

Appendix B

Response to Comments Received

Pacific Northwest Electronic Warfare Range

Decision Notice

and Finding of No Significant Impact

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#4]	The Forest Service should provide additional public involvement and ensure that the public process is open and transparent. [ID#154]	<p>The U.S. Forest Service (USFS) initially released a press release on June 26th, 2014, requesting public input. The initial comment period for the public to comment on the Navy EW-EA was started on September 13th, 2014. The USFS offered additional opportunity to comment through October 10th, 2014, and then again to October 31, 2014. In an effort to ensure the public had plenty of time to provide comment, the USFS again offered an additional opportunity to comment through November 28th, 2014. In addition to providing additional time to comment, representatives from the USFS attended and participated in several Navy hosted public meetings (Forks, WA and Port Angeles, WA) in order to hear the public's concerns and ensure that the public process was as open and transparent as possible. Additionally, the USFS provided a link on its webpage providing updates on the project status.</p> <p>The United States (U.S.) Department of the Navy (Navy) initially provided public notice of the Environmental Assessment (EA), as outlined in Appendix C of the Electronic Warfare (EW)-EA, through publication in newspapers including the Seattle Times, Daily World, Olympian, and the Montesano <i>Vidette</i>. In addition, the Navy mailed notice via postcards to 141 elected officials, government agencies, Native American Tribes, nongovernmental organizations, community business groups, and individuals on the project mailing list. Tribal notification letters were distributed, July 31, 2014 (see Appendix B of Navy EW Range Final EA, page B-30), by the Navy to the chairpersons or presidents of five federally recognized tribes (see Appendix B, Regulatory Compliance Communications, of the Navy EW-EA). A two-page informational flier, which included project information, a description of the Proposed Action and Alternatives, information repository locations, and comment instructions, was mailed July 30, 2014 (see APPENDIX C of Navy EW Range Final EA, page C-2) to the Pacific Beach Conference Center and 20 local U.S. Post Offices. The Navy also made the Draft EW-EA available for review in hard copy format at the following libraries: Oak Harbor, Ocean Shores, Omak Municipal, Republic Community, Timberland Regional-Aberdeen, and Timberland Regional-Hoquiam. The Navy's means of providing notice met the requirements of the National Environmental Policy Act (NEPA).</p> <p>The notice provided to the public, and the extension of the public comment period, ensured public participation in the EA process.</p>

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Concern [Seq#13]	The Forest Service should ensure that all relevant supporting documents are available for public review. [ID#36]	Relevant supporting documents are available on the Navy's website, http://go.usa.gov/kQ6e . Additionally, supporting documents are referenced in the Navy EW-EA Chapter 7 (References). The USFS also provided information on their webpage http://www.fs.fed.us/nepa/nepa_project_exp.php?project=42759 , where individuals could access much of the supporting documentation and receive updates on the status of the project. The USFS also provided several press releases and made the EW-EA available on an additional website: http://go.usa.gov/785z
Concern [Seq#18]	The Forest Service should clarify who has standing and acknowledge commenters' rights to provide future input. [ID#21]	Any member of the public has the opportunity to comment and to provide input on NEPA documents produced by the USFS. Under 36 CFR 218.5, Who may file an objection, "Individuals and entities as defined in §218.2 who have submitted timely, specific written comments regarding a proposed project or activity that is subject to these regulations during any designated opportunity for public comment may file an objection." The USFS NEPA procedures encourage public involvement and access to project planning and analysis throughout the NEPA process rather than only early in the planning process, during scoping, and later, during public comment periods for EAs and Draft Environmental Impact Statements (EISs). Formal public input normally occurs during public scoping sessions after release of a Notice of Intent to Prepare an EIS and the public comment periods following release of a Draft EIS or an EA. Public meetings, when required, are also well advertised, using media such as press releases in local newspapers, postcards, letters, and internet postings. More information on how the USFS implements NEPA is available at: http://www.fs.fed.us/emc/nepa/
Concern [Seq#19]	The Forest Service should respond to all public information requests by provided requested materials. [ID#23]	The USFS has responded to all public information requests to the best of its ability. Please note that relevant supporting documents are available on the Navy's website, http://go.usa.gov/kQ6e . Additionally, supporting documents are referenced in the Navy EW-EA Chapter 7 (References). The USFS also provided information on their webpage http://www.fs.fed.us/nepa/nepa_project_exp.php?project=42759 , where individuals could access much of the supporting documentation and receive updates on the status of the project. The USFS also provided several press releases and made the EA available on an additional website: http://go.usa.gov/785z .
Concern [Seq#26]	The Forest Service should ensure that the proposed project complies with all federal laws, including the Endangered Species Act, the Wilderness Act, and the National Historic Preservation Act. [ID#94]	The U.S. Department of the Navy's (Navy's) and the USFS's NEPA processes and requirements ensure that any proposed action is in compliance with all federal laws and regulations. During the scoping phase of the Navy EW-EA, the Navy solicited comments from federal and state agencies that have jurisdiction over certain federal laws (Please reference Appendix B, Regulatory Compliance Communications, of the Navy EW-EA).

