



**Decision Notice and Finding of No Significant Impact for the
Pacific Northwest Electronic Warfare Range
USDA Forest Service
Pacific Ranger District, Olympic National Forest Jefferson,
Grays Harbor, and Clallam County, Washington**

Contents

Executive Summary.....2

Introduction3

Decision.....4

Decision Rationale.....6

 1988 Master Agreement with the Department of Defense6

 Relationship to the Project’s Purpose and Need.....7

 Other Alternatives Considered in Detail7

 Consistency with the Forest Plan.....8

 Previous Operations.....8

 External Input9

Public Involvement and Tribal Consultation.....9

Finding of No Significant Impact..... 11

 Context..... 11

 Intensity 12

 Conclusion 22

Findings Required by Other Laws and Regulations..... 22

Administrative Review and Objection Rights 26

Implementation..... 33

Contact..... 33

References 34

Appendix A Maps..... 35

Appendix B Response to Comments Received 43

Appendix C Special Use Permit 114

Appendix D Alternatives Considered and Eliminated From Further Study..... 147

Appendix E Reviewing Officer Instructions 149

Appendix F Wildlife Effects..... 174

Executive Summary

I have decided to adopt the Navy's 2014 Pacific Northwest Electronic Warfare (EW) Range Environmental Assessment (EA) in accordance with the Council on Environmental Quality (CEQ) regulations at 40 CFR 1506.3, which provide that an agency may adopt appropriate environmental documents prepared by another agency to eliminate duplication by federal agencies. My decision also incorporates by reference analysis associated with the Navy's 2015 *Northwest Training and Testing Final EIS/OEIS* (Navy, 2015) and *Record of Decision* (Navy, 2016), as well as other materials. My decision is to select Alternative 1 as described in the 2014 *EW Range EA* (Section 2.1.1.4, pp. 2-4 through 2-6; Section 2.2.3.2, p. 2-10) with modifications, on the Pacific Ranger District of the Olympic National Forest.

Introduction

The Olympic National Forest received a special use permit (SUP) application from the U.S. Navy proposing to use National Forest System (NFS) roads for training exercises on the Pacific Ranger District in connection with aircraft activities conducting electronic warfare (EW) training. The project area is located on NFS lands within the counties of Jefferson, Grays Harbor, and Clallam, in the west portion of Washington's Olympic Peninsula (Appendix A). The legal description is as follows: T22N, R9W, Section 31; T22N, R10W, Sections 14, 24, 33; T23N, R10W, Section 1; T24N, R10W, Sections 2, 28; T24N, R9W, Section 31; T28N, R12W, Section 1; T29N, R11W, Section 30; T29N, R12W, Sections 14, 15.

The Navy prepared the 2014 *Pacific Northwest EW Range Environmental Assessment* (2014 *EW Range EA*) (Navy, 2014) that analyzes the potential impacts of actions associated with installation and operation of an EW range in the state of Washington. On August 28, 2014, the Navy signed a Finding of No Significant Impact (FONSI) for the 2014 *EW Range EA* documenting that an environmental impact statement is not necessary.

The 2014 *EW Range EA* tiers to the *Record of Decision* (Navy, 2010) for the Navy's 2010 *Northwest Training Range Complex (NWTRC) Environmental Impact Statement* (EIS)/Overseas EIS (OEIS) and incorporates the EIS/OEIS by reference (Navy, 2010). The 2010 *NWTRC EIS/OEIS* analyzed a variety of Navy ship, submarine, and aircraft training activities that included EW training (referred to as Electronic Combat in the 2010 *NWTRC EIS/OEIS*). The 2010 *NWTRC EIS/OEIS* analyzed EW range training activities and the concept of a fixed emitter on the Olympic Peninsula with aircraft activities that are currently conducting EW training. However, at the time the 2010 *NWTRC EIS/OEIS* was completed, details for the potential use of fixed and mobile signal transmitters were not available. The 2014 *EW Range EA* addresses the components of EW training that were not analyzed in the 2010 *NWTRC EIS/OEIS*. The nature and scope of the Proposed Action involving the use of NFS roads and Washington State Department of Natural Resources roads requires the participation of, and coordination with, both agencies.

The 2015 *Northwest Training and Testing Final EIS/OEIS*, authorized in its Record of Decision (Navy, 2016), consolidates and updates the analyses of military readiness activities within the *NWTRC EIS/OEIS* (Navy, 2010), the 2010 Keyport Range Complex Extension EIS (Navy, 2010), and the 1988 Southeast Alaska Acoustic Measurement Facility EIS (Navy, 1988). Specifically, aircraft use associated with EW training over the Olympic Military Operations Areas was addressed in the 2010 *NWTRC EIS/OEIS* (Navy, 2010) and reanalyzed in the Navy's 2015 *Northwest Training and Testing Final EIS/OEIS* (Navy, 2015) which includes an airspace noise analysis for the Olympic Military Operations Areas.

Electronic warfare is any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. The purpose of EW is to deny the opponent the advantage of, and ensure unimpeded access to, the electromagnetic spectrum—the range of all possible frequencies of electromagnetic radiation (i.e., electromagnetic energy) for use in such applications as communication systems, navigation systems, and defense-related systems and components (Joint Chiefs of Staff Publication, 2012). An EW Range is a collection of resources across a large geographic area where EW training can be facilitated.

Effective EW training requires sources of electromagnetic energy that simulate systems operated by enemy combatants. Each of these threat systems (typically search or targeting radar systems) transmits energy within identifiable and recognizable parameters (e.g., frequency). These parameters can be simulated by EW emitters such as those proposed in the 2014 *EW Range EA*. To train sailors in locating the source, it is important that the EW emitters have some degree of mobility in order to present a cross threat axis training picture. For that reason, mobile EW emitters are required. The emitters would be frequently relocated among the selected sites, challenging crews in determining the emitter's location.

Decision

My decision adopts the Navy's 2014 *EW Range EA* in accordance with the Council on Environmental Quality (CEQ) regulations at 40 CFR 1506.3, which provide that an agency may adopt appropriate environmental documents prepared by another agency to eliminate duplication by federal agencies.

My decision also incorporates by reference analysis associated with the Navy's 2015 *Northwest Training and Testing Final EIS/OEIS* (Navy, 2015) and *Record of Decision* (Navy, 2016), as well as other materials.

My decision is to select Alternative 1 as described in the 2014 *EW Range EA* (Section 2.1.1.4, pp. 2-4 through 2-6; Section 2.2.3.2, p. 2-10) with modifications. Under Alternative 1, the Navy proposes: (1) installation and operation of a mission control center and debrief center in an existing facility at Naval Air Station Whidbey Island; (2) installation and operation of a fixed emitter at Naval Station Everett Annex Pacific Beach, including renovation of Building 104; (3) installation and operation of communication equipment on an existing tower in the Olympic Military Operations Area at Octopus Mountain; and (4) operation of Mobile Electronic Warfare Training System using vehicle-mounted emitters within the Olympic Military Operations Areas on the Olympic National Forest and Washington State lands. Authorization of activities not occurring on the Olympic National Forest are outside the scope of my authority. Items (1), (2), and (3) are not on the Olympic National Forest. Portions of item (4) are not on the Olympic National Forest, specifically four locations on Washington State lands (emitter sites: 3, 12, 13, and 14).

The entirety of my decision is reflected in the SUP Terms and Conditions, SOP, and project design features in Appendix C of this document. My modifications to Alternative 1 are as follows:

1. Not authorizing installation and operation of a mission control center and debrief center in an existing facility at Naval Air Station Whidbey Island, because it is not within my jurisdiction.
2. Not authorizing installation and operation of a fixed emitter at Naval Station Everett Annex Pacific Beach, including renovation of Building 104, because it is not within my jurisdiction.
3. Not authorizing installation and operation of communication equipment on an existing tower in the Olympic Military Operations Area at Octopus Mountain, because it is not within my jurisdiction.
4. Not authorizing operation of Mobile Electronic Warfare Training System vehicle-mounted emitters within the Olympic Military Operations Areas on Washington State lands, because it is not within my jurisdiction.
5. Issuing a SUP Terms and Conditions, SOP, and project design features for operation

of a Mobile Electronic Warfare Training System consisting of vehicle-mounted emitters on the Olympic National Forest for up to five

years at 11 designated emitter sites: 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, and 15 (2014 *EW Range EA* Figures 1.3-2 and 1.3-3, and Table 1.3-1, pp. 1-3 through 1-5). Table 1 displays the locations and associated Forest Plan Management Allocations for the sites (Maps, Appendix A of this document).

Mobile emitter trucks are stationed at the Naval Station Everett Annex Pacific Beach. On a typical training day, three mobile-emitter trucks (2014 *EW Range EA*, Figures 2.1-3 through 2.1-5) will each drive to one of the 11 designated sites on the Olympic National Forest. They will be parked and operated at designated sites on pull-outs out of the way of traffic. These sites are generally on a cliff or ridgeline, or otherwise provide an open area to the west of the pull-out enabling the mobile emitter a clear line of sight to the west (2014 *EW Range EA*, p. 2-4). The crews will set up the safety zones to include warning tape and removable “Electromagnetic Radiation Hazard” signage, which will warn people to not linger inside the taped area. Training operations will cease or move if people are in the area. When the supported aircraft are within the area (either airborne in W-237, an offshore warning area extending westward off the coast of northern Washington State, or in the Olympic Military Operations Areas) the crew within the mobile emitter will energize the emitter in accordance with the training scenario. The emitter systems transmit electromagnetic radiation within an identifiable and recognizable energy wave within the electromagnetic spectrum. Two types of vehicle-mounted mobile emitters are proposed for use. Traveling Wave Tube Amplifier mobile emitters are capable of generating an electromagnetic wave at frequencies ranging from 4 to 8 GHz; the Magnetron mobile emitters are capable of generating an electromagnetic wave at frequencies ranging from 6.7 to 7.4 GHz. The emitter may be energized for short periods of time throughout the training activity or continuously throughout the entire time the aircraft is airborne, depending upon the training scenario. While training operations are underway, each mobile-emitter truck will be in place for 8 to 16 hours, for an average of 12 hours each day, with electronic emissions occurring for about 45 minutes out of every hour.

Public access and safety described in the 2014 *EW Range EA* are integral components of my decision (pp. 3.1-4 through 3.1-5). Health and Safety Standard Operating Procedures (SOP) will be implemented. These procedures from the 2014 *EW Range EA* are included as part of the SUP Terms and Conditions, SOP, and project design features (Appendix C, Exhibit B). Additional Project Design Features were developed by Forest Service resource specialists to ensure protection of forest resources and are also included as part of the SUP Terms and Conditions, SOP, and project design features (Appendix C, Exhibit B). Compliance with the SUP Terms and Conditions, SOP, and project design features will be ensured through the permit administration process.

