysis of surface water quality considers the potential for impacts that may change the water quality, including both improvements and degradation of current water quality. The impact assessment of wetlands considers the potential for impacts that may change the local hydrology, soils, or vegetation that support a wetland. The analysis of shorelines considers the potential of the Proposed Action to affect shoreline ecological functions such as channel movement and hydrological systems, flooding or storm surge areas, areas of erosion and sedimentation, water quality and temperature, presence of nutrients and pathogens and sites with the potential for protection or restoration.

3.1.3.1 No Action Alternative

Under the No Action Alternative, the Navy would not adopt and implement the northern Alaska sites INRMP and there would be no change to the management of water resources. A No Action Alternative would not incorporate the most current scientific information for managing water resources and would put the northern Alaska sites out of compliance with the Sikes Act. This could lead to minor long term negative changes to the water resources at the northern Alaska sites because of the lack of a water resources management plan that incorporates the newest information and data available.

3.1.3.2 Northern Alaska Sites INRMP (Preferred Alternative) Potential Impacts

The study area for the analysis of effects to water resources associated with the Preferred Alternative includes the lands and waters of the northern Alaska sites that are either owned or leased by the Navy.

The Preferred Alternative would help ensure that the most current scientific information is applied in project planning and execution to minimize potential impacts to water resources. Furthermore, the Preferred Alternative would help ensure that water quality would remain unchanged and could potentially lead to its improvement. These projects and strategies include: following BMPs for use of heavy machinery on the tundra, ensuring work plans and BMPs are in place to prevent fuel and oil spills, following environmental regulations and guidance, habitat improvements, and more robust monitoring and study efforts. Wetlands would benefit from the Preferred Alternative by providing new data from

surveys and monitoring of wetlands leading to better management, protection of native vegetation and adherence to BMPs when working in areas with wetlands. Shoreline monitoring would continue and protocols would be standardized for documenting the changes in shoreline exposure and erosion due to the decline in landfast ice. Landfast ice primarily forms off coasts in shallow water, and unlike pack ice, typically remains affixed to coastlines or shallow sea floor. Landfast ice usually starts to form in the fall and typically melts completely during the summer (Polar Science Center 2021). More photopoints would be established to monitor changes related to climate change and shoreline erosion issues. The Preferred Alternative would have no impact on the Navy's mission at the northern Alaska sites and could help reduce costs of maintenance, spread of contaminants, flooding, and erosion of shorelines and help the Navy develop models to predict the effects of climate change and shoreline erosion in the future. New data on water resources would be shared with management partners. Therefore, implementation of the Preferred Alternative would not result in significant impacts to water resources.

3.2 Biological Resources

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. Plant species are referred to generally as vegetation, and animal species are referred to generally as wildlife. Habitat can be defined as the resources and conditions present in an area that support a plant or animal.

Within this EA, biological resources are divided into four major categories (1) threatened, endangered, or other special status species, (2) terrestrial vegetation, (3) terrestrial wildlife, and (4) marine wildlife.

3.2.1 Regulatory Setting

Special-status species for the purposes of this assessment are those species listed as threatened or endangered under the ESA and species afforded federal protection under the MBTA and the MMPA.

The purpose of the ESA is to conserve the ecosystems upon which TES depend and to conserve and recover listed species. Section 7 of the ESA requires federal action proponents to consult with the USFWS and the NMFS to ensure that their actions are not likely to jeopardize the continued existence of federally listed species, or result in the destruction or adverse modification of designated critical habitat. Critical habitat will not be designated on any areas owned, controlled, or designated for use by the DOD where an INRMP has been developed that, as determined by the Department of Interior or Department of Commerce Secretary, provides a benefit to the species subject to critical habitat designation (50 CFR section 424.12 [h]).

Birds, both migratory and native-resident species, are protected under the MBTA, and their conservation by federal agencies is mandated by EO 13186 (Migratory Bird Conservation). Under the MBTA it is unlawful by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, [or] possess migratory birds or their nests or eggs at any time, unless permitted by regulation. The 2003 National Defense Authorization Act gave the Secretary of the Interior authority to prescribe regulations to exempt the Armed Forces from the incidental taking of migratory birds during authorized military readiness activities. The final rule authorizing the DOD to take migratory birds in such cases includes a requirement that the Armed Forces must confer with the USFWS to develop and implement appropriate conservation measures to minimize or mitigate adverse effects of the Proposed Action if the action will have a significant negative effect on the sustainability of a population of a migratory bird species.

Recent administrative actions and court decisions are further clarifying the scope of the MBTA and the Department of Interior's (DOI's) mandate to enforce and administer the MBTA. In December 2017, the DOI issued its Solicitor's Opinion, which clarified that otherwise lawful activity that results in an incidental take of a protected bird does not violate the MBTA (DOI 2017). In February 2018, a memorandum from the Deputy Assistant Secretary of Defense for Environment, Safety and Occupational Health clarified that DOD actions should continue current practices to minimize take of migratory birds (DOD 2018). On July 31, 2020, the United States District Court, Southern District New York, vacated the DOI Opinion (M 37050) regarding incidental take and remanded the Opinion back to the agency for further proceedings consistent with the Opinion. The vacated DOI Opinion does not change the analysis in this EA regarding potential effects to migratory birds, due to the Navy's continued efforts to follow the conservative and protective policies of the Assistant Secretary of Defense.

All marine mammals are protected under the provisions of the MMPA. The MMPA prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas. Take is defined as to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal. The term harass is further defined under the MMPA, for non-military readiness activities, to mean any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment).

3.2.2 Affected Environment

The following discussions provide a description of the existing conditions for each of the categories under biological resources at the northern Alaska sites. TES and species of concern are discussed in each respective section below with a composite list applicable to the Proposed Action provided in Table 3-1.

