1 Purpose and Need

Gulf of Alaska Navy Training Activities

Final Supplemental Environmental Impact Statement/ Overseas Environmental Impact Statement

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1 PURPOSE AND NEED

1.1 Introduction

The United States (U.S.) Department of the Navy (Navy), in cooperation with the National Marine Fisheries Service (NMFS), part of the National Oceanic and Atmospheric Administration, has prepared this supplement to the March 2011 Final Gulf of Alaska (GOA) Navy Training Activities Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) (U.S. Department of the Navy, 2011a), hereinafter referred to as the 2011 GOA Final EIS/OEIS, and the July 2016 GOA Final Navy Training Activities Supplemental Environmental Impact Statement (SEIS)/OEIS (U.S. Department of the Navy, 2016), hereinafter referred to as the 2016 GOA Final SEIS/OEIS. The Navy proposes to continue conducting military readiness activities in the GOA. The Navy prepared this SEIS/OEIS to comply with the National Environmental Policy Act (NEPA) and Executive Order (EO) 12114, *Environmental Effects Abroad of Major Federal Actions,* by assessing the potential environmental impacts associated with the proposed military readiness activities to be conducted within the Study Area.

The 2011 GOA Final EIS/OEIS Study Area consisted of three components: (1) Temporary Maritime Activities Area (TMAA), (2) U.S. Air Force overland Special Use Airspace (SUA) and air routes over the GOA and State of Alaska, and (3) U.S. Army training lands. Collectively, for the purposes of this Supplement, these areas are referred to as the Joint Pacific Alaska Range Complex (JPARC). The 2016 GOA Final SEIS/OEIS and the 2020 GOA Draft SEIS/OEIS only analyzed activities occurring within the TMAA, a component of the JPARC. To address the need for a broader area in which to maneuver during training and to accomplish more realistic training, the GOA Study Area now includes the Western Maneuver Area (WMA) in addition to the existing TMAA (Figure 1-1).

The Air Force SUA and Army training lands were previously analyzed for NEPA purposes under separate environmental documents[1] and are not included in the analysis in this SEIS/OEIS, but environmental analyses from those NEPA documents are incorporated by reference pursuant to 40 Code of Federal Regulations (CFR) section 1502.21 (2019) and listed in Section 1.9 (Related Environmental Documents), as applicable.

Following the release of the 2020 GOA Draft SEIS/OEIS and completion of the Northern Edge 2021 exercise, the Navy recognized that the size and shape of the GOA TMAA (approximately 42,146 square nautical miles) no longer provides sufficient space for the realistic maneuvering of vessels and aircraft during training exercises. The GOA Study Area was revised to include the WMA, in addition to the existing TMAA. This additional space, an additional 185,806 square nautical miles, would enable Navy personnel and units to practice more realistic, complex training scenarios in a safer, more efficient manner that would better prepare them to respond to real-world incidents. The WMA would provide air, surface, and submarine forces with sufficient maneuver areas for realistic training; the TMAA allows for only a single, predictable air axis approach, which is unrealistic in current real-world scenarios.

[1] In the 2011 GOA Final EIS/OEIS, the Navy defined these three training areas as the Alaska Training Areas (ATAs). After the publication of the Record of Decision (ROD) for the 2011 GOA Final EIS/OEIS, the U.S. Departments of the Army and Air Force published a Final EIS, *Modernization and Enhancement of Ranges, Airspace, and Training Areas in the Joint Pacific Alaska Range Complex in Alaska* (June 2013), for which a ROD was approved and signed on August 6, 2013. The EIS included the ATAs, and other training areas, and labeled them the JPARC. As such, the Navy has adopted the term JPARC when referring to the ATAs.