Table 1. Location of 11 emitter sites authorized for use and their associated Olympic National Forest Plan Allocations (Appendix A).

Emitter Site #.	Latitude/Longitude Township, Range, Section*	Specific Road Location	Forest Plan Allocation: Northwest Forest Plan Amendment/1990 Land and Resource Management Plan
1	N 47°32'13.56" / W 123°56'51.18" T24N, R10W, Sec 28	NFS Rd NF-2140, MP 3.5	Late Successional Reserve/ Timber Management
2	N 47°31'40.80" / W 123°52'47.50" T24N, R9W, Sec 31	NFS Rd NF-2190, MP 11.5	Late Successional Reserve/ Timber Management
4	N 47°35'49.80" / W 124°02'39.80" T24N, R10W, Sec 2	NFS Rd NF-011, MP3.7	Adaptive Management Area, Riparian Reserve/ Timber Management
5	N 47°22'32.81" / W 123°53'12.87" T22N, R10W, Sec 33	NFS Rd NF-2258, MP 2.56	Late Successional Reserve/ Timber Management
6	N 47°24'20.50" / W 123°50'27.08" T22N, R10W, Sec 24	NFS Rd NF-2258, MP 0.01	Late Successional Reserve/ Timber Management
7	N 47°23'47.40" / W 123°54'52.80" T22N, R10W, Sec 14	NFS Rd 2257, MP2.35, pull off	Adaptive Management Area/ Timber Management
8	N 47°21'30.10" / W 123°51'56.40" T22N, R9W, Sec 31	NFS Rd 042; MP 0.269, pull off	Late Successional Reserve, Riparian Reserve/ Timber Management
9	N 47°57'58.00" / W 124°11'41.70" T28N, R12W, Sec 1	NFS Rd 2923 and NFS Rd 025, MP 0.005, pull off at intersection	Adaptive Management Area/ Timber Management
10	N 47°59'26.11" / W 124°09'59.78" T29N, R11W, Sec 30	NFS Rd 2923, MP 10.2, MP 7.4, pull off	Adaptive Management Area/ Timber Management
11	N 48°00'57.54" / W 124°13'26.13" T29N, R12W, Sec 14-15	NFS Rd 060 and NFS Rd 065, MP 1.6, pull off	Adaptive Management Area, Riparian Reserve/ General Level River Corridor
15	N 47°30'44.80" / W 123°53'20.20" T23N, R10W, Sec 1	NFS Rd NF-2190, MP 10.2	Late Successional Reserve/ Timber Management

Decision Rationale

I considered several factors in making my decision to select Alternative 1 as described in the 2014 *EW Range EA* (Section 2.1.1.4) with modifications. I specifically considered: the 1988 Master Agreement with the Department of Defense; the relationship to the project's Purpose and Need; the three other alternatives; consistency with the Forest Plan; previous operations; analysis disclosed in the 2014 *EW Range EA* and 2015 *Northwest Training and Testing Final EIS*¹; and external input consisting of comments received during and outside of the scoping, comment, and objection periods.

1988 Master Agreement with the Department of Defense

In making my decision, I considered the 1988 Master Agreement between the Department of Defense and the United States Department of Agriculture concerning the use of NFS lands for military activity. I determined that my decision is consistent with and supports the intent of the 1988 Master Agreement.

¹ The Study Area for the 2015 *Northwest Training and Testing Final EIS/OEIS* includes only at-sea components of the training and testing areas and facilities. The land resources affected by use of the Olympic Military Operating Areas A and B in the 2010 *NWTRC EIS/OEIS* were re-evaluated in the 2015 *Northwest Training and Testing Final EIS/OEIS* as they are directly impacted by overflights for at-sea activities.

Relationship to the Project's Purpose and Need

In making my decision, I considered its relationship to the project's purpose and need. This decision to select Alternative 1, modified as described above, meets the project's purposes and needs in the following ways:

To sustain and enhance the level and type of EW training currently being conducted as described in the 2010 NWTRC EIS/OEIS and authorized in its Record of Decision.

My decision supports required EW basic, intermediate, and sustainment training activities and certifications for air and surface, units in the NWTRC.

To provide the ability to accommodate growth in future training requirements.

My decision accommodates anticipated future training requirements by expanding the current use and activity of the long-established Military Operations Areas in and around the Olympic Peninsula.

To maximize the ability of local Naval units to achieve their training requirements on local ranges.

My decision allows local Navy units to train in the local Olympic Military Operations Areas, as opposed to traveling longer distances to sites. Local training reduces training costs and reduces the use of fossil fuels. It also maximizes and balances the quality training with quality of life by reducing the time of Navy personnel away from home.

Other Alternatives Considered in Detail

No Action Alternative

Under the No Action Alternative, limited EW training, without the enhanced capability of fixed and mobile emitters, would continue to be conducted in the NWTRC and intermediate-level EW training for certification would continue to occur at the Mountain Home Air Force Base approximately 400 nautical miles southeast of the Naval Air Station Whidbey Island. I did not select this alternative because it does not reasonably address the project's purpose and need by foregoing the opportunity to sustain, enhance, expand, and accommodate for growth of EW training on lands within my jurisdiction.

Alternative 1

Under Alternative 1, the Navy proposes: (1) installation and operation of a mission control center and debrief center in an existing facility at Naval Air Station Whidbey Island; (2) installation and operation of a fixed emitter at Naval Station Everett Annex Pacific Beach, including renovation of Building 104; (3) installation and operation of communication equipment on an existing tower in the Olympic Military Operations Area at Octopus Mountain; and (4) operation of Mobile Electronic Warfare Training System using vehicle-mounted emitters within the Olympic Military Operations Areas on the Olympic National Forest and Washington State lands. Authorization of activities not occurring on the Olympic National Forest are outside the scope of my authority. Items (1), (2), and (3) are not on the Olympic National Forest. Portions of item (4) are not on the Olympic National Forest,

specifically four locations on Washington State lands (emitter sites: 3, 12, 13, and 14).

Proposed Action / Alternative 2

Under Alternative 2, the Navy proposes to undertake operations identified in Alternative 1 as well as operation of Mobile Electronic Warfare Training System using vehicle-mounted emitters on NFS lands within the Okanogan and Roosevelt Military Operations Areas. This alternative fully meets the project's Purpose and Need. I did not select this alternative because authorization of activities not occurring on the Olympic National Forest are outside the scope of my authority. The Okanogan and Roosevelt Military Operations Areas are not associated with the Olympic National Forest; they are associated with the Okanogan-Wenatchee National Forest and the Colville National Forest.

Alternatives Considered and Eliminated from Further Study

The Navy also considered five additional alternatives that it eliminated from further study (see Appendix D). These alternatives were determined by the Navy as not feasible or unreasonable relative to their ability to meet all of the selection criteria for the Proposed Action.

I also considered having the sites located on the Olympic National Forest moved to behind gates on closed roads. I considered this as a way to reduce the potential interference with other public uses. I eliminated this from further consideration because it would not be consistent with the intent of road closures.

Consistency with the Forest Plan

In making my decision, I considered the relationship to direction in the Forest Plan. My decision is consistent with the Forest Plan, see the Forest Plan Consistency Section, pp.18-21 of this document.

Previous Operations

In making my decision, I considered the four previously issued short-term SUPs authorizing this type of activity. These SUPs were for "conducting feasibility tests of an Integrated Air Defense System by use of a mobile emitter as a training device for Navy pilots. Aircraft will fly overhead in a manner consistent with heights and locations approved in the Olympic Military Operations Area, and a threat emitter will produce a simulation of hostile missiles and radar signals that will be monitored by the Aircraft Crew." On October 14, 2010, I signed SUP SOL142 that expired December 31, 2010; Navy reported conducting system checks for a total of 4 days during this permit period. On November 11, 2011, I signed SUP QUN345 that expired February 29, 2012; Navy reported conducting system checks for a total of 12 days during this permit period. On September 9, 2013, I signed SUP SOL185 that expired December 31, 2013; Navy reported conducting system checks for a total of 4 days during this permit period. On August 21, 2014, I signed SUP QUN387 that expired December 31, 2014; Navy reported conducting system checks for a total of 4 days during this permit period. No environmental or public concerns were identified from these activities.

External Input

I considered external input received during scoping and the comment periods (see ‘Public Involvement and Tribal Consultation’ and references to the National Marine Fisheries Service, U.S. Fish and Wildlife Service, and State Historic Preservation Office), as well as outside the formal comment period process. Input I considered outside of the formal comment period process includes, but is not limited to, letters to the Chief of the Forest Service and the Region 6, Pacific Northwest Regional Forester.

Public Involvement and Tribal Consultation

The Pacific Northwest Electronic Warfare Range Environmental Assessment was listed on the Olympic National Forest’s *Schedule of Proposed Actions* (SOPA) October 1, 2013, and has remained on the SOPA throughout the planning, analysis, and decision process.

On April 28, 2014, the Okanogan-Wenatchee National Forest sent letters to the Confederated Tribes of the Colville Reservation and Yakima Nation soliciting input on the project.

On May 19, 2014, I sent letters to the Quileute Tribe, Hoh Tribe, and Quinault Indian Nation to provide an invitation for Government-to-Government consultation and solicit input on the project. On June 26, 2014, I sent a scoping letters to citizens, organizations, and state, federal, and local government agencies that have expressed an interest in management activities on the Forest. The letters described the Proposed Action and requested comments. The Forest did not receive any responses as a result of these mailings.

On July 29, 2014, the Navy mailed notices to 141 elected officials, government agencies, Native American Tribes, nongovernmental organizations, community and business groups, and individuals on their project mailing list. The postcards included project information, a description of the Proposed Action, information repository locations, and comment instructions.

On July 30, 2014, the Navy sent a two-page informational flyer to the Pacific Beach Conference Center and 20 local U.S. Post Offices. Seventeen U.S. Post Offices were located in the vicinity of the Olympic National Forest area, and 3 were located in the vicinity of the Okanogan-Wenatchee and Colville National Forests areas. Post Offices were located in the following cities and towns in the state of Washington: Amanda Park, Beaver, Clallam Bay, Copalis Beach, Copalis Crossing, Forks, Humptulips, La Push, Matlock, McCleary, Moclips, Neah Bay, Neilton, Ocean Shores, Pacific Beach, Quinault, Taholah, Okanogan, Omak, and Republic. The fliers described the Proposed Action and alternatives, information repository locations, and comment instructions.