3.2.2.1 Threatened, Endangered, or Other Special Status Species

Threatened and Endangered Species

The ESA (16 U.S.C. sections 1531–1544) protects federally listed threatened and endangered plant and animal species. The ESA authorizes the determination and listing of species as endangered and threatened and provides regulatory protection for listed species.

The ESA defines critical habitat as "the specific areas within the geographical and Species area occupied by the [protected] species, at the time it is listed […] on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management consideration or protection." Critical habitat includes, "specific areas outside the geographical area occupied by the species at the time it is listed […] upon a determination by the Secretary [of the Interior] that such areas are essential for the conservation of the species," (16 U.S.C. sections 1532(5)(i) and (ii)). Critical habitat must be designated on the basis of the best scientific data available and after taking into consideration the economic impact of the designation.

Section 7(a)(2) of the ESA requires federal agencies to consult with the USFWS or NMFS whenever proposed actions "may affect" threatened and endangered species. Each federal agency, in consultation with the Secretary, is required to ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of critical habitat of such species. Federal agencies are to use the best scientific and commercial data available in meeting these requirements.

Three species have been designated as threatened under the ESA that are known to occur in the terrestrial area of the northern Alaska sites: the polar bear, spectacled eider, and Steller's eider. The polar bear has federally designated critical habitat at all three northern Alaska sites. The spectacled eider and the Steller's eider are known to occur at Icy Cape and Barrow however, have no critical habitat located within the fence line of the northern Alaska sites. Three federally listed marine mammals are likely to occur in the nearshore marine environment proximate to the northern Alaska sites, the bowhead whale (*Balaena mysticetus*), ringed seal (*Pusa hispida hispida*), and bearded seal (*Erignathus barbatus nauticus*) (Table 3-1). The bowhead whale, listed as endangered, does not have designated critical habitat due to the population decline being due to overexploitation by commercial whaling, and that there is no indication that habitat degradation has a negative impact on the increasing population in the present (67 FR 55767). In January 2021, NMFS published a proposed rule to designate critical habitat for the ringed seal (86 FR 1433) and the Beringia DPS of the bearded seal (86 FR 1452). For both the ringed and bearded seal, the revised proposed designation comprises an area of marine habitat in the Bering, Chukchi, and Beaufort seas. In addition to protection under ESA, the bowhead whale, ringed seal, bearded seal, and polar bear are all protected under the MMPA.

Federally recognized candidate species receive no statutory protection under the ESA. There are no federally recognized candidate species on or near the northern Alaska sites.

Other Special Status Species

Some species, although not federally listed, are identified by the State of Alaska as species at risk as designated in the State Wildlife Action Plan (SWAP 2015). The ADF&G designates these species, as species of greatest conservation need (SGCN). USFWS encourages cooperative conservation efforts for these species because they are, by definition, species that may warrant future protection under the ESA (USFWS 2017). Navy staff are aware that SGCN are potentially present at the northern Alaska sites, including the yellow-billed loon (*Gavia adamsii*), the Alaskan stock of Pacific walrus (*Odobenus rosmarus divergens*) and spotted seal Bering Sea Distinct Population Segment (DPS) (*Phoca largha*). A complete list of species designated as SGCN potentially found on the northern Alaska sites is identified in Appendix C of the INRMP (Navy 2021a).

3.2.2.2 Terrestrial Vegetation

Vegetation includes terrestrial plants as well as freshwater aquatic communities and constituent plant species. All three sites consist of largely undisturbed tundra wetlands. All three sites are above the arctic tree line, are dominated by mosses, grasses, and dwarf shrubs. There have been no formal vegetation surveys at the northern Alaska sites and there are no known invasive species. Five terrestrial ecosystem types are identified as likely occurring: Alaska Arctic Shrub Tussock-Tundra, Alaska Arctic Sedge Freshwater Marsh, Alaska Arctic Polygonal Ground Wet Sedge Tundra, Alaska Arctic Polygonal Ground Tussock Tundra, and Alaska Arctic Marine Beach and Beach Meadow. Most all of these ecosystems consist of tussock-forming grass communities, in wet shallow soils. Beaches are sand or cobble with vegetation stabilizing some areas' sediments.

3.2.2.3 Terrestrial Wildlife

Terrestrial wildlife includes all includes all non-marine animal species (i.e., insects and other invertebrates, freshwater fish, amphibians, reptiles, birds, and mammals) focusing on the species and habitat features of greatest importance or interest. No standardized wildlife surveys have been completed on the northern Alaska sites, except for the federally threatened Steller's and spectacled

eiders. The brown lemming (*Lemmus trimucronatus*) is a keystone species of the arctic system and drives the population dynamics of predators like arctic foxes (*Alopex lagopus*), weasels (*Mustela spp*.) and snowy owls (*Nyctea scandiaca*) (Huryn & Hobbie 2012), in addition to affecting vegetation availability. Caribou (*Rangifer tarandus*) are a historically and contemporarily important cultural resource for native Alaskans. Caribou herds are most often found at the Icy Cape site.

Only seven avian species are potential year-round residents of Alaska's ACP, although nearly 100 avian species breed there (Huryn & Hobbie 2012; Mckinnon et al. 2010). Enormous flocks of waterfowl stage and molt together on arctic lakes or in the nearshore environment. Currently, shorebirds, yellow-billed loons, snowy owls and the two federally threatened eiders are the Navy's top management priorities for migratory birds.

Invertebrates can be found in extremely high densities and play an integral role in the flow of energy and nutrient cycling as well as pollination in both the aquatic and terrestrial ecosystem (Hodkinson 2013). Within ponds and lakes, Alaskan freshwater invertebrate communities are concentrated either in the sediments in the center of the waterbody, or among the grasses and sedges on pond and lake margins (Lougheed et al. 2011; Butler et al. 1980). Consequently, ADF&G has designated thirteen terrestrial, freshwater, and marine invertebrate taxa as SGCN in the Arctic region. The terrestrial taxa are: ants, bees, wasps, and hornets (order Hymenoptera); flies, midges, and gnats (order Diptera); dragonflies and damselflies (order Odonata); butterflies and moths (order Lepidoptera); and spiders (order Arachnida). The designated freshwater taxa are mayflies (order Ephemeroptera); stoneflies (order Plecoptera); caddisflies (order Trichoptera); and water fleas (order Cladocera). The marine taxa are euphausids (order Euphausiacea), copepods (subclass Copepoda); mysids (order Mysida); and amphipods (order Amphipoda) (Appendix C in the INRMP [Navy 2021a]; ADF&G 2015).