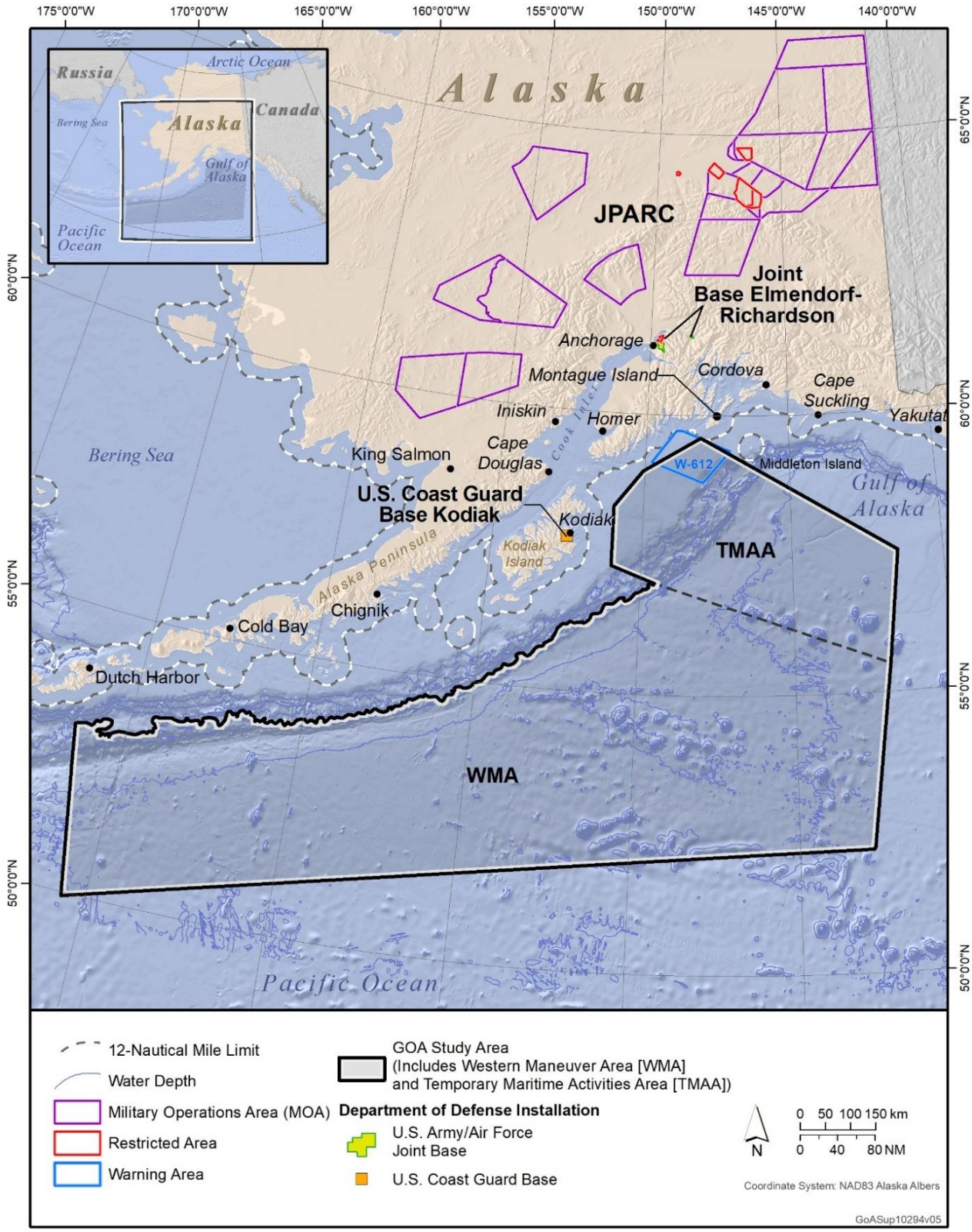

Figure 1-1: Gulf of Alaska Study Area

The addition of the WMA provides airspace for multiple air lanes and sea space for increased training complexity and maneuverability. It would also maximize airfield diverts available for aircrew safety. As currently configured, the TMAA only allows for Anchorage divert, whereas the WMA would allow for Cold Bay and King Salmon diverts. It also would improve access for commercially based assets used as Opposition Force vessels (contracted fishing vessels), historically out of Kodiak; TMAA geographic limitations require long transit to exercise areas and lost training time.

This SEIS/OEIS was prepared to update the Navy's assessment of the potential environmental impacts associated with proposed military readiness activities to be conducted in the GOA TMAA. The activities are consistent with those activities analyzed in both the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS and are representative of activities the Navy has been conducting in the TMAA for decades. These military readiness activities include the use of active sonar and explosives at sea in the TMAA.

New information addressed in this SEIS/OEIS includes a new acoustic effects model, updated marine mammal density data and sea turtle hearing criteria, and other evolving and emergent best available science. Using the updated information, the Navy is seeking the reissuance of the federal regulatory incidental take authorizations under the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA) to support military readiness activities within the GOA Study Area upon the expiration of the current authorizations and consultations in 2022. The Navy is consulting with NMFS to renew these authorizations.[2] The Navy completed ESA consultations with the USFWS, and the USFWS issued a Letter of Concurrence in April 2022.

The U.S. Navy carries out training activities to be able to protect the United States against its potential adversaries, to protect and defend the rights of the United States and its allies to move freely on the oceans, and to provide humanitarian assistance. Major conflicts, terrorism, lawlessness, and natural disasters all have the potential to threaten the national security of the United States. The security, prosperity, and vital interests of the United States are increasingly tied to other nations because of the close relationships between the United States and other national economies. The U.S. military operates on the world's oceans, seas, and coastal areas—the international maritime domain—on which 90 percent of the world's trade is conducted and two-thirds of its oil transported. The majority of the world's population also lives within a few hundred miles of an ocean.

Although the new information and analytical methods that have emerged since the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS do not present a substantially different picture of the environmental consequences or the significance of impacts resulting from the Navy's proposed action, the Navy has determined that preparing this SEIS/OEIS still furthers the purpose of NEPA, pursuant to the Council on Environmental Quality (CEQ) regulations (40 CFR section 1500.1(b) and 40 CFR section 1502.9(c)(2))[3]. This SEIS/OEIS identifies and evaluates new information that is applicable to the Proposed Action and its environmental impacts.

[2] NMFS' issuance of an MMPA incidental take authorization (i.e., Letter of Authorization) is a major Federal action (NMFS' Proposed Action) and is considered a connected action under NEPA (40 CFR 1508.25), with a discrete purpose and need relative to NMFS' statutory and regulatory obligations. Consequently, NMFS has an independent responsibility to comply with NEPA. If NMFS makes the findings necessary to issue the requested authorization, NMFS will rely on the information and analyses in this document and intends to adopt this SEIS/OEIS to fulfill its NEPA obligations, and issue its own ROD, if appropriate.

[3] The associated Final SEIS/OEIS was prepared using the 1978 CEQ NEPA Regulations. NEPA reviews initiated prior to the effective date of the 2020 and 2022 CEQ regulations may be conducted using the 1978 version of the

1.2 The Navy's Environmental Compliance and At-Sea Policy

In 2000, the Navy completed a review of its environmental compliance requirements for exercises and training at sea. The Navy then instituted a policy, known as the "At-Sea Policy," to ensure compliance with applicable environmental regulations and policies, and preserve the flexibility necessary for the Navy and Marine Corps to train and test at sea. This policy directed, in part, that Fleet Commanders develop a programmatic approach to environmental compliance at sea for ranges and Operating Areas (OPAREAs) within their respective geographic areas of responsibility (U.S. Department of the Navy, 2000). Those ranges affected by the "At-Sea Policy" are designated water areas, sometimes containing instrumentation, that are managed and used to conduct training and testing activities.

In 2005, the Navy and the National Oceanic and Atmospheric Administration reached an agreement on a coordinated programmatic strategy for assessing certain environmental effects of military readiness activities at sea. The Navy is currently in the third phase of implementing this programmatic approach.