On July 31, 2014, the Navy sent letters to the Quileute Tribe, Hoh Tribe, Quinault Indian Nation, Makah Tribe, and Confederated Tribes of the Colville Reservation. The letters provided notice of the availability of the Draft 2014 *EW Range EA* as well as to seek whether they wanted Government-to-Government consultation. Consultations were conducted between the Navy and the Quileute Tribe, Hoh Tribe, and Quinault Indian Nation, as well as with the Jamestown S’Kallam Tribe, Port Gamble S’Kallam Tribe, Lower Elwha Klallam Tribe, Suquamish Tribe, and Skokomish Tribe. The Navy responded to questions and request for additional information from the Confederated Tribes of the Colville Reservation.

On August 1, 2014, the Navy posted the Draft 2014 *EW Range EA* on the Naval Facilities Engineering Command Northwest documents website (<http://go.usa.gov/kQ6e>). This website was included in the Navy's aforementioned postcard mailers, informational fliers, and Tribal letters, and the newspaper display advertisements noted below. The Draft 2014 *EW Range EA* was also made available at the following information repository location of public libraries: Oak Harbor, Ocean Shores, Omak Municipal, Republic Community, Timberland Regional-Aberdeen, and Timberland Regional-Hoquiam.

From August 1, 2014, through August 14, 2014, display advertisements were published in the following newspapers: *The Olympian* (August 1, 2, 3, 2014); *The Seattle Times* (August 1, 2, 3, 2014); *The Daily World* (August 2, 5, 7, 2014); *The Montesano Vidette* (August 7, 14, 2014). All advertisements included the project information, a description of the Proposed Action, information repository locations, and comment instructions.

On August 4, 2014, I sent letters to interested parties providing them a 30-day opportunity to comment on the Proposed Action and Draft 2014 *EW Range EA*. On August 9, 2014, I published notice of the Forest Service 30-day comment period in *The Daily World*. Two responses were received by the Forest during this comment period. The comments were not specific, in that they did not introduce any new information or issues related to the proposed alternatives.

On August 15, 2014, the Navy's 15-day public comment period on their Draft *EW Range EA* closed. The Navy received no comments in response to their Draft *EW Range EA*.

On September 12, 2014, I sent letters to interested parties informing them of my Draft Decision Notice and Finding of No Significant Impact, and 45-day pre-decisional objection period. On September 13, 2014, I published notice of my Draft Decision Notice and Finding of No Significant Impact and 45-day pre-decisional objection period (per 36 CFR 218) in *The Daily World*.

On September 26, 2014, after public concerns indicated that the prior scoping and comment period notification may not have reached all interested and affected parties, by letter to interested parties I cancelled my Draft Decision Notice and Finding of No Significant Impact that started the 45-day pre-decisional objection period. On September 26, 2014, I also sent additional letters to interested parties notifying them of the additional time to provide comments. On October 1, 2014, I published a notice of the cancellation of the objection period and additional opportunity to comment in *The Peninsula Daily News*. In order to fully understand public concerns and interests, this additional opportunity to comment went through October 10, 2014.

On October 8, 2014, I issued a News Release and sent letters to interested parties that to ensure the public had adequate time to provide comment, I was providing additional time to comment through October 31, 2014, and that the Navy was hosting a question and answer session in Forks Washington on October 14, 2014. I participated in the Navy-hosted question and answer session. At this session, the Navy provided a brief with PowerPoint slides addressing the ongoing and proposed activities related to EW training activities, and provided written informational handouts. Follow-on questions and comments were provided verbally by the public and varied greatly. Topics of discussion included electronic signal energy,

aircraft activities and noise, airspace parameters, potential effects of Navy activities to the public and the environment, Navy safety procedures and mitigations, potential for interference with other electronic signal sources, the National Environmental Policy Act process, and the National Forest Service SUP process.

On October 31, 2014, I issued a News Release and sent letters to interested parties that to ensure the public has adequate time to provide comment, I was offering additional time for comments through November 28, 2014, and the Navy was hosting a question and answer session in Port Angeles Washington on November 6, 2014. I participated in the Navy-hosted question and answer session. This session was similar in format and in the nature of questions and comments posed by the public as noted for the session above.

Over 3,500 public comments were received by the Forest during its comment period. In addition, a petition of 126,000 signatures in opposition to the project was received by the Forest. Comments were thematically grouped by concern. Public input was considered in making my decision to select Alternative 1 with modifications. Responses on the received comments are included as Appendix B.

On November 29, 2016, the legal notices were published, initiating the 45-day objection period process (see the Administrative Review and Objection Rights section). See Appendix E for the list of eligible objectors, the compiled objection statements and responses, as well as the Objection Reviewing Officers instructions.

On April 5, 2017, after the designated objection period, I met with the Hoh Indian Tribe to discuss their concerns and issues with the project actions. We responded to questions and request for clarification from the Hoh Indian Tribe concerning the actions the decision were authorizing on the west side of the Olympic Peninsula.

Finding of No Significant Impact

After considering comments from the public and the environmental effects described in the 2014 *EW Range EA* and other materials. I have determined that the actions of modified Alternative 1 will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.

The following is a summary of the project analysis to determine significance, as defined by Forest Service Handbook 1909.15_05. "Significant" as used in National Environmental Policy Act requires consideration of both context and intensity of the expected project effects.

Context means that the significance of an action must be analyzed in several contexts (i.e. local regional, worldwide), and over short and long time frames. For site-specific actions, significance usually depends upon the effects in the local context rather than in the world as a whole.

Intensity refers to the severity of the expected project impacts and is defined by the following 10 points.

Context

The project is limited in scope and duration and is designed to minimize environmental

effects through mitigation measures (2014 *EW Range EA*, Section 3.1.1.5; this document, Appendix C, Exhibit B). The Pacific Northwest EW range activities will be localized to specific sites within the Pacific Ranger District. Mobile Electronic Warfare Training System vehicles will utilize 11 pullout sites along NFS roads, using 3 sites per day, for 8 to 16 hours per day for approximately 250 days per year. The EW range activities will be authorized under a SUP Terms and Conditions, SOP, and project design features for a duration of 5 years. Based on these factors, I believe the effects of this project will be localized, and will not contribute to significant environmental effects within or beyond the project area.

Intensity

The environmental effects of the actions are documented in Chapter 3 of the 2014 *EW Range EA* (2014 *EW Range EA* beginning on p. 3.0-1). I considered the beneficial and adverse impacts associated with modified Alternative 1 disclosed in the 2014 *EW Range EA* and supporting documentation in the project file. The analysis considered the direct and indirect effects of the project and their contribution to potential cumulative effects (2014 *EW Range EA*, p. 3.0-1). The key findings for potential effects are summarized below. Effects are expected to be low in intensity with implementation of SUP Terms and Conditions, SOP, and project design features (Appendix C, Exhibit B) included to eliminate or minimize effects.

1. Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.

I considered the beneficial and adverse impacts associated with Alternative 1 disclosed in the 2014 *EW Range EA*. A full range of environmental issues were considered for evaluation at the outset of the process. Certain resources were eliminated from detailed study in the 2014 *EW Range EA* because research revealed that the proposed action and alternatives were unlikely to have any potential environmental impacts on these resources, or that impacts would be negligible (2014 *EW Range EA*, p. 3.0-2, Table 3.0-1). The analysis considered the direct and indirect impacts of the project and their contribution to potential cumulative impacts (2014 *EW Range EA*, p. 3.0-1). The key findings for potential impacts from vehicle noise, and mobile emitter generator noise, and electromagnetic radiation are summarized below.

Public Health and Safety

No significant health or safety impacts to the public would occur as a result of implementation of my decision because of the SOP listed in Section 3.1.1.5 of the 2014 *EW Range EA* and included as requirements in the SUP Terms and Conditions, SOP, and project design features (Appendix C, Exhibit B). These include procedures that require emitter operators to adhere to specific safety precautions designed to prevent electromagnetic hazards to people. In addition, the response to comments, Appendix B, p. 61 states that “the frequency bands that the transmitters will operate within are within the radio wave part of the electromagnetic spectrum and include frequencies used in existing public equipment, such as cordless phones, Wi-Fi, and Bluetooth devices.”

Navy aircraft have been training in airspace over the Olympic Peninsula for over 40 years, and EA-18G Growler aircraft have been flying in this airspace since 2008. Olympic National Park data indicates that there has been an increase in park visitors from 2.82 million in 2012 to 3.29 million in 2016. Navy mobile emitter sites were specifically selected for locations where there were no common use attractions or public areas, such as trails, viewpoints,

parking areas, or picnic areas. The transmitter sites in my decision are on NFS lands that have been disturbed or harvested and, therefore, are not likely prime recreational locations.

Additionally, the vehicles and transmitter training equipment are U.S. government owned and will be driven and operated by approved and trained military staff or government contractors that are required to follow strict SUP Terms and Conditions, SOP, and project design features and safety protocols. The contractors are supervised by a U.S. Navy government employee. These systems are currently operated in this manner on other military training areas around the country in support of Department of Defense training needs.

Truck operators will not carry any firearms or other weapons. Safety procedures for encounters with aggressive wildlife are to remain close to the vehicle or to remain in the vehicle. If an encounter with wildlife should happen, the operators may have to discontinue activities at that site until all clear or to move to another site. Procedures for other types of emergencies include calling the range command facility located at Pacific Beach or notifying 911, as appropriate. The Special Use Permit allows Forest Service personnel to inspect the Navy's equipment or transmission area at any time.

Noise²

The 2014 *EW Range EA* addresses the potential impacts of noise on the human terrestrial environment in the vicinity of the EW range in Washington from the sound generated by the selected alternative on noise-sensitive areas (2014 *EW Range EA*, pp. 3.3-3 through 3.3-8). Noise sensitive areas are those areas where noise interferes with normal activities associated with its use (2014 *EW Range EA*, pg. 3.3-3). Noise-sensitive areas may include such sites in the immediate vicinity of operations, pursuant to the Noise Control Act of 1972 (49 USC 44715). Users of designated recreational areas are considered sensitive receptors (2014 *EW Range EA*, pg. 3.3-3). Potential impacts of sound on terrestrial biological resources are addressed in Section 3.2 of the 2014 *EW Range EA*, and summarized in this document under the Biological Resources section.

While conducting operations, noise from mobile transmitter vehicles and generators will only occur on established NFS roads within the Olympic National Forest. Existing noise levels in the project area are influenced by traffic on Highway 101 and local roads, adjacent transmission lines, local industries and other noise-generating activities. Ambient sounds levels vary by location in forested areas and is expected to range between 30 and 50 dBA on the Olympic Peninsula (2014 *EW Range EA*, pg. 3.3-4).