3.2.2.4 **Marine Wildlife**

Three species of threatened or endangered marine mammals are likely to occur in the nearshore areas off the coastline of the northern Alaska sites including the bowhead whale, ringed seal and bearded seal. The Navy has a minimal effect on these animals' marine habitat, because Navy activities are not proximate to the areas these species use. The polar bear, Pacific walrus, spotted seal Bering Sea DPS, beluga whale (*Delphinapterus leucas*), harbor porpoise (*Phocoena phocoena*) and gray whales (*Estrichtius robustus*) have been documented at the northern Alaska sites (Navy 2021a). A list of marine species that potentially occur near northern Alaska sites are listed in Appendix C of the INRMP (Navy 2021a).

Table 3-1 Federally threatened and endangered species known to potentially occur on or in the vicinity of northern Alaska sites

Common Name (Scientific Name)	*Status/Federal* [1]	*Critical Habitat*	*Habitat*
Threatened and Endangered Species			
Polar bear *(Ursus maritimus)*	Threatened 73 FR 28306 (2008)	Yes[1] 75 FR 76086 (2010)	Sea ice for hunting and steep stable slopes (4.3 to 111.6 feet high) with water or relatively level ground below the slope and relatively flat terrain above slope for denning.
Spectacled eider *(Somateria fischeri)*	Threatened 58 FR 27474 (1993)	Yes[2] 66 FR 9146 (2001)	Breeding habitat: low-lying arctic and sub-arctic wetlands dominated by graminoids and numerous ponds and lakes.
Steller's eider *(Polysticta stelleri)*	Threatened 62 FR 31748 (1997)	Yes[2] 66 FR 8850 (2001)	Breeding habitat: tundra adjacent to small ponds or within drained lake basins.
Bowhead whale *(Balaena mysticetus)*	Endangered 35 FR 8491 (1970)	N/A*	Nearshore marine environment.
Ringed seal *(Pusa hispida hispida)*	Threatened 77 FR 76706 (2012)	Proposed Rule 86 FR 1452 (2021)**	Nearshore marine environment.
Bearded seal (*Erignathus barbatus nauticus*)	Threatened 77 FR 76739 (2012)	Proposed Rule 86 FR 1433 (2021)**	Nearshore marine environment.

[1] Critical habitat designated on all three northern Alaska sites (Navy 2021a).
[2]No critical habitat is designated on any of the northern Alaska sites.
**NMFS has no legal obligation to designate critical habitat for the bowhead whale because the species was listed prior to 1973.*
*** Proposed rule, not final.*

3.2.3 Environmental Consequences

This analysis focuses on wildlife or vegetation types that are important to the function of the ecosystem or are protected under federal or state law or statute.

3.2.3.1 No Action Alternative Potential Impacts

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to biological resources. No significant impacts to biological resources would result from implementation of the No Action Alternative. However, the northern Alaska sites would be non-compliant with the Sikes Act due to the lack of a current INRMP; this could lead to minor negative impacts to biological resources. The No Action Alternative would lead to management without current survey data or adaptive

management strategies, potentially leading to future ESA critical habitat designation with constraints on the Navy's mission activities. No additional habitat and species surveys would be performed (unless required by the ESA) under this alternative.

3.2.3.2 Northern Alaska Sites INRMP (Preferred Alternative) Potential Impacts

The study area for the analysis of effects to biological resources associated with the Preferred Alternative includes all land owned and leased by the Navy at the northern Alaska sites.

The Preferred Alternative includes measures for surveying, monitoring, conservation, reducing human wildlife conflict, and improvements to natural resources that would benefit biological resources, safety, threatened or endangered species and create or improve habitat. New data from wildlife and vegetation surveys would be shared with management partners. The Preferred Alternative includes objectives (Table 2-1) and specific projects (Appendix A) that would improve wildlife habitat by applying an ecosystem approach to wildlife and land management at the northern Alaska sites. Navy staff would review all planned construction projects for natural resources impacts, focusing on the goals and objectives of the INRMP.

Threatened, Endangered, or Other Special Status Species

The Preferred Alternative is expected to have a beneficial effect on TES. Under the Preferred Alternative, the Navy would geospatially monitor polar bear activity in the area. The Navy typically conducts work after 15 July to avoid disturbance to federally threatened eiders, and prior to 15 October to avoid disturbing denning polar bears. New surveys and monitoring of marine mammal haulouts and bird nesting areas would provide the most up-to-date information to inform decision-making, ultimately benefiting TES and other wildlife. Implementation of the Preferred Alternative would integrate natural resources conservation with military operations.

Terrestrial Vegetation

Implementation of the Preferred Alternative would likely have a beneficial effect on terrestrial vegetation. Restoration activities such as the use of aircraft, heavy machinery and foot traffic can lead to ground vegetation disturbance. The INRMP would make recommendations to reduce or eliminate these disturbances. Wetlands and tundra habitat would be identified, mapped and enhanced under the INRMP. Climate change reports focusing on the impact to Navy restoration activities would also be developed. Reports and photopoints would document new restoration efforts and continue to document shoreline erosion issues at all three sites. Through the adoption of the northern Alaska sites INRMP, shoreline revegetation projects could help mitigate shoreline erosion.