Phase I of environmental planning. The first phase of the planning program was accomplished by the preparation and completion of individual or separate environmental documents for each range complex and OPAREA. The 2011 GOA Final EIS/OEIS document identified major training activities; analyzed potential environmental impacts; and supported the MMPA incidental take authorization (in this case a "Letter of Authorization"), issued by NMFS, pursuant to Section 101(a)(5) of the MMPA, which was obtained for Navy training activities in the GOA for May 2011 through May 2016.

Phase II of environmental planning. The second phase of the Navy's environmental compliance planning covered activities and existing ranges and OPAREAs previously analyzed in the Phase I NEPA/EO 12114 documents. The 2016 GOA Final SEIS/OEIS was prepared to support the Navy's request to obtain an incidental take authorization under the MMPA from NMFS and to obtain an updated Biological Opinion/Incidental Take Statement under the ESA from NMFS for the period of April 2017 through April 2022. To support the reissuance of the MMPA authorization and Biological Opinion/Incidental Take Statement, the Navy's re-analysis included consideration of changes since the 2011 GOA Final EIS/OEIS, including new information related to the resources being analyzed, use of a new acoustic effects model, and consideration of evolving and emergent best available science.

Specifically, for the marine mammals analysis, changes included the following:

- Integration of results from a new GOA survey and predictive habitat-based density modeling to derive improved marine mammal density data for the GOA Study Area.
- Change in the ESA status of the humpback whale (Hawaii Distinct Population Segment).
- Integration of revised acoustic impact criteria and revised acoustic impact thresholds.
- Use of a newly developed standard Navy model for acoustic effects analysis.
- Consideration of research published since the 2011 GOA Final EIS/OEIS.
- Integration of results from scientific monitoring and research relating to understanding impacts on marine mammals from Navy training activities.

regulations. The effective date of the 2020 CEQ NEPA Regulations was September 14, 2020, the effective date of the 2022 CEQ NEPA Regulations was May 20, 2022. This review began on February 10, 2020, and the Navy decided to proceed under the 1978 regulations.

For resources other than marine mammals, such as fish and sea turtles, similar consideration of changes since the 2011 GOA Final EIS/OEIS were made through the 2016 analysis to determine if there was a need to re-analyze the potential for impacts accordingly.

Phase III of environmental planning. The third phase of the Navy's environmental compliance planning covers similar types of Navy training activities in the same study area analyzed in Phase II, in addition to the expanded study area encompassing the WMA. This SEIS/OEIS is the Navy's third phase of environmental compliance for military readiness activities in the Study Area. The Navy has re-evaluated impacts from these ongoing activities in existing ranges and OPAREAs, and additionally analyzed new or changing military readiness activities into the reasonably foreseeable future based on evolving operational requirements, including those associated with new platforms and systems not previously analyzed. The Navy has thoroughly reviewed and incorporated into this analysis the best available science relevant to analyzing the environmental impacts of the proposed activities. As was done in Phase I and Phase II, the Navy used this analysis to support regulatory consultations and submitted requests for a letter of authorization under the MMPA and incidental take statements under the ESA.

1.3 Proposed Action

The Navy's Proposed Action is consistent with the Proposed Action presented in the 2011 GOA Final EIS/OEIS (U.S. Department of the Navy, 2011a), *Record of Decision for Final Environmental Impact Statement/Overseas Environmental Impact Statement for the Gulf of Alaska Navy Training Activities* (U.S. Department of the Navy, 2011b), the 2016 GOA Final SEIS/OEIS (U.S. Department of the Navy, 2016), and *Record of Decision for the Gulf of Alaska Final Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement* (U.S. Department of the Navy, 2017). The Proposed Action, described in detail in Chapter 2 (Description of Proposed Action and Alternatives), entails the military continuing training activities previously conducted and described in the 2016 GOA Final SEIS/OEIS, for which a ROD was issued.

Although the types of activities and number of events in the Proposed Action are the same as in the previous documents (Alternative 1 in both the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS), there have been changes in the platforms and systems used as part of those activities (e.g., EA-6B aircraft and Oliver Hazard Perry Class Frigate, and their associated systems, have been replaced with the EA-18G aircraft, Littoral Combat Ship, and Constellation Class Frigate), and use of the Portable Underwater Tracking Range is no longer proposed. Consistent with the previous analysis for Alternative 1, the sinking exercise activity will not be part of the Proposed Action for this SEIS/OEIS.

While the revised GOA Study Area is larger, the type and number of training events would not change, and the majority of training (approximately 70 percent) would still occur only in the TMAA. The activities conducted in the WMA (approximately 30 percent) would be limited to vessel and aircraft training, and events associated with these activities. The exception would be non-explosive gunnery activities in the WMA. Activities using active acoustics, such as sonar, or use of explosives during training events, would not occur in the WMA.

In addition, the Navy proposes implementing a new mitigation area within the continental shelf and slope area of the TMAA, called the "Continental Shelf and Slope Mitigation Area." To protect marine species and biologically important habitat, use of explosives (up to 10,000 feet altitude) would be prohibited in this area.

1.4 Purpose of and Need for Proposed Military Readiness Training Activities

> Title 10 section 8062 of the U.S. Code provides: "The Navy shall be organized, trained, and equipped primarily for prompt and sustained combat incident to operations at sea. It is responsible for the preparation of naval forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Navy to meet the needs of war."