² Aircraft use associated with EW training over the Olympic Military Operations Areas was addressed in the 2010 *NWTRC EIS/OEIS* (Navy, 2010) and reanalyzed in the Navy's 2015 *Northwest Training and Testing Final EIS/OEIS* (Navy, 2015) which includes an airspace noise analysis for the Olympic Military Operations Areas. The 2015 Northwest Training and Testing EIS (p. 3.0-37) notes that: "Based on the results of that study, sound exposure levels at the sea surface or on land from most air combat maneuver overflights are expected to be less than 85 dBA (based on an EA-18G aircraft flying at an altitude of 5,000 feet [1,524 m] and at a subsonic airspeed [400 knots]). Exposure to fixed-wing aircraft noise would be brief (seconds) as an aircraft quickly passes overhead."

Biological Resources

One remedy recommended by the Objection Reviewing Officer following the objection period for the project was to explore incorporation of noise monitoring (see Compliance for Noise section). The Navy uses the federally-approved noise modeling software, NOISEMAP. This modeling program uses a sound library taken from actual aircraft measurements in various flight modes, and considers many factors, including future operational levels, weather, and topography. This allows the Navy to best predict both community-wide impacts and impacts to specific locations from future aircraft activities. The Navy's Northwest Training and Testing EIS includes an airspace noise modeling analysis for the Olympic Military Operations Areas (MOAs) in Appendix J of the Final EIS. Information on the Northwest Training and Testing EIS can be found at www.NWTTEIS.com. Noise modeling has been upheld as the preferred method of predicting future aircraft impacts (NWTT, 2016).

The contribution of the intermittent transits by the mobile emitter vehicles to the overall noise from the generators used to power the emitters will create a steady noise during the periods of operation.

The sound level at 50 feet (15.3 m) is estimated at or near ambient noise levels and the sound level at 100 feet (30.5 m) is estimated to be below the expected ambient noise level. Sound impacts to community noise levels from training activities under Alternative 1 are negligible in areas outside the immediate vicinity of operations because the areas occur on NFS lands and very few members of the public would be exposed to sound from the mobile emitter sites. Overall, no impacts on the acoustic environment would occur under modified Alternative 1 as a result of operations noise (Navy, 2014).

The impacts of project activities, including noise (discussed above) and electromagnetic radiation, on biological resources were disclosed in the 2014 *EW Range EA* (Section 3.2). Electromagnetic radiation from Mobile Electronic Warfare Training System is described in the 2014 *EW Range EA* (p. 3.2-28).

Impacts to Non-Endangered Species Act (ESA)-listed Vegetation, Invertebrates, Amphibians, Reptiles, and Other Birds and Mammals

A list of species potentially found in the study area that were considered for potential impacts are listed in the 2014 *EW Range EA*, Table A-1, pp. A-1-A-8. To provide further clarification of the information in that table specific to species and habitat occurrence within the project area, a Forest Service biologist prepared a list of wildlife (invertebrates, amphibians, reptiles, and bird) species or habitat occurring on the Olympic National Forest. Additional information on species, habitat and potential impacts was provided where necessary for clarification (summary provided in the project record). Effects to ESA-listed species occurring in the project area are discussed separately below.

As summarized in the 2014 *EW Range EA* (2014 *EW Range EA*, p. 3.2-24, 3.2-27), under Alternative 1, the disturbances from vehicle noise, generator/emitter noise are expected to be minimal, short term, and recoverable based on: (1) relatively low intensity of the impacts, (2) localized nature of the impacts on pre-disturbed areas, (3) infrequent nature of the impacts due to the spread-out nature of the sites, and (4) the brief duration of the activities. For these reasons, long-term consequences to individual vegetation, invertebrates, amphibians, reptiles, and other non-listed birds and mammals or their populations are not expected to result from proposed training activities. Modified Alternative 1 will have no direct or indirect changes

that would have a considerable impact on species or their habitat.

As summarized in the 2014 *EW Range EA* (p. 3.2-26, 3.2-29) the effects of electromagnetic radiation on vegetation, invertebrates, amphibians, reptiles, and non-listed birds and mammals can be expected to be minor for the following reasons: (1) the source of electromagnetic radiation does not expose wildlife species to constant radiation; in other words, no area of the project area is continuously saturated with electromagnetic fields because the three vehicle mounted emitters are mobile and not constantly running; (2) beams of electromagnetic radiation (e.g., from EW training) may expose birds in flight to increased levels of radiation; however, the birds in flight would be moving through the area and potentially out of the area of the main beam, once again keeping them from continuous or long-duration exposure (especially since non-soaring birds have relatively quick airspeeds); and (3) the beam pattern emitted is directional, which minimizes the area exposed to radiation. Electromagnetic radiation may have an impact on vegetation, invertebrates, amphibians, reptiles, and non-listed birds and mammals under modified Alternative 1; however, it is unlikely that vegetation, invertebrates, amphibians, reptiles, and non-listed birds and mammals would be constantly exposed to electromagnetic radiation, and therefore negative effects are likely to be minor.

The Regional Forester's Forest Service Interagency Special Status / Sensitive Species (ISSSS) with habitat within the project area include: pacific fisher, northern goshawk, Peregrine falcon, bald eagle, van Dyke's salamander, Olympic torrent salamander, Olympia pebblesnail, Malone jumping slug, keeled (Burrington) jumping-slug, Oregon megomphix, broadwhorl tightcoil, blue-gray tail-dropper, mottled tail-dropper, Western bumble bee, Johnson's hairstreak, Townsend's big-eared bat, Keen's myotis, little brown myotis, and Pacific marten. For these species a Forest Service biologist concluded that the actions may impact individuals or habitat, but will not likely contribute to a trend toward federal listing or cause a loss of viability to the population or species. The project will have no effect and will not contribute to a negative trend in viability to the Olympic National Forest Management Indicator Species: Pacific marten, primary cavity excavators (various species), pileated woodpecker, Roosevelt elk, or Columbia black-tailed deer. The project activity is not ground disturbing within habitat for Survey and Manage species, therefore mollusks are not further addressed.

Several objections received by the Forest expressed concerns about species in the canopy and how activities might effect them. The two types of emitter (Traveling Wave Tube Amplifier and Magnetron emitters) systems are mounted on a modified truck and the antennas are located 14 feet above the ground. The beams of the signals are similar to a flash light beam being directional and dimensional. Additionally, as the beams are directional, the antenna will be angled for directional signal output in a skyward direction above the horizon. For the Traveling Wave Tube Amplifier emitters, the range of wave frequencies is 4 to 8 gigahertz (GHz) and will have a cone angle relative to the surface of the antenna. The dimension of the cone angle signal is 8.1 degrees, and the safe distance separation is 101.1 feet. For the Magnetron emitters, the range of frequencies is 6.7 to 7.4 GHz and will have a wedge shape. The dimension of this wedge-shaped signal is 9 degrees horizontal and 27 degrees vertical, and the safe distance separation is 29.3 feet. The mobile emitter signals are intermittent and operate for about 45 minutes out of every hour. The mobile emitters will operate from areas relatively clear of trees, with minimal overhead canopy. The antennas will be pointed toward areas of sparse tree or canopy coverage

preventing signal disruption. Finally, onsite signal equipment operators will watch for persons or animals that come within the safe distance separation areas and will shut down transmissions until the safe distance area is clear. If the area cannot be cleared, signal transmissions will be temporarily suspended or the emitter would be relocated to another site. The Navy's equipment has a maximum rated output of the transmitter which ranges from 3-100 KW. However, for training Navy aircrew, transmitter power output between 100-300 watts is the proposed use range. The intent of transmitter systems for the training is to simulate surface to air missile systems. In real world situations, surface to air missile systems do not transmit with higher wattage in the KW range as it would make them much easier to find. Therefore, planned use of the mobile transmitter systems is from 100 to 300 watts to keep the training as realistic as possible.

Impacts to Fish Species

Impacts resulting from implementing this decision to listed fish species within the project area on the Olympic National Forest were evaluated by a Forest Service fish biologist. Bull trout is the only federally listed fish species and designated fish critical habitat within the project area. The potential impacts to this species and consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service are discussed under intensity factor 9 in this document.

Impacts to ESA-Listed Species

Two ESA-listed threatened species, marbled murrelets and Northern spotted owls, and their critical habitat occur within the project area. Formal and informal consultation was conducted with the U.S. Fish and Wildlife Service to determine effects to these species and their critical habitat. The findings of the Biological Opinion issued by the U.S. Fish and Wildlife Service are summarized under intensity factor 9 in this document.

Table 3.2-2 summarizes the determination of effect on ESA-listed species in the Study Area for the Navy's *EW Range EA*, with the added column of Rationale Summary to abridge the analysis of noise and electromagnetic radiation (highlighted column and information below was added to table 3.2-2 from the EA). When the Navy reinitiated consultation, the USFWS did not concur with the Navy's not likely to adversely affect (NLAA) determination for murrelets. USFWS concluded likely to adversely affect (LAA) for marbled murrelet due to potential aircraft noise effects, however no incidental take was anticipated from aircraft noise.

Impacts on Air Quality and Climate Change

As shown in the 2014 *EW Range EA* (p. Table 3.4-6), emission estimates for Alternative 1 do not exceed *de minimis* levels established by the Clean Air Act in 40 C.F.R. §93.153(b). Annual criteria and precursor air pollutant emissions would be less than the corresponding federal Prevention of Significant Deterioration increments. In addition, estimated emissions would not be considered regionally significant as they would be approximately 0.0031 percent of the regional emissions.

Impacts on Visual Resources

For EW operations underlying the Olympic Military Operations Areas, activities will be conducted using mobile emitter trucks away from population centers and sensitive view sheds or receptors. The mobile emitter trucks will be temporarily parked at one of the 11 pre-selected training sites during training activities (using existing and cleared pull outs or

turnarounds); these sites are along NFS roads that are open for public use. There will be no change to the visual character of these areas (2014 *EW Range EA*, p. 3.5-1) as a result of this use.

2. The degree to which the proposed action affects public health or safety.

The hazards associated with these actions and their potential effects on public health and safety are described in the 2014 *EW Range EA* (pp. 3.1-1 through 3.1-8) and addressed above under intensity factor 1. Implementation of modified Alternative 1 will comply with the electromagnetic safety standards already in place for EW training activities. During EW training, the Navy will ensure that all necessary safety precautions are adhered to in order to minimize the risk to the public. SOP are requirement of the SUP Terms and Conditions, SOP, and project design features to ensure health and safety (Appendix C, Exhibit B).