Terrestrial Wildlife

Implementation of the Preferred Alternative would be a general overall benefit to terrestrial wildlife and migratory birds. The INRMP describes habitat and nesting surveys to gain more information and protect terrestrial wildlife species and migratory birds. Many of the same measures that would benefit TES would also benefit terrestrial wildlife and migratory bird populations at the northern Alaska sites, such as testing for toxins in invertebrate communities, social surveys of subsistence hunters, and collaborating with management partners to share data to inform management decisions as detailed in the INRMP. The INRMP would also ensure all personnel on site are aware of potentially hazardous wildlife, and are informed on what protocols to follow should any wildlife present a danger to human

life. Implementation would protect and enhance habitat, survey for the presence and distribution of species and migratory birds, restore habitat and protect both human and animal lives.

Marine Wildlife

The implementation of the Preferred Alternative would have beneficial effects on marine wildlife. Increased surveys and new reports would provide information on the marine species that utilize the nearshore areas managed by the Navy. Through the implementation of the INRMP, knowledge of shorebirds and seabirds would increase through surveys and mapping of habitat. Marine mammals would benefit from helicopter and boat BMPs detailed in the strategies of Objective 1.1 in the INRMP (Navy 2021). The USFWS have put in place BMPs (USFWS 2019) for operating boats and aircraft near hauled out and in-water marine mammals. These BMPs include restrictions on operating distances from pinnipeds in the water and at haul outs, minimum marine vessel distance depending on vessel length, reductions in noise and changes in vessel speed and direction of travel.

Therefore, implementation of the Preferred Alternative would not result in significant impacts to biological resources.

3.3 Summary of Potential Impacts to Resources

A summary of the potential impacts associated with the No Action Alternative and the Preferred Alternative are presented in Table 3-2.

Table 3-2 Summary of Potential Impacts to Resource Areas

Resource Area	*No Action Alternative*	*Adopt and Implement INRMP (Preferred Alternative)*
Water Resources: *Wetlands Surface Waters and Shorelines*	This option would not incorporate the most current scientific information for managing water resources and put the northern Alaska sites out of compliance with the Sikes Act. This could lead to minor long term negative effects to the water resources at the northern Alaska sites because of the lack of a management plan that incorporates the newest information and data available.	Would ensure that the most current scientific information is applied in project planning and execution to minimize potential impacts to water resources. Ensure that water quality would remain unchanged and could potentially lead to its improvement. Enact projects such as following BMPs for use of heavy machinery, ensure a work plan and BMPs are in place to prevent fuel and oil spills, following environmental regulations and guidance and habitat improvement projects. The Preferred Alternative would have no impact on the Navy's mission at the northern Alaska sites and could help reduce costs of maintenance due to flooding, erosion.
Biological Resources: *Threatened and Endangered Species; Marine/Terrestrial Wildlife; and Terrestrial Vegetation*	Continuation of current management practices could comply with ESA and MMPA, but would not comply with the Sikes Act. Without an INRMP there could be more costly, time-consuming consultations and permit applications. There is a possibility of minor adverse effect from lack of new survey data to provide most recent information on habitat, species presence and distribution. This could lead to future ESA critical habitat designation with putting constraints on the Navy's mission activities. No additional habitat and species surveys would be performed (unless required by the ESA) under this alternative	The Preferred Alternative would put the northern Alaska sites in compliance with the Sikes Act. The INRMP would propose new surveys and monitoring of marine mammal haulouts, monitoring of polar bear geospatial activity, making human wildlife conflict protocol common knowledge to all personnel and survey bird nesting areas. All this data would be used to inform decision-making at the northern Alaska sites to benefit TES and all wildlife and be shared with management partners. Other actions listed in the INRMP that wildlife may benefit from include social surveys of subsistence hunters, collaborating with management partners. Marine wildlife would benefit because of an increase in data on shorebirds, seabirds and marine mammals through more surveys and mapping of habitat. Marine mammals would benefit through adherence to heavy equipment, boat and aircraft BMPs in and near to haulout areas. To protect vegetation BMPs would be followed to reduce disturbances; wetlands and tundra habitat would be mapped, identified and enhanced; climate change reports would be developed; documentation of shoreline erosion would continue at all three sites; and shoreline revegetation projects would be proposed.

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4 Cumulative Impacts

This section (1) defines cumulative impacts, (2) describes past, present, and reasonably foreseeable future actions relevant to cumulative impacts, (3) analyzes the incremental interaction the Proposed Action may have with other actions, and (4) evaluates cumulative impacts potentially resulting from these interactions.

4.1 Definition of Cumulative Impacts

The approach taken in the analysis of cumulative impacts follows the objectives of the NEPA, CEQ regulations[2], and CEQ guidance. Cumulative impacts are defined in 40 CFR section 1508.7 as "the impact on the environment that results from the incremental impact of the action when added to the other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

To determine the scope of environmental impact analyses, agencies shall consider cumulative actions, which when viewed with other Proposed Actions have cumulatively significant impacts and should therefore be discussed in the same impact analysis document.

In addition, CEQ and USEPA have published guidance addressing implementation of cumulative impact analyses—Guidance on the Consideration of Past Actions in Cumulative Effects Analysis (CEQ 2005) and Consideration of Cumulative Impacts in Environmental Protection Administration Review of NEPA Documents (USEPA 1999). CEQ guidance entitled Considering Cumulative Impacts Under NEPA (1997) states that cumulative impact analyses should

> "…determine the magnitude and significance of the environmental consequences of the Proposed Action in the context of the cumulative impacts of other past, present, and future actions...identify significant cumulative impacts…[and]…focus on truly meaningful impacts."

Cumulative impacts are most likely to arise when a relationship or synergism exists between a Proposed Action and other actions expected to occur in a similar location or during a similar time period. Actions overlapping with or in close proximity to the Proposed Action would be expected to have more potential for a relationship than those more geographically separated. Similarly, relatively concurrent actions would tend to offer a higher potential for cumulative impacts. To identify cumulative impacts, the analysis needs to address the following three fundamental questions.