This is a supplemental document to the 2011 GOA Final EIS/OEIS and ROD (U.S. Department of the Navy, 2011a, 2011b) and the 2016 GOA Final SEIS/OEIS and ROD (U.S. Department of the Navy, 2016, 2017) pursuant to 40 CFR section 1502.9(c)(2), and EO 12114. The Navy and NMFS (as a cooperating agency under the provisions of NEPA) have coordinated from the outset and developed this document to meet each agency's separate and distinct NEPA obligations and support the independent decision making of both agencies. As identified in the 2016 GOA Final SEIS/OEIS, the Navy's purpose for the Proposed Action is to achieve and maintain fleet readiness pursuant to Title 10 section 8062, using the JPARC, previously referred to as the ATAs in the 2011 GOA Final EIS/OEIS, to support and conduct current, emerging, and future training activities. NMFS' purpose, described in greater detail below, is to evaluate the Navy's Proposed Action pursuant to NMFS' regulatory authority under the MMPA. As stated in Section 1.1 (Introduction), this SEIS/OEIS only addresses the Navy's activities in the GOA Study Area.

The Navy is requesting reauthorization from NMFS to "take" marine mammals incidental to conducting training in the TMAA by Level A and B harassment, serious injury, or mortality. Take under the MMPA is defined as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." For military readiness activities, harassment is defined as "(i) any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment] or (ii) any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered [Level B harassment]."

The purpose of issuing incidental take authorizations is to provide an exception to the take prohibition in the MMPA and to ensure that the Navy's proposed training activities comply with the MMPA and implementing regulations. Incidental take authorizations may be issued as either (1) regulations and associated Letters of Authorization (LOAs) under section 101(a)(5)(A) of the MMPA, or (2) Incidental Harassment Authorizations under section 101(a)(5)(D) of the MMPA. An Incidental Harassment Authorization can be issued only when there is no potential for serious injury or mortality or where any such potential can be negated through required mitigation measures. Because some of the activities under the Proposed Action may create a potential for lethal takes or takes that may result in serious injury that could lead to mortality, the Navy is appropriately requesting rulemaking and the issuance of an LOA for this action.

As noted above, NMFS' purpose is to evaluate the Navy's Proposed Action pursuant to NMFS' authority under the MMPA, and to determine whether to authorize incidental take of marine mammals and an LOA, including any conditions needed to meet the statutory mandates of the MMPA. To authorize the incidental take of marine mammals, NMFS evaluates the best available scientific information to determine whether the take would have a negligible impact on the affected marine mammal species or stocks and an unmitigable impact on their availability for taking for subsistence uses. NMFS must also prescribe permissible methods of taking, other "means of effecting the least practicable adverse impact"

on the affected species or stocks and their habitat, and monitoring and reporting requirements. NMFS cannot issue an incidental take authorization unless it can make the required findings. The need for NMFS' action is to consider the impacts of the Navy's activities on marine mammals and meet NMFS' obligations under the MMPA. This SEIS/OEIS analyzes the environmental impacts associated with proposed training activities (and corresponding mitigation measures) for which the Navy is seeking authorization of the take of marine mammals. The analysis of mitigation measures considers benefits to species or stocks and their habitat, and analyzes the practicability and efficacy of each measure. This analysis of mitigation measures was used to support requirements pertaining to mitigation, monitoring, and reporting that would be specified in final MMPA regulations and subsequent LOA if issued.

1.4.1 Why the Navy Trains

As described above, the Navy is statutorily mandated to protect U.S. national security by being ready, at all times, to effectively prosecute war and defend the nation by conducting operations at sea. Naval forces must be ready for a variety of military operations—from large-scale conflict to maritime security operations and humanitarian assistance/disaster relief—to deal with the dynamic social, political, economic, and environmental issues that occur in today's world. The Navy supports these military operations through its continuous presence on the world's oceans; the Navy can respond to a wide range of issues because, on any given day, over one-third of its ships, submarines, and aircraft are deployed overseas. Before deploying, naval forces must train to develop a broad range of capabilities to respond to threats, from full-scale armed conflict in a variety of different geographic areas[4] and environmental conditions to humanitarian assistance and disaster relief efforts.[5] This also prepares Navy personnel to be proficient in operating and maintaining the equipment, weapons, and systems they will use to conduct their assigned missions. The training process provides personnel with an in-depth understanding of their individual limits and capabilities; the training process also helps the testing community improve new weapon systems' capabilities and effectiveness.

Training is focused on preparing for worldwide deployment. Naval forces generally deploy in specially organized units called Strike Groups. A Strike Group may be organized around one or more aircraft carriers, together with several surface combatant ships and submarines, collectively known as a Carrier Strike Group. An Expeditionary Strike Group may be organized around various amphibious warfare ships together with surface combatant ships and submarines. A naval force known as a Surface Action Group consists of three or more surface combatant ships. The Navy and Marine Corps deploy Carrier Strike Groups, Expeditionary Strike Groups, and Surface Action Groups on a continuous basis. The number and composition of Strike Groups deployed and the schedule for deployment are determined based on worldwide requirements and commitments.

Modern weapons bring both unprecedented opportunities and challenges to the Navy. For example, precision (or smart) weapons help the Navy accomplish its mission with far less collateral damage than in past conflicts; however, modern weapons are also very complex to use. Military personnel must train regularly with these weapons to understand the capabilities, limitations, and operations of the platform or system, as well as how to keep them operational under difficult conditions and without readily

[4] Operation Iraqi Freedom in Iraq and Operation Enduring Freedom in Afghanistan; maritime security operations, including anti-piracy efforts like those in Southeast Asia and the Horn of Africa.
[5] Evacuation of non-combatants from American embassies under hostile conditions, as well as humanitarian assistance/disaster relief like the U.S. Naval Ship Mercy and U.S. Naval Ship Comfort coronavirus pandemic (COVID-19) response in 2020 and Hurricane Dorian relief in the Bahamas in 2019.

available technical or logistical assistance. Modern military actions require teamwork among hundreds or thousands of people, across vast geographic areas, and the coordinated use of various equipment, ships, aircraft, and vehicles (e.g., unmanned aerial systems) to achieve success. Personnel increase in skill level by completing basic and specialized individual military training; they then advance to intermediate (e.g., unit-level training) and larger exercise training events.