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

As concurred by the State Historic Preservation Office, no historic or cultural resources will be affected with this proposal (2014 *EW Range EA*, Table 3.0-1, p. 3.0-2). Park lands are defined as lands reserved for a public park. The Olympic National Forest is adjacent to Olympic National Park but has no authority over any designations on sites within the Park's boundary. There will be no direct, indirect, or cumulative effects to the National Park from this decision. Effects of noise from aircraft flights was analyzed in the 2010 NWTRC EIS and re-evaluated in the 2015 *Northwest Training and Testing Final EIS*, to include an Airspace Noise Analysis (Navy, 2015; Appendix J) and a World Heritage Site Analysis (Navy, 2015; Appendix K).

Prime farmland is a designation assigned by U.S. Department of Agriculture defining land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these land uses. The project sites are not located in proximity to prime farmlands.

The proposed activities will occur along existing NFS roads outside of wetlands. None of the sites designated for mobile emitter use occur within or in proximity to designated Wild and Scenic Rivers. As result there will be no effects to these areas. The activity is not in proximity to ecologically critical areas or special land management allocations (Forest Plan, as amended) on the Forest.

Table 3.2-2: Summary of Effect Determinations for ESA-listed Species (with added Rationale Summary Column)

Species/ Critical Habitat	Status	Navy Effect Determination			
		No Action Alternative	Alternative 1	Alternative 2	Rational Summary
Birds					
Northern Spotted Owl/ Critical Habitat	Endangered	No effect	May affect not likely to adversely affect/ May affect not likely to adversely affect Critical Habitat	May affect not likely to adversely affect/ May affect not likely to adversely affect Critical Habitat	<u>Noise</u> Alt 1 and Alt 2: Short-term and negligible impacts (due to noise) may result from proposed training activities. Mobile emitters will operate from cleared sites (i.e., harvested timber) and drive on established, disturbed roads. Marbled murrelets spend the majority of their lives on the ocean, but come inland to nest in old-growth forests. There are no known nesting sites that will be impacted by the driving on logging or paved roads, and murrelets are unlikely to create nests near the sites because these areas are clear of trees and murrelets prefer heavy canopy areas for nesting. <u>Electromagnetic Energy</u> Alt 1 and Alt 2- The impact is expected to be minimal, short-term, and recoverable due to the lack of constant exposure and the directional beam is pointed skyward.
Marbled Murrelet/Critical Habitat	Endangered	No effect	2014 Finding, May affect not likely to adversely affect; 2016 Finding, LAA/ May affect not likely to adversely affect Critical Habitat	May affect not likely to adversely affect/ May affect not likely to adversely affect Critical Habitat	
Mammals					
Grizzly Bear	Endangered	No effect	No effect	May affect not likely to adversely affect	<u>Noise</u> Alt 1 - Mammals that are ESA-Listed should not be present in the Study Area Alt 2 - Grizzly bears in the immediate vicinity of mobile emitter sites may vacate the area due to generator noise. If grizzly bears are present prior to the arrival of a mobile emitter, it is likely that they will relocate prior to any activation of the emitter. Any potential occurrences of lynx within the study area would be a rare transitory movement by individuals. Woodland caribou and gray wolves (individuals of populations are not anticipated to overlap with the proposed emitter locations. <u>Electromagnetic Energy</u> Alt 1 - Mammals that are ESA-Listed should not be present in the Study Area. Alt 2 - The impact is expected to be minimal, short-term, and recoverable due to the lack of constant exposure and the directional beam is pointed skyward. Woodland caribou and gray wolves (individuals or populations) are not anticipated to overlap with the proposed emitter locations.
Canada Lynx	Endangered	No effect	No effect	May affect not likely to adversely affect	
Gray Wolf	Endangered	No effect	No effect	No effect	
Woodland Caribou	Endangered	No effect	No effect	No effect	

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

As used in the Council on Environmental Quality's guidelines for implementing NEPA, the term "controversial" refers to whether substantial dispute exists as to the size, nature,

or effects of the major federal action. A range of public comments both supporting and opposing various aspects of the proposed actions was received through scoping and comment periods. Comments received during the official comment periods stated general concerns on how electronic warfare activity would affect flora and fauna, noise, human safety, or concerns over use in certain areas which may restrict public access (Appendix B provides a response to many of these issues and concerns). The majority of the letters did not provide specific criticism of the proposal; and did not provide factual or scientific basis for their concerns.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The effects of this project are not highly uncertain, and do not involve unique or unknown risks. The Navy has extensive experience with EW range capabilities across the United States. In the Response to Comments Table, Appendix B, p. 37, the Navy states, “Similar to what is proposed for the Pacific Northwest, Navy ranges located at China Lake, El Centro, and San Clemente Island, CA; Yuma, AZ; Fallon, NV; Cherry Point, NC; and Pinecastle, FL, have been safely utilizing fixed and mobile transmitters for decades.

Mobile transmitters have operated safely on DoD-owned and other public lands such as U.S.F.S. and BLM lands without incident or adverse effect. Other examples include the EW range at Fallon Range Training Complex (FRTC) and at Whidbey Island. The FRTC is designed for advanced training with more complex training scenarios than those proposed for the Olympic Military Operating Area. The FRTC has safely provided advanced EW training for several decades with no documented effects on people, wildlife, or the environment. Additionally, a similar EW fixed transmitter facility located on Navy property on Whidbey Island has been in place for 32 years without any documented adverse effects to people, wildlife, or the environment. See sections 2.1.3, 2.2.1 and 2.2.2.1 of the EW-EA.” Similar commercial use electromagnetic signal equipment to what the Navy proposes to use, with both mobile and fixed site antennas have been located throughout federal, state and private lands of the Olympic Peninsula and all around the country for decades without documented adverse effects.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

This action does not establish a precedent for future EW range actions on the Olympic National Forest with significant effects, nor represent a decision in principle about a future consideration. The cumulative effects discussion (2014 *EW Range EA*, p. 4-3), states that “training levels would continue at present levels with regard to the Proposed Action.”

Any future requests by the Navy to undertake EW training operation authorized by a SUP Terms and Conditions, SOP, and project design features would need to be considered using relevant scientific and site-specific information available at that time.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The current impacts of past and present actions and the potential impacts of reasonably foreseeable future impacts were analyzed, to the extent they may be additive to impacts of the Alternatives analyzed in the 2014 *EW Range EA*. I find the incremental effects of the modified Alternative 1 combined with the effects of past, present and reasonably foreseeable military activities³ will not have any significant cumulative effects. Cumulative impacts are addressed in the 2014 *EW Range EA* (pp. 4-1 through 4-7), which analyzes the following: Other Military Actions and Other Environmental Considerations. This analysis ends with Summary of Cumulative Impacts which states:

“In accordance with Council on Environmental Quality guidance (Council on Environmental Quality 2010), the cumulative impacts analysis focused on impacts that are “truly meaningful.” The level of analysis for each resource was commensurate with the intensity of the impacts identified in Chapter 3 (Affected Environment and Environmental Consequences). No significant contribution of military activities associated with the Proposed Action to cumulative impacts were identified when added to other past, present, and reasonably foreseeable future actions. The discussions presented in Chapter 3 of this EA indicate that implementation of the Proposed Action, Alternative 1, or Alternative 2 would not substantially impact the resources that have been evaluated (public health and safety, biological resources, noise, air quality, and visual resources). The evaluation of other actions that are reasonably foreseeable in the Study Area, and other environmental considerations, indicated that procedures and processes are implemented to minimize or avoid cumulative impacts. Therefore, the proposed activities under Alternative 1 and Alternative 2 would not result in significant cumulative impacts on the resources evaluated.” Additionally, although separate actions, the *Draft EIS for EA-18G “Growler” Airfield Operation at NAS Whidbey Island Complex* (2016 Growler DEIS) (Navy, 2016), also analyzes cumulative impacts for noise associated with aircraft operations. The other actions listed in the 2016 Growler DEIS (Table 5-1), which includes the NWTT Final EIS/OEIS, concludes “a minor contribution to the overall cumulative effect (Navy, 2016).

My review of the 2014 *EW Range EA* and supporting documents finds the analysis has adequately considered the cumulative effects to resources.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.

I find the action will have no significant adverse effects on districts, sites, highways, structures, or objects in or eligible for listing in the National Register of Historic Places since all known cultural properties will be avoided during implementation. A letter dated May 22, 2014, from the State Historic Preservation Officer (SHPO), concurred with the Navy’s findings that no historic properties would be affected by the Proposed Action. However, if an area used by a mobile emitter is required for use by local tribes, the mobile emitter will be relocated (2014 *EW Range EA*, p. 3.0-2).

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.

Fish Species

Consultation with the National Marine Fisheries Service (NMFS) was not required because effects of the proposed action are discountable. As stated in the Response to Comments, Appendix B, Pg. 4: “The Navy and the USFS concluded that the Navy EW-EA’s preferred alternative would have no effect on Endangered Species Act (ESA)-listed species or other trust resources of the NMFS (e.g., marine sanctuaries, marine mammals, essential fish habitat); therefore consultation with NMFS was not required. The Navy and USFS received no comments from NMFS during public scoping or during their respective comment periods on the EA. Though unrelated to the Navy’s request for special use access to NFS lands for ground-based support activities during EW training, it should be noted that the EA was tiered off the Northwest Training Range Complex EIS of 2010 and the Navy did complete formal consultation with NMFS as part of the EIS process.

Additionally, the Navy also consulted for the 2015 *Northwest Training and Testing Final EIS/OEIS*. NMFS was a cooperating agency for both EIS projects. Information on the 2015 Northwest Training and Testing EIS can be found at www.NWTTEIS.com, to include the Biological Opinion (BO) completed by NMFS for this project.” Effects to listed fish species were reviewed by a Forest Service fish biologist and are summarized below.

Bull trout is the only federally listed fish species or designated fish critical habitat within the project area. The proposed activities would occur on existing roads open to vehicle traffic. The closest emitter site would be greater than 1 mile from bull trout habitat. A Forest Service fish biologist determined that the implementation of my decision would have no effect on any listed fish species or their designated critical habitat (Project Consistency Evaluation form on file at the Olympic National Forest Supervisor’s Office). The proposed project would not adversely affect essential fish habitat designated under the Magnuson-Stevens Fishery Conservation Act (2014 *EW Range EA*, Table 5-1, p. 5-2).