- Does a relationship exist such that affected resource areas of the Proposed Action might interact with the affected resource areas of past, present, or reasonably foreseeable actions?
- If one or more of the affected resource areas of the Proposed Action and another action could be expected to interact, would the proposed action affect or be affected by impacts of the other action?

[2] On 16 July 2020 CEQ published the final rule updating its regulations for implementing NEPA (85 Federal Register 43304). These regulations became effective on 14 September 2020. However, Department of Navy guidance published on 10 September 2020 directs that action proponents should apply the revised CEQ regulations to any NEPA process commenced after 14 September 2020. Because the NEPA process for the Northern Alaska Sites INRMP EA began prior to 14 September 2020, this EA relies on the previous version of 40 CFR parts 1500-1508 (1978, as amended in 1986 and 2005).

- If such a relationship exists, then does an assessment reveal any potentially significant impacts not identified when the Proposed Action is considered alone?

4.2 Scope of Cumulative Impacts Analysis

The scope of the cumulative impacts analysis involves both the geographic extent of the effects and the time frame in which the effects could be expected to occur. For this EA, the study area delimits the geographic extent of the cumulative impacts analysis. In general, the study area will include those areas previously identified in Chapter 3 for the respective resource areas. The time frame for cumulative impacts centers on the timing of the Proposed Action.

Another factor influencing the scope of cumulative impacts analysis involves identifying other actions to consider. Beyond determining that the geographic scope and time period for the actions interrelate to the Proposed Action, the analysis employs the measure of "reasonably foreseeable" to include or exclude other actions. For the purposes of this analysis, public documents prepared by federal, state, and local government agencies form the primary sources of information regarding reasonably foreseeable actions. Documents used to identify other actions include notices of intent for Environmental Impact Statements and EAs, management plans, land use plans, and other planning related studies.

4.3 Past, Present, and Reasonably Foreseeable Actions

This section will focus on past, present, and reasonably foreseeable future projects at and near the Proposed Action locale. In determining which projects to include in the cumulative impacts analysis, a preliminary determination was made regarding the past, present, or reasonably foreseeable action. Specifically, using the first fundamental question included in section 4.1, it was determined if a relationship exists such that the affected resource areas of the Proposed Action (included in this EA) might interact with the affected resource area of a past, present, or reasonably foreseeable action. If no such potential relationship exists, the project was not carried forward into the cumulative impacts analysis. In accordance with CEQ guidance (CEQ 2005), these actions were considered but excluded from further cumulative effects analysis, but not catalogued here, as the intent is to focus the analysis on the meaningful actions relevant to informed decision-making. Projects included in this cumulative impacts analysis are briefly described in the following subsections.

4.3.1 Past Actions

All northern Alaska sites were originally undisturbed arctic tundra habitat, inhabited by the native, Iñupiat people who occupied the area north of the Brooks Range between Nome, Alaska and northeastern Canada.

Icy Cape and Pt. McIntyre. Icy Cape and Pt. McIntyre both were originally developed by the U.S. military as DEW Line stations—the Air Force built these systems to detect incoming attacks from adversaries (Air Force 2013). The sites became technologically obsolete and were abandoned by the Air Force and transferred to the Navy in 1965 to be used as a remote field camps for the NARL stationed in Barrow. The sites were decommissioned after the end of the NARL program in 1981. Subsequent actions at Icy Cape include removal of debris, soil and groundwater sampling and landfill repairs. Actions at Pt. McIntyre include the demolition of structures, cleanup of contaminated soils and the relocation of a former landfill.

Barrow. The Navy established a runway and facilities in 1944 to support oil exploration at Barrow. The Office of Naval Research subsequently established NARL at the site in 1947 for arctic research. Oil exploration ended in Barrow in 1953 and the Navy continued to fund NARL as a research station until it was decommissioned. The Navy and Bureau of Land Management completed a land exchange with the Ukpeaġvik Iñupiat Corporation under the Alaska Native Claims Settlement Act (43 U.S.C. section 1601 et seq.) in 1986. At this time, the Navy only owns the former airstrip and antenna field at Barrow. The relevant past actions at Barrow include soil treatments and debris removal.

Table 4-1 provides a summary of past major restoration activities at the northern Alaska sites.

4.3.2 Present and Reasonably Foreseeable Actions

The Navy has no current active missions on any of the northern Alaska sites, which are all decommissioned. The purpose of the Navy's presence at these sites is limited to environmental remediation activities and monitoring. The Navy is the only entity conducting activities at the northern Alaska sites for the reasonably foreseeable future.

Icy Cape. Present actions at this site include the evaluations of the three landfills being affected by landfill degradation. Future actions include an environmental remedial alternative evaluation, Record of Decision, and remedial action.

Pt. McIntyre. Future actions at Pt. McIntyre could include groundwater testing, survey of landfill for erosion, and shoreline stability monitoring.

Barrow. Present actions at Barrow include monitoring of groundwater and surface water for petroleum and evaluating impact from per- or polyfluoroalkyl substances (PFAS). Future actions at Barrow include limited lead contaminated soil removal, groundwater and surface water monitoring for petroleum, limited petroleum contaminated soil removal, and PFAS remedial investigation/feasibility study.

Table 4-1 provides a summary of past and future restoration activities at the northern Alaska sites.

4.4 Cumulative Impact Analysis

Where feasible, the cumulative impacts were assessed using quantifiable data; however, for many of the resources included for analysis, quantifiable data is not available and a qualitative analysis was undertaken. In addition, where an analysis of potential environmental effects for future actions has not been completed, assumptions were made regarding cumulative impacts related to this EA where possible. The analytical methodology presented in Chapter 3, which was used to determine potential impacts to the various resources analyzed in this document, was also used to determine cumulative impacts.

4.4.1 Water Resources

4.4.1.1 Description of Geographic Study Area

The Region of Influence (ROI) for water resources consists of all the surface and ground water on the northern Alaska sites installation areas.