Military readiness training must be as realistic as possible to provide the experiences vital to success and survival during military operations because simulated training, even in technologically advanced simulators, cannot duplicate the complexity faced by Sailors and Marines in the real world. While simulators and synthetic training are critical elements that provide early skill repetition and enhance teamwork, there is no substitute for live training in a realistic environment. Just as a pilot would not be ready to fly solo after simulator training, a Navy commander cannot allow military personnel to engage in real combat activities based merely on simulator training.

The large size of the GOA Study Area is essential to allow for realistic training scenarios that prepare Sailors and Marines for real-world operations. Only a large operating area offers the space necessary for operations such as the launch and recovery of aircraft or replenishment maneuvers that require a straight-line course at a fixed speed for a sustained period of time. For example, in light wind conditions, to maintain a safe wind speed over the carrier's deck of 20 knots, flight operations taking 30 minutes to an hour would require traveling in a straight line over a distance of at least 10–20 nautical miles (NM). Aircraft landing on an aircraft carrier must be organized into a holding pattern, typically located 10–50 NM away from the carrier, depending on several factors, including weather conditions, visibility, the number of aircraft waiting to land, and the condition of the aircraft (e.g., fuel remaining). Therefore, to practice this maneuver safely away from civilian airspace, the carrier would need to be 20–50 NM away from any operating area boundary. In short, safe and effective Navy training often requires expansive operating areas due to a number of complex and interrelated factors, and the GOA Study Area meets this requirement.

The Navy also requires extensive areas of ocean to conduct its training in order to properly separate and/or coordinate different training events so that individual training events do not interfere with each other and do not interfere with public and commercial vessels and aircraft. For example, hazardous activities such as gunnery or missile fire from a vessel in one training event would need to be conducted away from other training events. Additionally, large areas of ocean are required to ensure different training events can be conducted safely while minimizing the risks inherent in military training, such as aircraft flying too closely to one another or to commercial airways. Navy ships must also train to operate at long distances—often hundreds of miles—from each other while still maintaining a common picture of the "battlespace" so that individual Navy units can be coordinated to achieve a common objective. Separation of Navy units may also be required to ensure that participants of other exercises do not experience interference with sensors. This need for expansive sea space makes this area in the Northern Pacific Ocean, which offers a safe cold-water training environment and a unique combination of oceanographic and bathymetric features, even more critical today as the Navy has a renewed emphasis on "sea control." Sea control is the need to secure large areas of oceans from other highly capable naval forces. When the Cold War ended, the Navy emerged unchallenged and dominant. That dominance allowed the Navy to focus on projecting power ashore. The balance between sea control and power projection tipped strongly in favor of the latter, and the Navy's surface force evolved accordingly. During this time, the Navy's proficiency in land-attack and maritime security operations reached new heights, while foundational skills in anti-submarine warfare and anti-surface warfare slowly began to erode. Per

the *Chief of Naval Operations Design for Maintaining Maritime Superiority 2.0* (U.S. Department of the Navy, 2018), it has now been decades since the Navy last competed for sea control. Much has changed since the Navy last competed. The emergence of more sophisticated capabilities by our potential adversaries requires us to operate further from their coastline in times of conflict, and the modernization of navies able to challenge the U.S. Navy directly means that control of the seas can no longer be assumed. In response, the Navy is developing a model of "distributed lethality," which is intended to enhance the offensive power of individual surface ships. This allows them to deploy in dispersed formations in order to control large areas of the sea (e.g., hundreds of thousands of square miles) from which the Navy can operate seamlessly in times of conflict.

1.5 The Strategic Importance of the Temporary Maritime Activities Area and the Western Maneuver Area

The TMAA (Figure 1-1) is composed of the 42,146 square nautical miles of surface and subsurface OPAREA and overlying airspace that also includes the majority of Warning Area (W)-612 located over Blying Sound, towards the northwestern quadrant of the TMAA (see Figure 1-1 in the 2011 GOA Final EIS/OEIS and Figure 1.2-1 in the 2016 GOA Final SEIS/OEIS). A Warning Area is Federal Aviation Administration-designated airspace of defined dimensions, which contains activity that may be hazardous to nonparticipating aircraft. The purpose of such Warning Areas is to warn nonparticipating pilots of the potential danger. A Warning Area may be located over domestic or international waters, or both. When not included as part of the TMAA, W-612 provides 2,256 square nautical miles (8,766 square kilometers) of SUA and is used by the Air Force and the U.S. Coast Guard to fulfill training requirements. Air Force and U.S. Coast Guard activities conducted as part of joint training within the TMAA are included in this EIS/OEIS analysis. No Navy training activities analyzed in this document will occur in the area of W-612 that is outside of the TMAA.

The TMAA is located entirely in International Waters and is roughly rectangular shaped and oriented from northwest to southeast, approximately 300 NM long by 156 NM wide, situated south of Prince William Sound and east of Kodiak Island. The boundaries of the TMAA were developed to avoid Steller sea lion critical habitat. With the exception of Cape Cleare on Montague Island, which is located over 12 NM away from the northern point of the TMAA, the nearest shoreline (Kenai Peninsula) is approximately 24 NM north of the TMAA northern Boundary. Cordova is approximately 80 NM from the nearest edge of the TMAA, and the center of the TMAA is approximately 170 NM offshore from Cordova. Kodiak is approximately 45 NM from the nearest edge of the TMAA, and the center of the TMAA is approximately 190 NM offshore from Kodiak. Yakutat is approximately 130 NM from the nearest edge of the TMAA, and the center of the TMAA is approximately 240 NM offshore from Yakutat. The TMAA is bounded by the following coordinates: 57° 30'N, 141° 30'W to 59° 36'N, 148° 10'W to 58° 57'N, 150° 04'W to 58° 20'N, 151° 00'W to 57° 16'N, 151° 00'W to 55° 30'N, 142° 00'W. Apart from the limited activities that may occur in the WMA, the only Navy training activities that currently occur outside the TMAA are aircraft flights to and from inland Air Force bases and ranges, which were addressed in the June 2013 JPARC EIS.