Terrestrial Species

In accordance with Section 7 of ESA consultation procedures, consultation for the 2010 NWTRC was completed upon receipt of concurrence and biological opinion issued by the U.S. Fish and Wildlife Service to the Navy on August 12, 2010. During the preparation of the 2014 *EW Range EA*, the Navy transmitted a letter to the U.S. Fish and Wildlife Service dated August 18, 2014 (2014 *EW Range EA*, Appendix B, Regulatory Compliance Communications) informing the USFWS of the updated information provided in the 2014 *EW Range EA*, and that this updated information did not require re-initiation of the Section 7 ESA consultation.

³ The actions proposed in the 2015 *Northwest Training and Testing Final EIS/OEIS* were considered in cumulative effects analysis in the *EW Range EA* (*EW Range EA*, p. 4-3). The *Northwest Training and Testing Final EIS/OEIS* includes an airspace noise analysis for aircraft use associated with EW training over the Olympic Military Operations Areas originally addressed in the 2010 *NWTRC EIS/OEIS*. The 2015 Northwest Training and Testing EIS/OEIS does not propose significant increases in numbers of flights. Annual flight requirements and actual flight activities tend to fluctuate from year to year based on many variables. To allow flexibility of training in these areas, the Navy has estimated that a 10 percent increase in flights may occur related to electronic warfare training activities, averaging to less than one additional flight per day.

The 2010 NWTRC BO expired in 2015. As a result, on April 1, 2015 the Navy requested including the Electronic Warfare Range signal emitter activities occurring in the Olympic Military Operations Area in the current 2015 *Northwest Training and Testing Final EIS* consultation. Consultation with the U.S. Fish and Wildlife Service on the 2014 *EW Range EA* was completed with concurrence and BO received by the Navy on July 21, 2016.

The effects of the proposed actions are covered in the *Navy's Northwest Training and Testing Activities Biological Opinion* received from the US Fish and Wildlife Service (July 21, 2016). The BO includes the analysis for the Olympic National Forest SUP Terms and Conditions, SOP, and project design features for the Navy's EW range activities. The U.S. Fish and Wildlife Service considered the inter-related activities, including aircraft use, from the 2014 *EW Range EA* and the 2015 *Northwest Training and Testing Final EIS/OEIS* in making its final effects determinations. No terms and conditions or reasonable and prudent measures related to my decision were identified in the BO. This BO is posted on the Navy's project website at www.NWTTEIS.com.

Marbled Murrelet and Designated Critical Habitat

The U.S. Fish and Wildlife Service determined that the project may affect, likely to adversely affect marbled murrelets due to noise from aircraft use and that the project will have no effect to marbled murrelet critical habitat.

Northern Spotted Owl and Designated Critical Habitat

The U.S. Fish and Wildlife Service concurred that the project may affect, not likely to adversely affect Northern spotted owl, and no effect on its critical habitat (6 acres of potential nesting, roosting and foraging habitat exposed to ground-based noise from the ground-based mobile emitters).

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

I find the action will not violate Federal, State, or local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the 2014 *EW Range EA* (Table 5-1, pp. 5-1 through 5-3). A Forest Service NEPA specialist reviewed my decision and determined it consistent with the Olympic National Forest Land and Resource Management Plan (see the section below on Consistency with the Forest Plan).

Conclusion

After considering the environmental effects described in the 2014 *EW Range EA* and additional materials provided by Forest Service specialists, I have determined that my decision will not have significant effects on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.

Findings Required by Other Laws and Regulations

National Forest Management Act (NFMA)

The National Forest Management Act directs that guidelines for land management plans

provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives [16USC 1604 Sec 6 (g)(3)(B)]. This decision to select Alternative 1, with modifications described in this document, is consistent with the intent and long-term goals and objectives of the Olympic National Forest Land and Resource Management Plan (USDA, 1990).

Sensitive Species

The Regional Forester has designated a list of sensitive plants and animals for which population viability is a concern (FSM 2670-5). I have reviewed the analysis and projected effects on all Sensitive species listed as occurring or possibly occurring in the project area. Effects are described under intensity factor 1 beginning on p. 10 of this document.

I find that the my decision, modified Alternative 1, as described in this document and the accompanying 2014 *EW Range EA* is in compliance with the relevant management requirements set forth in the National Forest Management Act (36 CFR 219), including the management direction found in the Olympic National Forest Land and Resource Management Plan (Forest Plan) as amended. It is consistent with standards and guidelines specific to the relevant land allocations and it is consistent with the applicable Forest-wide standards and guidelines, as described below.

In making this decision, I examined the activities that will be conducted along NFS roads, the associated effects from these activities, and the related activities in relationship to the goals and objectives of the Forest Plan.

Consistency with the Forest Plan

The 1990 Forest Plan was amended, in part, by the April 1994 ROD for *Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (USDA Forest Service and USDI Bureau of Land Management 1994). The ROD and associated Standards and Guidelines, provides additional standards and guidelines (USDA Forest Service and USDI Bureau of Land Management, 1994b). These two documents are commonly referred to collectively as the Northwest Forest Plan (NWFP). The 1994 ROD added land allocations that overlay many of the allocations in the 1990 Land and Resource Management Plan. The standards and guidelines it established for these new land allocations supersede management direction in the 1990 Forest Plan unless the 1990 Forest Plan is more restrictive or provides greater benefits to late-successional forest related species. The key elements of the Northwest Forest Plan are they system of Riparian and Late Successional Reserves, the Aquatic Conservation Strategy, and various standards and guidelines affecting each of the land allocations.

Survey and Manage Species

The NWFP included mitigation measures for management of known sites, site-specific pre-habitat disturbing surveys, and/or other landscape scale surveys for about 400 rare and/or isolated species. These are species that due to rarity or lack of information it was uncertain as to whether they would be adequately protected by the other elements authorized in the 1994 NWFP ROD. The project is not a habitat-disturbing activity, therefore pre-disturbance surveys are not required for these species.

Forest Plan Management Areas

Table 1, p. 3 identifies the Forest Plan management areas associated with the mobile emitter sites: Adaptive Management Area, Late Successional Reserve, Riparian Reserves, Timber Management Area, General Level River Corridor, and Scenic.

Late Successional Reserve (NWFP, pp. A-4, C-19)

The objectives of the Late Successional Reserves are to be managed to protect and enhance conditions of late-successional and old-growth forest ecosystems, which serve as habitat for late-successional and old-growth related species including the northern spotted owl. These reserves are designed to maintain a functional, interacting, late-successional and old-growth forest ecosystem. As a general guideline, non-silvicultural activities located inside Late-Successional Reserves that are neutral or beneficial to the creation and maintenance of late successional habitat are allowed. The use mobile emitters on existing, open, NFS roads, is considered a neutral action. Therefore, modified Alternative 1 is consistent with the Forest Plan direction for this land management allocation.

Adaptive Management Area (NWFP pp.A-4, C-26)

A fundamental goal of AMAs is “to encourage the development and testing of technical and social approaches to achieving desired ecological, economic, and other social objectives” (ROD, page D-1). There are no standards and guidelines directly applicable for the proposed activities occurring along NFS roads in this management area. Therefore the proposed use is consistent with the Forest Plan direction for this management allocation.

Riparian Reserves (NWFP A-4, C-37)

Riparian Reserves provide an area along all stream, wetlands, ponds, lakes, and unstable and potentially unstable areas where riparian dependent resources receive primary emphasis. Three of the emitter sites are located in Riparian Reserves. All three sites are along existing roads open to motorized vehicles. No additional clearing or infrastructure development would be needed. No impacts to streams, fish habitat, or riparian reserves are anticipated. The existing condition would be maintained with the proposed use, and therefore will not prevent attainment of the Aquatic Conservation Strategy Objectives.

Scenic (1990 Forest Plan, p. IV-68)

The goal of the Scenic Management area is to manage specific landscapes in such a manner that their scenic values are protected, maintained, and/or enhanced as viewed from major travel routes, use areas, or water bodies. Landscapes are providing pleasing scenery as viewed from travel routes, use areas, and water bodies. These landscapes will accommodate management activities that are not evident, or are visually subordinate to the natural landscape, when viewed by casual forest visitors. Modified Alternative 1 is consistent with the Forest Plan for this land management allocation, no scenic values will be affected by use of the emitter sites.

General Management River Corridor (1990 Forest Plan, p. IV-78)

For planning purposes, a corridor is considered to extend a distance of one-eighth mile on each side of a river channel. There are no applicable standards and guidelines for the proposed activities occurring along NFS roads in this management area. Therefore the proposed use is consistent with the Forest Plan direction for this management allocation.

Timber Management (1990 Forest Plan, p. IV-95)

There are no applicable standards and guidelines related to the proposed activities occurring along NFS roads in this management area. Therefore the proposed use is consistent with the Forest Plan direction for this management allocation.

Forest-wide Standards and Guidelines

The following Forest-wide standards and guidelines are applicable to the modified Alternative 1 (inapplicable standards and guidelines are not included, therefore numbers may not be consecutive):

Lands (1990 Forest Plan, pp. IV-55-56)

1. Special use of National Forest land may be authorized when such use cannot reasonably be accommodated on private land. In considering special use applications, the interests and needs of the general public shall be given priority over those of the applicant. Use should be compatible, and in harmony with, the surrounding landscape.
2. When issued or renewed, special use permits should be consistent with the Goal and Desired Future Condition for each Management Prescription.
5. Applicants may be required to furnish necessary environmental analysis, surveys, plats, drawings, etc., and provide funds for the processing and administration of permits.
6. Special use authorizations for use or development of sites and facilities should emphasize:
 - c. Preparation of environmental analysis, master plans, site charters, surveys, and site development plans.
 - d. That land and other resources committed must be suitable for the proposed use.
 - e. That encumbrances on National Forest land should be kept to the minimum area and duration possible.

The mobile emitter use is consistent with the above standards and guidelines for Lands because: the Navy considered alternatives and determined that the actions cannot be accommodated on private lands; the actions are consistent with, or neutral to the Management Area goals and desired future conditions; the Navy completed and furnished the necessary environmental analysis; the actions qualify as suitable use for NFS roads as described as follows under Facilities; and the encumbrances affect minimum areas for limited duration.

Facilities (1990 Forest Plan, pp. IV-56-59)

9b. Roads shall not be used if their use causes damage to the road or unacceptable impacts to adjacent resources (36 CFR 261). Damage is exclusive of normal wear and tear correctable by maintenance activities.

This use is consistent with the above standards and guidelines for facilities because use is expected to be commiserate with normal vehicular activities already occurring on the NFS roads proposed for use, and this decision will authorize a permit for the Navy's use of the NFS roads.