4.4.1.2 Relevant Past, Present, and Future Actions

Past, present and reasonably foreseeable future actions that might interact with the affected resource areas of the Preferred Alternative consist of environmental remediation and monitoring, implementation of BMPs, and wetland avoidance and mitigation.

4.4.1.3 Cumulative Impact Analysis of Water Resources

The Navy does not have any active missions at the northern Alaska sites besides continuing environmental remediation. Mitigation measures, where appropriate, were taken at the time of past actions. Future projects will continue environmental restoration, monitoring for shoreline erosion and surveying for new and emerging pollutants. The effects of present or future planned actions and the objectives outlined in the INRMP are unlikely to have a negative effect on water resources. Therefore, implementation of the Proposed Action combined with past, present, and reasonably foreseeable future projects, would not result in significant impacts to water resources within the ROI of the northern Alaska sites.

4.4.2 Biological Resources

4.4.2.1 Description of Geographic Study Area

The ROI for biological resources consists of the northern Alaska site areas.

4.4.2.2 Relevant Past, Present, and Future Actions

Past, present and reasonably foreseeable future actions that might interact with affected resource areas of the Preferred Alternative consist of previous and continuing environmental cleanup and restoration efforts, and adherence to BMPs and regulations at the northern Alaska sites.

4.4.2.3 Cumulative Impact Analysis to Biological Resources

The Preferred Alternative, in combination with past, present, and reasonably foreseeable future actions at the northern Alaska sites is expected to result in a beneficial cumulative effect to biological resources. The INRMP would collect data on wildlife, and habitat, as well as follow BMPs and design protocol for reducing human-wildlife interactions, which would lead to improved management capabilities for those species and habitats existing on the northern Alaska sites. No adverse effects from the Preferred Alternative would occur. Therefore, implementation of the Proposed Action, combined with past, present, and reasonably foreseeable future actions, would not result in significant adverse impacts to biological resources at the northern Alaska sites.

Table 4-1 Summary of past restoration actions at the Navy's northern Alaska sites

Year	*Action*	*Report (if pertinent)*
Icy Cape		
1997	USACE performed a clean-up/removal effort at the site where they 1) removed all buildings and most of the site debris and 2) excavated contaminated soils and shipped them to an off-site disposal facility.	OHM 1999
2013	Navy performed soil sediment sampling, groundwater sampling, landfill repairs, and limited debris removal.	Navy 2014a
2019	Conducted ground water testing and evaluated condition of landfills.	Navy 2020a
Barrow		
Airstrip site		
1996-2000	Navy installed a fuel recovery trench and a 1,720-foot-long subsurface ice-barrier wall (containment berm/barrier) to address former fuel spills at the Airstrip Site.	Navy 2001
2003	Navy treated approximately 2,268 cubic yards of fuel-contaminated soils from the airstrip site.	Navy 2004
2003	Navy began monitoring the natural attenuation of petroleum contamination in the active zone water and surface water quality of Imikpuk Lake.	Navy 2004
2010-2016	Navy conducted several investigations to identify the location of residual petroleum contamination.	Navy 2012; Navy 2013
2017	Navy identified two PFAS contaminants in Imikpuk Lake above the Environmental Protection Agency's (EPA) health advisory.	Navy 2019b
2018	Navy removed three buildings (containing asbestos and lead based paint) and removed petroleum and lead-contaminated soils under each building.	Navy 2020b
2018	Navy performed preliminary assessment for PFAS at all Navy-owned and formerly owned property in Utqiaġvik and associated areas (including Icy Cape and Point McIntyre)	Navy 2020d
2019	Navy performed site inspection for PFAS at Airstrip site.	Navy 2021b
Antenna Field		
2011	Navy contracted the Air Force to remove all surface debris from the antenna field property, to address the physical hazard the debris presented to human and wildlife. Note that this work was not performed by DON ERP.	U.S. Air Force 2013b
2016	Navy removed a small amount of lead and petroleum contaminated soils identified onsite in 2012 and 2013.	Navy 2017
2018-2019	Navy removed a large amount of debris and lead-contaminated soils from the eastern shoreline of Middle Salt Lagoon.	Navy 2020b; Navy 2020c
Pt. McIntyre		
2004	The Navy demolished site structures and performed clean up actions for contaminated soils.	Navy 2005
2013	Relocated former eroding landfill to a new freezeback landfill constructed within the former runway 1,200-feet inland.	Navy 2014b

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5 Other Considerations Required by NEPA

5.1 Consistency with Other Federal, State, and Local Laws, Plans, Policies, and Regulations

In accordance with 40 CFR section 1502.16(c), analysis of environmental consequences shall include discussion of possible conflicts between the Proposed Action and the objectives of federal, regional, state and local land use plans, policies, and controls. Table 5-1 identifies the principal federal and state laws and regulations that are applicable to the Proposed Action, and describes briefly how compliance with these laws and regulations would be accomplished.

Table 5-1 Principal Federal and State Laws Applicable to the Proposed Action

Federal, State, Local, and Regional Land Use Plans, Policies, and Controls	***Status of Compliance***
Council on Environmental Quality (CEQ) NEPA implementing regulations; Navy procedures for Implementing NEPA	Preparation of this EA has been conducted in compliance with NEPA and in accordance with CEQ regulations and the Navy's NEPA procedures.
Clean Air Act (CAA)	The North Slope Borough, where the northern Alaska sites are located, is not classified as a nonattainment or maintenance area for any criteria pollutants. As a result, the Conformity Rule is not applicable at the northern Alaska sites. Adoption and implementation of the Integrated Natural Resources Management Plan (INRMP) would not change air quality attainment status or conflict with attainment goals established by the State of Alaska. A CAA conformity determination is not required.
Clean Water Act (CWA); Rivers and Harbors Act	Adoption and implementation of INRMP as a management tool under the Preferred Alternative would not require permits/authorizations under the CWA. If management actions may affect navigable waters and waters of the U.S., the Navy would obtain any required CWA permits/authorizations, as applicable.
Sikes Act Improvement Act (Sikes Act)	In accordance with the Sikes Act, the INRMP was developed cooperatively with the USFWS, ADF&G, and NMFS and would enhance natural resource management at Icy Cape, Barrow, and Pt. McIntyre.
National Historic Preservation Act (NHPA)	Adoption and implementation of the INRMP does not propose actions that would adversely affect historic properties, buildings, structures, landscape, or land use patterns.
Endangered Species Act (ESA)	The Navy developed the INRMP cooperatively with U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration Fisheries, determining that the Proposed Action would not adversely affect any federally threatened, sensitive, or endangered species.
Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSFCMA)	Adoption and implementation of the INRMP would not adversely affect marine fisheries and may provide benefit to marine species. As management decisions and project designs are developed, the Navy would conduct any required consultations under the MSFCMA.
Migratory Bird Treaty Act	Adoption and implementation of the INRMP would not adversely affect migratory birds and may provide benefit to migratory species.