The JPARC has a unique combination of attributes that make it a strategically important training venue, to include:

- **Location**. The large contingent of Air Force aircraft and Army assets based within a few hundred miles of the TMAA creates the possibility of rare joint training opportunities with Navy forces. The TMAA provides a maritime training venue located within flight range of Joint Base

Elmendorf-Richardson, Eielson Air Force Base, Fort Wainwright, Fort Greely, and their associated air and land training ranges. The abundance of commercial vessels in shipping lanes within the GOA provides additional valuable realistic training during exercise scenarios, specifically on avoiding conflicts between military and civilian air and marine traffic.

- **Oceanographic Conditions**. The complex bathymetric and oceanographic conditions, including a continental shelf, submarine canyons, numerous seamounts, and freshwater infusions from multiple sources provide a challenging environment for training in the search, detection, and localization of submarines. The TMAA provides a safe, cold-water training environment from April to October.
- **Area of Training Space**. The JPARC is one of the largest air, surface, subsurface, and land training areas in the United States. This vast area provides ample space to support a full range of joint training scenarios.

The 2011 GOA Final EIS/OEIS analyzed Navy activities within the entire JPARC, which included the TMAA, the Air Force SUA, and the Army training lands and associated airspace. For the 2016 GOA Final SEIS/OEIS and this SEIS/OEIS, only actions involving underwater acoustic and explosive impacts within the TMAA were analyzed, because the analysis of SUA and land-based training remains unchanged and was incorporated in the June 2013 JPARC EIS.

Since the 1990s, the Department of Defense has conducted Northern Edge, a major joint training exercise in Alaska and off the Alaskan coast that involves the Departments of the Navy, Army, Air Force, and Coast Guard participants reporting to a unified or joint commander at the United States Indo-Pacific Command (USINDOPACOM) who coordinates the activities. The USINDOPACOM is a combatant command in charge of achieving U.S. national security objectives while protecting national interests. USINDOPACOM is also responsible for organizing and planning for the Northern Edge exercise. Major joint training exercise activities are planned to demonstrate and evaluate the ability of the services to jointly engage in a conflict and carry out plans in response to a threat to national security. To avoid the severe environmental conditions probable during the winter months, the exercise occurs between April and October. In 2011, the Navy signed the ROD selecting Alternative 2 from the 2011 GOA Final EIS/OEIS and was issued a permit to conduct two exercises annually during the April to October timeframe. In 2017, the Navy signed the ROD selecting Alternative 1 from the 2016 GOA Final SEIS/OEIS and was issued a permit to conduct one exercise annually during the April to October timeframe. Historically, the Northern Edge exercises have occurred only every other year. To date the Navy has conducted five exercises under these analyses, in June 2011, June 2015, May 2017, May 2019, and May 2021.

Following the release of the 2020 GOA Draft SEIS/OEIS and completion of the Northern Edge 2021 exercise, the Navy recognized that the size and shape of the TMAA (approximately 42,146 square nautical miles) in the GOA does not provide sufficient space for the realistic maneuvering of vessels and aircraft during training exercises. To address the need for a broader area in which to maneuver during training, the GOA Study Area now includes the WMA in addition to the existing TMAA (Figure 1-1). The WMA is located south and west of the TMAA and provides an additional 185,806 square nautical miles of surface, sub-surface, and airspace in which to maneuver in support of activities occurring within the TMAA. The WMA is bounded by the following coordinates: 55° 30’N, 142° 00’W; to 52° 14’N, 142° 49’W; to 49° 55’N, 165° 38’W; to 52° 54’N, 166° 30’W; following the -4,000 isobath to 57° 01’N, 149° 18’W. The northern boundary of the WMA follows the bottom of the slope at the 4,000 meter contour line and was configured to avoid overlap and impacts on critical habitat, biologically important areas, marine mammal migration routes, and primary fishing grounds. Currently, the TMAA allows for a single,

predictable air and surface axis of approach to the Study Area, which does not replicate real-world conditions or scenarios, which are unpredictable. The addition of the WMA provides airspace for multiple air lanes and sea space for increased training complexity. Airspace training in the WMA would be conducted following procedures for international flight in airspace over the high seas (U.S. Department of the Navy, 2021). Similar to the TMAA, training in the WMA is expected to continue into the reasonably foreseeable future.

1.6 The Environmental Planning Process

NEPA requires federal agencies to examine the environmental impacts of their proposed actions within the United States and its territories. An EIS/OEIS is a detailed public document that assesses the potential effects that a major federal action might have on the human environment. The Navy undertakes environmental planning for major Navy actions occurring throughout the world in accordance with applicable laws, regulations, and executive orders.

Pursuant to 40 CFR section 1502.9(c), an SEIS is prepared when the agency makes substantial changes in the proposed action that are relevant to environmental concerns; or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. An agency may also supplement a final EIS when the agency determines that the purpose of NEPA will be furthered by doing so. The Navy's original purpose and need and Proposed Action, as identified in the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS, have not changed and are applicable to this SEIS/OEIS. Although new information and analytical methods have emerged since the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS, this new information is not significant and does not present a substantially different picture of the environmental consequences or the significance of impacts resulting from the Navy's Proposed Action. Nonetheless, pursuant to the CEQ regulations (40 CFR section 1500.1(b) and 40 CFR section 1502.9(c)(2)), the Navy has determined that preparing this SEIS/OEIS furthers the purpose of NEPA by updating the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS with new information relevant to the public's concerns. This SEIS/OEIS updates the marine mammal, fishes, birds, and sea turtles sections for acoustic and explosive stressors resource analyses, as well as socioeconomics and environmental justice analyses, in the 2011 GOA Final EIS/OEIS (U.S. Department of the Navy, 2011a) and ROD (U.S. Department of the Navy, 2011b) and the 2016 GOA Final SEIS/OEIS (U.S. Department of the Navy, 2016) and ROD (U.S. Department of the Navy, 2017).