Endangered Species Act (ESA)

The ESA established protection over and conservation of threatened and endangered species and the ecosystems upon which they depend. Effects to endangered species and results of consultation are discussed above under intensity factor 9 in this document.

Clean Air Act (CAA)

The CAA is the comprehensive federal law that regulates air emissions from stationary and mobile sources. This decision will not conflict with attainment and maintenance goals established in State Implementation Plan. A CAA conformity determination will not be required because emissions attributable to the alternatives including the modified Alternative 1 will be below *de minimis* thresholds.

Clean Water Act (CWA)

The CWA is an act to provide for water pollution control activities in the Public Health Service of the Federal Security Agency and in the Federal Works Agency, and for other purposes. The Act's objective is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Modified Alternative 1 will not conflict with goals established in state implementation plans. No permits are required under the CWA Sections 401, 402, or 404 (b)(1).

National Historic Preservation Act (NHPA)

My decision will not result in any negative impacts, change, or alter cultural resources of surrounding areas. In a letter from the SHPO dated May 22, 2014, they have concurred with the Navy's findings that no historic properties would be affected by the implementing modified Alternative 1.

Migratory Birds, Executive Order 13186

The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, or possessing of migratory birds or the parts, nests, or eggs of such birds, unless permitted by regulation. Implementation of modified Alternative 1 would cause no significant adverse effect on a population of migratory bird species. This decision will not have a significant impact on migratory birds and would comply with applicable requirements of the MBTA (2014 *EW Range EA*, Table 5-1, p. 5-2).

Executive Order 12898, Environmental Justice

Implementation of modified Alternative 1 will not result in any disproportionately high and adverse human health or environmental effects on children, minority, or low-income populations. No significant unavoidable impacts on traditional cultural resources are anticipated to result from the Alternatives (2014 *EW Range EA* p. 3.0-2).

Administrative Review and Objection Rights

This project was subject to Predecisional Administrative Review pursuant to 36 CFR 218, Subpart B. Also called the "objection process" the predecisional administrative review process replaced the appeal process in March 2013. The full text of the rule can be found here: <http://federal.eregulations.us/cfr/title/5/28/2013/title36/chapterII/part218>.

The Draft DN was distributed according to 36 CFR 218.7 providing a 45-day period for

objection to be filed prior to making a final decision. On November 29, 2016, the legal notices were published in *The Daily World* (Aberdeen, Washington) and *The Peninsula Daily News* (Port Angeles, Washington) announcing the Predecisional Administrative Review (Objection) Period for the Draft Decision Notice and Environmental Assessment.

There were a total of 266 objections received during the 45-day period; 111 were determined to be eligible. All the objections were considered, including the ineligible ones. All the eligible objections were reviewed, compiled by theme and resource area issue, and addressed by the Objection Reviewing Officer in her instructions to me the District Ranger.

As authorized by the regulation at 36 CFR 218.11, the Objection Reviewing Officer did not hold an objection resolution meeting since it was determined that there was not adequate time remaining in the review period to make a meeting practical. After reviewing the Navy's EA, the Master Agreement, the District's draft DN/FONSI, the project record, and supporting materials, the Objection Reviewing Officer also determined that additional clarity was needed to be made to the final DN/FONSI in order to respond to the objection issues that were raised.

The Objection Reviewing Officer also instructed the Responsible Official, the District Ranger for the Pacific Ranger District, to clarify the final decision (see example letter Appendix E) and concluded the following:

- The draft decision clearly described the actions to be taken in sufficient detail that the reader can easily understand what will occur as a result of the draft decision.
- The draft decision considered a range of alternatives in the EA that was adequate to respond to the Purpose and Need. The Purpose and Need and alternatives considered in the EA reflect a reasonable range of alternatives, consistent with law, regulation, and policy.
- The draft decision is consistent with Forest Plan standards and guidelines.
- The draft decision is consistent with all policy, law, direction, and supporting evidence. The record contains site-specific documentation regarding resource conditions, and the Responsible Official's draft decision document is based on the record and reflects a reasonable conclusion.

This DN complies with the Objection Reviewing Officer's instructions in the following:

- **Compliance for Effects on Wildlife (terrestrial and marine)** - As outlined in Table 3.2-2 in the above DN, additional rationale has been added for ESA-listed species. Additionally, see Appendix F, Wildlife Effects, for the rationale used in drawing the conclusions for the effects determination for each species, in a clear path of logic.

The two types of emitter (Traveling Wave Tube Amplifier and Magnetron emitters) systems are mounted on a modified truck and the antennas are located 14 feet

above the ground. The beams of the signals are similar to a flash light beam being

directional and dimensional. Additionally, as the beams are directional, the antenna will be angled for directional signal output in a skyward direction above the horizon.

For the Traveling Wave Tube Amplifier emitters, the range of wave frequencies is 4 to 8 gigahertz (GHz) and will have a cone angle relative to the surface of the antenna. The dimension of the cone angle signal is 8.1 degrees, and the safe distance separation is 101.1 feet.

For the Magnetron emitters, the range of frequencies is 6.7 to 7.4 GHz and will have a wedge shape. The dimension of this wedge-shaped signal is 9 degrees horizontal and 27 degrees vertical, and the safe distance separation is 29.3 feet.

The mobile emitter signals are intermittent and operate for about 45 minutes out of every hour. The mobile emitters will operate from areas relatively clear of trees, with minimal overhead canopy. The antennas will be pointed toward areas of sparse tree or canopy coverage preventing signal disruption. Finally, onsite signal equipment operators will watch for persons or animals that come within the safe distance separation areas and will shut down transmissions until the safe distance area is clear. If the area cannot be cleared, signal transmissions will be temporarily suspended or the emitter would be relocated to another site.

- **Compliance for Recreation/Tourism** - As outlined above, the mobile emitter signals are intermittent and operate for about 45 minutes out of every hour. The mobile emitters will operate from areas relatively clear of trees, with minimal overhead canopy. The antennas will be pointed toward areas of sparse tree or canopy coverage preventing signal disruption. Finally, onsite signal equipment operators will watch for persons or animals that come within the safe distance separation areas and will shut down transmissions until the safe distance area is clear. If the area cannot be cleared, signal transmissions will be temporarily suspended or the emitter would be relocated to another site.

The Special Use Permit allows the Forest Service to inspect the Navy's equipment and transmission area at any time.

Navy aircraft have been training in airspace over the Olympic Peninsula for over 40 years, and EA-18G Growler aircraft have been flying in this airspace since 2008. Olympic National Park data indicates that there has been an increase in park visitors from 2.82 million in 2012 to 3.29 million in 2016. Navy mobile emitter sites were specifically selected for locations where there were no common use attractions or public areas, such as trails, viewpoints, parking areas, or picnic areas. The transmitter sites in my decision are on managed NFS lands that have been disturbed or harvested and, therefore, are not likely prime recreational locations.

Navy signal emitter trucks will use existing NFS roads and procedures restrict the use of sites if other people are present and persist at these locations, therefore reducing potential impacts to recreational uses of the forest. Navy Electronic

Warfare (EW) training flights are an ongoing activity and the number of flights is

not expected to substantially increase from what has been previously conducted in this airspace.

- **Compliance for Noise** – My decision and permit are solely for the use of the NFS roads and not for Navy aircraft overflights. EW aircraft training is already occurring in the Federal Aviation Administration designated Special Use Airspace over the Olympic Peninsula, and has been for over 40 years. With the addition of the transmitter trucks, this ongoing training will be improved. With the improved effectiveness of the training, the Navy estimated that an approximate 10 percent increase in EW activity flights may occur. Current average use of the airspace area is about 8 aircraft flights a day based on a 250 day work year, so a 10 percent potential increase averages out to less than one additional flight per day. This average fluctuates based on many factors, including training requirements, aircraft deployment schedules, and fuel budgets. Some days will have no flights utilizing the airspace, some days may have 2 aircraft, and some days may have greater than 8 aircraft training in the airspace.

The ongoing training mission that would be supported during Navy EW activities requires the aircraft to detect the transmitters at a substantial distance away, typically flying at altitudes of 10,000 feet or greater (usually greater). It should be noted that the aircraft involved will not be flying directly over or in close proximity to the signal truck sites as the aircraft training scenarios require a substantial standoff distance from the truck's location. The mission of the EW aircraft in these training scenarios is to detect, locate and identify a simulated threat signal, not to attack the signal source on the ground.

Only a portion of the designated Special Use Airspace overlays the Olympic National Forest and flight patterns are very random based on the nature of the training that occurs here, so it is impossible to say if the 10 percent increase would occur specifically over NFS lands or over other lands. The potential increase will likely not be a perceptible change to an observer on the ground, when compared with the aircraft activity that has been occurring there for many years. Additionally the mobile signal transmitters have been designed to muffle generator noise to less than 42 dB at 50 feet from the vehicle. As stated in the NWTT EIS appendix J, Airspace Noise Analysis for the Olympic MOAs, an EA-18G aircraft at 10,000 feet, conducting an EW training event, will generate approximately 57 dB of noise. For comparison, according to the Federal Interagency Committee on Noise, Federal Agency Review of Selected Airport Noise Analysis Issues of August, 1992, 60 dB is equivalent to the sound of an air conditioner at 100 feet, and 60 dB is the approximate level of normal conversation within 5 feet.

The Navy uses the federally-approved noise modeling software, NOISEMAP. This modeling program uses a sound library taken from actual aircraft measurements in various flight modes, and considers countless factors, including future operational levels, weather, and topography. This allows the Navy to best predict both community-wide impacts and impacts to specific locations from future aircraft activities. The Navy's Northwest Training and Testing EIS includes an airspace

noise modeling analysis for the Olympic Military Operations Areas (MOAs) in

Appendix J of the Final EIS. Information on the Northwest Training and Testing EIS can be found at www.NWTTEIS.com. Noise modeling has been upheld as the preferred method of predicting future aircraft impacts.