Table 5-1 Principal Federal and State Laws Applicable to the Proposed Action

Federal, State, Local, and Regional Land Use Plans, Policies, and Controls	*Status of Compliance*
Comprehensive Environmental Response, Compensation, and Liability Act	Adoption and implementation of the INRMP would not affect the Navy's ongoing monitoring and restoration activities at the northern Alaska sites. The Navy's Installation Restoration Program would continue to monitor and conduct reviews, as required.
Marine Mammal Protection Act (MMPA)	Adoption and implementation of the INRMP would likely benefit marine mammals protected under the MMPA through additional monitoring, data collection and avoidance.
Resource Conservation and Recovery Act	Adoption and implementation of the INRMP would not adversely affect the management of hazardous substances and may provide benefit to natural resources.
Coastal Zone Management Act	The Alaska Coastal Management Program ended in 2011 per state legislative action (AS 44.66.030). Alaska currently does not have an approved Coastal Management Program, and the Navy has no requirements to prepare and submit a consistency determination under the CZMA.
EO 11990 Protection of Wetlands	Adoption and implementation of the INRMP would likely benefit wetlands due to efforts to restore and expand wetland habitat, follow BMPs, and increase monitoring and data collection.
EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low income Populations	No disproportionately high or adverse impacts to minority and low-income communities would be expected from adoption and implementation of the INRMP.
EO 12088, Federal Compliance with Pollution Control Standards	Adoption and implementation of the INRMP would not adversely affect compliance with pollution control standards.
EO 13045, Protection of Children from Environmental Health Risks and Safety Risks	There are no residences, schools, or other facilities used by children within the project areas. The Proposed Action would not cause environmental health risks and safety risks that may disproportionately affect children.
EO 13175, Consultation and Coordination with Indian Tribal Governments	Adoption and implementation of the INRMP would not adversely affect treaty rights, sacred sites, burial sites, or other rights to natural resources. The Navy provided the draft INRMP and draft EA to the Arctic Slope Regional Corporation and the to the eight federally recognized Native villages and village corporations in the North Slope region: the Village of Anaktuvuk Pass, the Native Village of Atqasuk, the Native Village of Barrow (Iñupiat Community of the Arctic Slope), the Native Village of Kaktovik (Barter Island), the Native Village of Nuiqsut (Nooiksut), the Native Village of Pt. Hope, the Native Village of Pt. Lay, and Wainwright Traditional Council for review and comment. The Navy consulted with the local Native Alaskan villages and their corporations for the Proposed Action.
Alaska Hazardous Waste Regulations	Adoption and implementation of the INRMP would not adversely affect compliance with Alaska hazardous waste regulations.

5.2 Irreversible or Irretrievable Commitments of Resources

Resources that are irreversibly or irretrievably committed to a project are those that are used on a long-term or permanent basis. This includes the use of non-renewable resources such as metal and fuel, and natural or cultural resources. These resources are irretrievable in that they would be used for this project when they could have been used for other purposes. Human labor is also considered an irretrievable resource. Another impact that falls under this category is the unavoidable destruction of natural resources that could limit the range of potential uses of that particular environment.

Implementation of the Proposed Action would involve human labor; and the consumption of fuel, oil, and lubricants for vehicles. Implementing the Proposed Action would not result in significant irreversible or irretrievable commitment of resources.

5.3 Unavoidable Adverse Impacts

This EA has determined that the alternatives considered would not result in any significant impacts. No unavoidable adverse effects are expected to occur from implementation of the Northern Alaska Sites INRMP. Under the No-Action Alternative, projects will continue to be reviewed for environmental compliance, but would not benefit from updated protection and conservation measures for natural resources included in the INRMP.

5.4 Relationship between Short-Term Use of the Environment and Long-Term Productivity

NEPA requires an analysis of the relationship between a project's short-term impacts on the environment and the effects that these impacts may have on the maintenance and enhancement of the long-term productivity of the affected environment. Impacts that narrow the range of beneficial uses of the environment are of particular concern. This refers to the possibility that choosing one development site reduces future flexibility in pursuing other options, or that using a parcel of land or other resources often eliminates the possibility of other uses at that site.

In the relationship between short-term use and long-term productivity, the Proposed Action would be beneficial. It would not adversely affect the long-term natural resource productivity of the area, significantly reduce environmental productivity, or permanently narrow the range of beneficial uses of the environment. Implementing the INRMP would enhance natural resource management at Icy Cape, Barrow, and Pt. McIntyre, in keeping with the intent of the Sikes Act (16 U.S.C. section 670 et seq., as amended), and maintain the healthy condition of the environment for these three facilities over the long term.