There is no significant new information relevant to the other resource areas evaluated in the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS. Additionally, there is no additional information or changes to the best available science for those resource areas. For these reasons, re-analysis of the alternatives in relation to the other resource areas is not warranted. The alternatives analysis for these resource areas is still valid and is not being re-analyzed in this SEIS/OEIS (refer to Chapter 3, Affected Environment and Environmental Consequences, and the individual resource sections of this SEIS/OEIS for detailed discussions).

1.6.1 National Environmental Policy Act Requirements

The NEPA process for an EIS is displayed in Figure 1-2. As was done for the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS, the Navy complied with all the substantive and procedural NEPA requirements for this SEIS/OEIS. It should be noted that in accordance with the CEQ regulations for implementing the requirements of NEPA, scoping is not required for an SEIS; however, in an effort to maximize public participation and ensure the public's concerns are addressed, the Navy chose to conduct a scoping period for this SEIS/OEIS. The 30-day scoping process period for this SEIS/OEIS was initiated by publication of the Notice of Intent in the *Federal Register* (February 10, 2020) and local newspapers (*Anchorage Daily News, Cordova Times*, *Juneau Empire*, *Kodiak Daily Mirror*, *and Peninsula Clarion*) (Appendix F, Public Participation, has more information on the Navy's scoping process for this SEIS/OEIS along with details of outreach efforts the Navy has conducted in support of the training conducted in the GOA).

The 2020 GOA Draft SEIS/OEIS Notice of Availability (85 Federal Register 80093) and the Notice of Virtual Public Meetings (85 Federal Register 80076) was published in the Federal Register December 11, 2020. The public was able to provide comments from December 11, 2020 to February 16, 2021 on the Draft SEIS/OEIS. The Notice of Availability for the Supplement to the Draft SEIS/OEIS was published in the *Federal Register* March 18, 2022 (87 Federal Register 15415), and the public was invited to provide comments through May 2, 2022. For each notice, advertisements were also placed in the five newspapers listed above.

The Final SEIS/OEIS addresses all public comments received on the 2020 Draft SEIS/OEIS and 2021 Supplement to the 2020 Draft SEIS/OEIS. Responses to public comments may include factual corrections, supplements, or modifications to analysis; and inclusion of new information. Additionally, responses may explain why the comments do not warrant further agency response (see Appendix G, Public Comments and Responses).

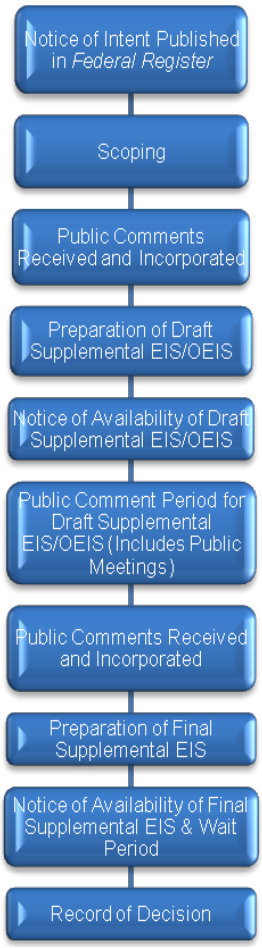

Figure 1-2: National Environmental Policy Act Process

Finally, the decision maker will issue a ROD no earlier than 30 days after the Final SEIS/OEIS is made available to the public.

For a description of how the Navy complied with each of these requirements during the development of this SEIS/OEIS, please see Appendix F (Public Participation).

1.6.2 Executive Order 12114

EO 12114, *Environmental Impacts Abroad of Major Federal Actions*, directs federal agencies to provide for informed environmental decision-making for major federal actions outside the United States and its territories. Presidential Proclamation 5928, issued on December 27, 1988, extended the exercise of U.S. sovereignty and jurisdiction under international law to 12 NM; however, the proclamation expressly provides that it does not extend or otherwise alter existing federal law or any associated jurisdiction, rights, legal interests, or obligations. Thus, as a matter of policy, the Navy analyzes environmental effects and actions within 12 NM under NEPA (an EIS) and those effects occurring beyond 12 NM under the provisions of EO 12114 (an OEIS).

1.6.3 Other Environmental Requirements Considered

The Navy must comply with all applicable federal environmental laws, regulations, and EOs as discussed in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS. With the exception of acoustic and explosive effects analysis conducted for compliance with the MMPA and the ESA-listed marine mammal, fish, and bird species under NMFS and U.S. Fish and Wildlife Service jurisdiction, there are no detailed re-analysis of the other resource areas from the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS analyses. Analysis of impacts under the MMPA and the ESA can be found in Chapter 3 (Affected Environment and Environmental Consequences) of this SEIS/OEIS. Additionally, Chapter 6 (Additional Regulatory Considerations), Table 6.1-1, provides an updated listing of the Navy's compliance status.