In contrast, noise monitoring is a limited methodology in predicting future impacts because monitoring cannot measure aircraft noise from aircraft that have not yet arrived at a location. Nor does monitoring provide a predictive methodology that accounts for different future operational levels or weather variations, or how noise propagates throughout an area or community due to topography. Monitoring is effective in measuring noise from an aircraft at a discreet location only when that aircraft is present at that moment in time and based on the weather conditions of that day. Aircraft noise monitoring is poorly suited to analyze potential effects in areas under the Olympic MOAs, because the training airspace is randomly used by aircraft to maneuver during various training activities. There are no specific flight tracks that are routinely followed during training in the MOAs, and Navy aircraft will not specifically fly over or in close proximity to the mobile emitter sites, when those are being used. Additionally, there is no way to easily discern Navy aircraft flights from commercial or civil aviation aircraft flights, which also use the airspace extensively. A portion of the Olympic MOAs overlay the western side of Olympic National Park. The National Park Service's Olympic National Parks Noise Monitoring Report Winter 2010, included noise monitoring data from five sites within the park. Three of the five sites are under or in close proximity to the MOAs airspace. Data included in the monitoring report indicated that at site OLYM001, 11.2 percent of recorded noise above background was assessed to be from high altitude jets. At site OLYM002, 3.7 percent of recorded noise was assessed to be from high altitude jets, and at site OLYM005, 6.3 percent of recorded noise was assessed to be from high altitude jets. While the report states information from high altitude jets, it also notes that it cannot distinguish that noise information as coming from commercial aviation, general aviation, or military aircraft.

The Navy used the best available science to support its NEPA documents, including studies supporting the NWT Final EIS/OEIS in appendices J and K, in regards to noise impacts (USN ROD, 2016).

NEPA requires an analysis of potential future impacts, and the most effective means of doing so is to model future aircraft operations. The Navy, like other federal agencies, uses noise modeling in evaluating environmental effects of proposed aircraft activities. Please note that the Navy *EW Range EA* pertains to ground-based activities that are planned to support and improve current and ongoing aircraft training requirements. Specifically, the EA addresses the actions of installing and operating a fixed signal transmitter, located on Navy property at Pacific Beach, and operation of three mobile signal transmitter trucks at designated locations within the Olympic National Forest and on Washington State lands. As detailed in the Navy *EW Range EA*, EW training by aircraft has been conducted in the various Special Use Airspace areas of the Northwest for over 40 years. The number, duration, and parameters of EW training flights in and around the Olympic Peninsula are not projected to increase substantially when the proposed

improvements to the training area are in place.

Aircraft flights in Northwest Special Use Airspace areas were addressed in the Navy's Northwest Training and Testing EIS (2015) and did not propose significant increases in numbers of flights. Annual flight requirements and actual flight activities tend to fluctuate from year-to-year based a number of variables, including world events, deployment schedules for squadrons, budget allocations, and fuel costs. To allow flexibility of training in these areas, the Navy estimated that a 10 percent increase in flights may occur, specifically related to EW training activities. Actual flight numbers per day varies, but this averages out to less than one additional flight per day. Each individual training flight normally lasts 90 minutes or less. As the number of flights was not expected to increase substantially, and the flight altitude at which this activity is conducted is not proposed to change, there is no expected measurable change in aircraft noise or other potential effects on the human environment. Additionally, the equipment in the mobile transmitter trucks has been designed to muffle generator noise to less than 42 decibels (dB) at 50 feet from the vehicle. These points substantiate the EA analysis conclusion that there will likely be very limited increase in noise from base line conditions on the ground from the Navy's activities.

Additionally, the USFWS NWTB BO (2016) further explains the effects of noise from overflying aircraft:

In most cases, exposure to aircraft noise is expected to result in only minor behavioral responses, such as head turning, a sudden movement such as flattening, or short periods of increased vigilance which we consider to be insignificant effects. Aircraft noise does pose a potential risk of more severe disturbance effects (e.g., flushing from a nest), but due to the limited duration of training flights at lower altitudes, these potential effects are speculative, and are not reasonably certain to occur. Because the potential effects of aircraft noise are not insignificant or entirely discountable, we conclude exposure to aircraft noise may adversely affect marbled murrelets, but we do not anticipate these effects will result in a significant disruption of nesting behaviors or result in direct injury to marbled murrelets.

Considering the project location and the project effects, we concur that the proposed action is not likely to adversely affect the spotted owl.

As the Responsible Official, I have explored the incorporation of existing noise monitoring efforts as part of my decision to further the understanding of possible impacts to wildlife. My decision includes acoustic monitoring in conjunction with the Northwest Forest Plan Interagency Regional Monitoring Program. Specifically, daytime passive acoustic monitoring using autonomous recording units.

Additionally, Representative Kilmer's office is working with the Navy and the National Park Service to review the noise modeling and analysis by the Navy and identify any knowledge gaps which may exist.

- **Compliance for National Heritage Site** – The Forest Service has no authority

over the National Heritage Site. However, I refer to the *NWTT Final EIS/OEIS*

(2015), Appendix K “World Heritage Site Analysis” where the analysis shows that Navy training has occurred over the site in the Olympic MOAs since 1977 and no significant impacts to the Olympic National Park World Heritage Site have or would occur as a result of implementation of the Proposed Action.

- **Compliance for Direct, Indirect and Cumulative Impacts** - Section 4 of the *EW Range EA* of 2014, section 4, CUMULATIVE IMPACTS, which analyzes the following: Other Military Actions and Other Environmental Considerations. Analysis ends with Summary of Cumulative Impacts which states:

“In accordance with Council on Environmental Quality guidance (Council on Environmental Quality 2010), the cumulative impacts analysis focused on impacts that are “truly meaningful.” The level of analysis for each resource was commensurate with the intensity of the impacts identified in Chapter 3 (Affected Environment and Environmental Consequences). No significant contribution of military activities associated with the Proposed Action to cumulative impacts were identified when added to other past, present, and reasonably foreseeable future actions. The discussions presented in Chapter 3 of this EA indicate that implementation of the Proposed Action, Alternative 1, or Alternative 2 would not substantially impact the resources that have been evaluated (public health and safety, biological resources, noise, air quality, and visual resources). The evaluation of other actions that are reasonably foreseeable in the Study Area, and other environmental considerations, indicated that procedures and processes are implemented to minimize or avoid cumulative impacts. Therefore, the proposed activities under Alternative 1 and Alternative 2 would not result in significant cumulative impacts on the resources evaluated.”

The above section on Compliance for Noise references more information for direct, indirect, and cumulative impacts for my decision.

- **Compliance for Tiering/ Adoption/Past NEPA Documents/Incorporation by Reference** - In accordance with Section 7 of ESA consultation procedures, consultation for the 2010 *NWTRC* was completed upon receipt of concurrence and biological opinion issued by the U.S. Fish and Wildlife Service to the Navy on August 12, 2010. During the preparation of the 2014 *EW Range EA*, the Navy transmitted a letter to the U.S. Fish and Wildlife Service dated August 18, 2014 (2014 *EW Range EA*, Appendix B, Regulatory Compliance Communications) informing the USFWS of the updated information provided in the 2014 *EW Range EA*, and that this updated information did not require re-initiation of the Section 7 ESA consultation. The 2010 *NWTRC* BO expired in 2015. As a result, on April 1, 2015 the Navy requested including the Electronic Warfare Range signal emitter activities occurring in the Olympic Military Operations Area in the 2015 *Northwest Training and Testing Final EIS* consultation. Consultation with the U.S. Fish and Wildlife Service on the 2014 *EW Range EA* was completed with concurrence and BO received by the Navy on July 21, 2016. This 2016 U.S. Fish and Wildlife BO is incorporated by reference.

The draft decision notice is replaced by this final decision notice.

Implementation

Implementation may occur immediately following the date that this final decision is signed. The EA, DN/FONSI, and other materials are available at the Forest website at: <https://www.fs.usda.gov/project/?project=42759>.

Contact

For additional information about this proposed decision or the Forest Service objection process, contact Olympic National Forest Environmental Coordinator Greg Wahl (Phone: 360-956-2375. Email: gtwahl@fs.fed.us. Address: 1835 Black Lake Blvd. SW, Olympia, WA 98512.)

Approved by:



DEAN R. MILLETT
District Ranger, Pacific Ranger District
Olympic National Forest

July 31, 2017
DATE

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer and lender.

References

- Joint Chiefs of Staff. 2012. Doctrine Update for JP3-13.1, *Electronic Warfare*.
- Lee, C., and MacDonald, J. 2016. Olympic National Park: Acoustical monitoring 2010. Natural Resource Report NPS/NRSS/NSNSD/NRR—2016/1310. National Park Service, Fort Collins, Colorado.
- U.S. Department of the Navy. 2016. Draft EIS for EA-18G “Growler” Airfield Operation at NAS Whidbey Island Complex. Prepared by the U.S. Department of the Navy.
- U.S. Department of the Navy. 2016. Record of Decision for the Northwest Training and Testing Final Environmental Impact Statement/Overseas Environmental Impact Statement. Prepared by the U.S. Department of the Navy.
- U.S. Department of the Navy. 2015. Northwest Training and Testing Activities: Final Environmental Impact Statement/Overseas Environmental Impact Statement. Prepared by U.S. Department of the Navy.
- U.S. Department of the Navy. 2014. Pacific Northwest Electronic Warfare Range Final Environmental Assessment. Prepared by U.S. Department of the Navy.
- U.S. Department of the Navy. 2014. Pacific Northwest Electronic Warfare Range Finding of No Significant Impact. Prepared by U.S. Department of the Navy.
- U.S. Department of the Navy. 2010. Northwest Training Range Complex Environmental Impact Statement. Naval Facilities Engineering Command, Silverdale, WA.
- U.S. Department of the Navy. 2010. Northwest Training Range Complex Record of Decision. Prepared by U.S. Department of the Navy.
- U.S. Department of the Navy. 2010. Naval Sea Systems Command Naval Undersea Warfare Center Keyport Range Complex Extension Environmental Impact Statement/Overseas Environmental Impact Statement. Prepared by U.S. Department of the Navy.
- U.S. Department of the Navy. 1988. Southeast Alaska Acoustic Measurement Facility Environmental Impact Statement. Prepared by U.S. Department of the Navy.
- U.S. Department of the Navy and USDA Forest Service. Master Agreement Between the Department of Defense and Department of Defense and Department of Agriculture Concerning the Use of National Forest System Lands for Military Activity. Sept. 30, 1988.
- U.S. Fish and Wildlife Service. 2016. Biological Opinion for the Navy’s Northwest Training and Testing Activities Offshore Waters of Northern California, Oregon, and Washington and the Inland Waters of Puget Sound, and Portions of the Olympic Peninsula. Prepared by the U.S. Fish and Wildlife Office, Lacey, WA.
- U.S.D.A. Forest Service. 1990. Land and Resource Management Plan. Olympic National Forest, Olympia, WA.
- U.S.D.A. Forest Service, USDI Bureau of Land Management. 1994. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl. Portland, OR.
- U.S.D.A. Forest Service and USDI, Bureau of Land Management. 2001. Record of Decision and Standards and Guideline for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines. Portland, OR.