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Appendix A. Project Implementation Table

EPR Number: EPR Title	*Legal Driver(s)*	*Scheduled Implementation*	*Implementation Year(s)*	*Funding Source*	*DoD Priority (Class)*	*Navy Priority (ERL)*
Annual INRMP Updates and Revisions						
68742CN006: CHE/D NRNW INRMP Updates and Revisions	ESA, MMPA, Sikes Act, DODI 4715.03, OPNAVINST 5090.1E	Annually	FY23, FY24, FY25, FY26	CNIC CN	0	4
Strategy 1.2.1. Conduct nest surveys at least every five years on each site, with a focus on listed Steller's and spectacled eiders.						
6874200101: 1 S NW Alaska Properties T&E Species Surveys	ESA, MBTA, Sikes Act, DODI 4715.03, OPNAVINST 5090.1E	Non-annual recurring	FY25	CNIC CN	0	4
Strategy 1.2.2. Monitor polar bear activity and population numbers near Navy sites via aerial or geospatial imagery.						
6874200101: 1 S NW Alaska Properties T&E Species Surveys	ESA, MMPA, Sikes Act, DODI 4715.03, OPNAVINST 5090.1E	Non-annual recurring	FY23, FY25	CNIC CN	0	4
Strategy 1.2.6. Delineate ecosystem type on each property to better predict where species might be more or less likely to nest and/or forage onsite.						
68742NRMAP: SIKES NW Puget Sound & Alaska INRMP Conservation Mapping	Sikes Act, ESA, MBTA, MMPA	Recurring, as needed	FY23	CNIC CN	1	4
Strategy 1.2.7. Deploy cameras on remote sites (Icy Cape and/or Pt. McIntyre) to monitor marine mammal haul outs and big-game activity onsite.						
6874200101: 1 S NW Alaska Properties T&E Species Surveys	ESA, MMPA, MBTA, Sikes Act, DODI 4715.03, OPNAVINST 5090.1E	Non-annual recurring	FY23, FY25	CNIC CN	1	4

Strategy 2.2.1. Improve at least 35 acres of habitat through reseeding, debris removal, and/or protection from vehicle traffic.						
68742NWTJ1: 1 CP NW Establishing, Sustaining & Improving Threatened and Endangered Species Habitats - Climate	ESA, Sikes Act, DODI 4715.03, OPNAVINST 5090.1E	Recurring	FY22, FY23, FY24, FY25, FY26	CNIC CN, ER	3	1
Strategy 2.3.1. Develop a climate change report, which will focus on potential impacts to Navy restoration activities on the ACP.						
68742CN009: SIKES NW Region Climate Resilience and Adaptation - Climate	Sikes Act, DODI 4715.03, OPNAVINST 5090.1E, ESA	Non-recurring	FY26	CNIC CN, ER	0	4

The above projects reflect those strategies which were programmed for within the CNIC CN program during the Navy's FY24 Program Objective Memorandum (POM) process. As of August 2021, the Navy intends to accomplish other strategies identified within the document through a) in-house labor or b) pursuing alternate means and/or funding sources.

CHE/D: Critical Habitat Exemption/Designation, CN: Conservation Program, CNIC: Commander, Naval Installations Command, CP: Conservation Project, DODI: Department of Defense Instruction, ER: Environmental Restoration Program, ERL: Environmental Readiness Level, ESA: Endangered Species Act, FY: Fiscal Year, INRMP: Integrated Natural Resources Management Plan, MMPA: Marine Mammal Protection Act, MBTA: Migratory Bird Treaty Act, NRNW: Navy Region Northwest, NSB: North Slope Borough, NW: Northwest, OPNAVINST: Chief of Naval Operations Instruction, S: Survey, SIKES: Sikes Act, T&E: Threatened and Endangered

***DOD Funding Priority**

Class 0 - Recurring Natural and Cultural Resources Conservation Management Requirement: Must contain INRMP actions necessary to rehabilitate or prevent resource degradation that may affect military readiness

Class 1 - Current Compliance: contains requirements to manage species and habitats of concern to prevent listing of species that could affect military readiness.

Class 2 - Maintenance Requirements: includes projects and activities needed that are not currently out of compliance, but will be out of compliance if projects or activities are not implemented in time to meet an established deadline.

Class 3 - Enhancement Actions Beyond Compliance: includes projects and activities that enhance conservation resources or the integrity of the installation mission, or are needed to address overall environmental goals and objectives, but are not specifically required under a regulation or Executive Orders (EO) and are not of an immediate nature.

***Navy Funding Priority**

ERL 4:

a) Supports all actions specifically required by law, regulation or Executive Order (DOD Class 1 and 2 requirements).

b) Supports all DOD Class 0 requirements as they relate to a specific statute such as hazardous waste disposal, permits, fees, monitoring, sampling and analysis, reporting and record keeping.

c) Supports recurring administrative, personnel and other costs associated with managing environmental programs that are necessary to meet applicable compliance requirements (DOD Class 0).

d) Supports DOD policy requirement to comply with overseas Final Governing Standards and Overseas Environmental Baseline Guidance Document.

e) Supports minimum feasible Navy executive agent responsibilities, participation in Office of the Secretary of Defense sponsored inter-department and inter-agency efforts, and OSD mandated regional coordination efforts.

ERL 3:

a) Supports all capabilities provided by ERL4.

b) Supports existing level of Navy executive agent responsibilities, participation in OSD sponsored interdepartment and interagency efforts, and OSD mandated regional coordination efforts.

c) Supports proactive involvement in the legislative and regulatory process to identity and mitigate requirements that will impose excessive costs or restrictions on operations and training.

d) Supports proactive initiatives critical to the protection of Navy operational readiness.

ERL 2:

a) Supports all capabilities provided under ERL3.

b) Supports enhanced proactive initiatives critical to the protection of Navy operational readiness.

c) Supports all Navy and DOD policy requirements.

d) Supports investments in pollution reduction, compliance enhancement, energy conservation, and cost reduction.

ERL 1:

a) Supports all capabilities provided under ERL2.

b) Supports proactive actions required to ensure compliance with pending/strong anticipated laws and regulations in a timely manner and/or to prevent adverse impact to Navy mission.

c) Supports investments that demonstrate Navy environmental leadership and proactive environmental stewardship