1.7 Scope and Content

In this SEIS/OEIS, the Navy reevaluated potential impacts from the ongoing military training activities in the GOA Study Area. The GOA Study Area supports opportunistic experimentation and testing activities when conducted as part of training activities and when considered to be consistent with the proposed training activities. These activities could occur as part of large-scale exercises or as independent events. Therefore, there is no separate discussion or analysis for testing activities that may occur as part of the proposed military readiness activities in the GOA Study Area. Additionally, the analysis presented in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS does not change under any resource area except for acoustic and explosive stressors for marine mammals, fish, and birds (taking into account the new information and analytical methods), and socioeconomics and environmental justice. As such, those other resource areas are not carried forward for re-analysis in this SEIS/OEIS. Through the application of new scientific information and the Navy Acoustic Effects Model, the Navy reanalyzed direct, indirect, cumulative, short-term, long-term, irreversible, and irretrievable impacts that result from the Navy's training activities in this SEIS/OEIS. This SEIS/OEIS analyzes the impacts under two alternatives—the No Action Alternative and Alternative 1. Alternative 1 was derived from Alternative 1 in the 2016 GOA SEIS/OEIS, which was ultimately selected in the 2017 ROD (U.S. Department of the Navy, 2017). Alternative 2 from the 2016 GOA SEIS/OEIS was eliminated from consideration because including one additional Carrier Strike Group exercise during the summer months and conducting two sinking exercises goes beyond the Navy's need for training at this time and into the near future.

The Navy is the lead agency for the Proposed Action and is responsible for the scope and content of this SEIS/OEIS. NMFS is a cooperating agency pursuant to 40 CFR section 1501.6, because of its expertise and regulatory authority over marine resources. Additionally, NMFS is required to review applications and, if appropriate, issue an incidental take authorization under the MMPA.

NMFS' issuance of an MMPA incidental take authorization (i.e., Letter of Authorization) is a major Federal action (NMFS' Proposed Action) and is considered a connected action under NEPA (40 CFR 1508.25), with a discrete purpose and need relative to NMFS' statutory and regulatory obligations.

NMFS has an independent responsibility to comply with NEPA and intends, after independent review, to rely on the information and analysis in the Final SEIS/OEIS to fulfill its NEPA requirements. NMFS intends to adopt this Final SEIS/OEIS and issue a ROD if appropriate.

1.8 Organization of This Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement

This SEIS/OEIS is organized as follows:

- Chapter 1 describes the purpose of and need for the Proposed Action.

- Chapter 2 describes the Proposed Action and Alternatives analyzed and presented in the ROD for the 2011 GOA Final EIS/OEIS (U.S. Department of the Navy, 2011b) and the ROD for the 2016 GOA Final SEIS/OEIS (U.S. Department of the Navy, 2017).
- Chapter 3 describes the existing conditions of the affected environment and potential environmental consequences on those resources requiring additional discussion or analysis beyond what was analyzed in the 2011 GOA Final EIS/OEIS (U.S. Department of the Navy, 2011a) and the 2016 GOA Final SEIS/OEIS (U.S. Department of the Navy, 2016).
- Chapter 4 describes the analysis of cumulative impacts, which are the impacts of the Proposed Action, as described in the 2011 GOA Final EIS/OEIS (U.S. Department of the Navy, 2011a) and the 2016 GOA Final SEIS/OEIS (U.S. Department of the Navy, 2016) when added to past, present, and reasonably foreseeable future actions.
- Chapter 5 describes and focuses on the measures the Navy evaluated that could mitigate impacts on marine resources as well as mitigations beyond those discussed in the 2011 GOA Final EIS/OEIS (U.S. Department of the Navy, 2011a) and the 2016 GOA Final SEIS/OEIS (U.S. Department of the Navy, 2016) for other resource areas.
- Chapter 6 describes other considerations required by the NEPA and describes how the Navy complies with other federal, state, and local plans, policies, and regulations. Additionally, this chapter describes the Navy's government-to-government consultation with federally recognized Alaska Native Tribes in accordance with EO 13175, *Consultation and Coordination with Indian Tribal Governments*.
- Chapter 7 includes a list of the SEIS/OEIS preparers.
- Appendices provide technical information that supports the SEIS/OEIS analyses and its conclusions.

1.9 Related Environmental Documents

The progression of NEPA/EO 12114 documentation for Navy activities has developed from planning individual range complex exercises and testing events to theater assessment planning that spans multiple years and covers multiple range complexes. The following documents are referenced in this SEIS/OEIS where appropriate:

- *Gulf of Alaska Navy Training Activities Final Environmental Impact Statement/Overseas Environmental Impact Statement* (U.S. Department of the Navy, 2011a) – This EIS/OEIS is the initial document that analyzes environmental compliance coverage for Navy training activities in the GOA. This document provides the basis for this SEIS/OEIS.
- *Record of Decision for Final Environmental Impact Statement/Overseas Environmental Impact Statement for the Gulf of Alaska Navy Training Activities* (U.S. Department of the Navy, 2011b) – This document, signed on May 11, 2011, is the formal decision document that identifies and explains the reasoning and decision on the selected alternative in the 2011 GOA Final EIS/OEIS.
- *Final Environmental Impact Statement for the Modernization and Enhancement of Ranges, Airspace, and Training Areas in the Joint Pacific Alaska Range Complex* (U.S. Department of Army & Air Force, 2013a) – This EIS analyzes the need to modernize and enhance the range and airspace infrastructure of the training ranges in Alaska to meet Department of Defense Service component training requirements. Current and future Navy training activities are included in this document and it provides environmental coverage for Navy overland activities.
- *Record of Decision for Final Environmental Impact Statement for the Modernization and Enhancement of Ranges, Airspace, and Training Areas in the Joint Pacific Alaska Range Complex*

(U.S. Department of Army & Air Force, 2013b) – This document, which was approved and signed on August 6, 2013, provides the reasoning and decision on the selected alternative in the JPARC EIS.

- *Gulf of Alaska Navy Training Activities Final Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement* (U.S. Department of the Navy, 2016) – This is the first supplement to the initial EIS/OEIS.
- *Record of Decision for the Gulf of Alaska Final Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement* (U.S. Department of the Navy, 2017) – This document, signed on April 22, 2017, is the formal decision document that identifies and explains the reasoning and decision on the selected alternative in the 2016 GOA Final SEIS/OEIS.

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