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Concern [Seq#27]	The Forest Service should deny the Navy Permit. Because proposed actions would violate the Americans with Disabilities Act and Rehabilitation Act [ID#17]	The Americans with Disabilities Act (ADA) is applicable to the USFS under Title V Section 507 of the ADA. Public facilities, however, must be accessible in accordance with the ADA. The USFS's proposed action does not include any new public facilities or restrict access to existing compliant facilities. Therefore, the proposed action does not violate the ADA. The Rehabilitation Act of 1973 concerns vocational hiring discrimination. Any new employment or contracting required for the implementation of the USFS's Proposed Action would occur under existing federal requirements, which ensure compliance with the Rehabilitation Act.
Concern [Seq#35]	The Forest Service should deny the Navy Permit. Because it conflicts with NPS purposes [ID#27]	The USFS's proposed action does not affect the National Park Service's (NPS) stewardship and mission within Olympic National Park. It should be noted that no Navy activities are proposed to take place on NPS lands. Additionally, it should be noted that the number, duration, and frequency of aircraft flights in and around the Olympic Peninsula are not projected to increase significantly with the implementation of the proposed action. Aircraft flights in Pacific Northwest Special Use Airspace areas were addressed in the Navy's Northwest Training Range Complex EIS, completed in 2010 and were reanalyzed in the Northwest Training and Testing (NWTT) Final EIS, released in October 2015; available at www.NWTTTEIS.com . Though no land-based activities by the Navy are proposed within the National Park, the existing Special Use Airspace the Navy trains in overlays a small portion of the park. Navy training flights in this airspace are currently being reassessed and reanalyzed in the Northwest Training and Testing Final EIS and includes an airspace noise analysis for the Olympic Military Operations Areas (Appendix J), and an analysis of potential impacts on the Olympic National Park World Heritage Site (Appendix K).

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Concern [Seq#36]	The Forest Service should document consultation with Olympic National Park. [ID#10]	<p>The USFS's proposed action to issue a special use access permit to the Navy does not occur on NPS lands. The NPS was scoped during project development; on several occasions, the USFS and NPS discussed the project and potential issues related to the activities. In addition, Navy assessed the noise levels and USFS concurred with the assessment the potential noise levels of transmitter equipment. As stated in Section 3.2.4.3.1 (Noise), generators selected to power the mobile transmitters have specifications stating they meet NPS sound level requirements (60 A-weighted decibels [dBA] at 50 feet [ft.]) for NPS use. Because the geographical locations of the Navy's proposed action is outside the National Park and the lack of potential impacts to NPS lands and resources, there is no additional requirement for the USFS to consult with Olympic National Park. It should be noted that the Navy did consult with the National Park Service related to aircraft training flights in the Olympic Military Operations Areas airspace as part of the Northwest Training and Testing EIS project.</p>
Concern [Seq#38]	The Forest Service should provide documentation of consultation with NMFS [ID#148]	<p>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 National Marine Fisheries Service (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.</p> <p>Though unrelated to the Navy's request for special use access to USFS 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 Northwest Training and Testing EIS project, scheduled to be completed in 2016. NMFS was a cooperating agency for both EIS projects. Information on the Northwest Training and Testing EIS can be found at www.NWTTEIS.com.</p>

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Concern [Seq#39]	The Forest Service should disclose consultation with the USFWS and concurrence with determinations. [ID#52]	The Navy solicited comments from the U.S. Fish and Wildlife Service (USFWS) during various phases of the NEPA process for the EW Range EA. The Navy and the USFS are required to assess regulatory frameworks under the trust authority of USFWS, such as Section 7 of the ESA and the Migratory Bird Treaty Act (MBTA). Correspondence with the USFWS is included in Appendix B, Regulatory Compliance Communications, of the Navy EW-EA. Additionally; the Navy engaged in consultation with USFWS for the Northwest Training and Testing EIS, which includes a re-analysis of Navy training and testing activities in the northwest, to include EW training activities above areas of the Olympic Peninsula. This consultation was completed in July 2016 with a Biological Opinion issued by the USFWS. Information on the Northwest Training and Testing EIS can be found at www.NWTTEIS.com .
Concern [Seq#40]	The Forest Service should request development of an updated biological opinion using latest science and expanded project actions. [ID#58]	The Navy completed a consultation with the USFWS resulting in a Biological Opinion for the Northwest Training Range Complex, signed by the USFWS on August 12, 2010. The effects determinations included in that Biological Opinion are not changed by new information provided in the Navy EW-EA, nor are the effects determinations altered by new or updated species status information for species included in the 2010 Biological Opinion. In addition, no new species have been added to the list of threatened and endangered species protected under the ESA and no new critical habitat for listed species occurring in the action area has been designated. In accordance with Section 7 of ESA consultation procedures, the Navy transmitted a letter to the USFWS (dated August 18, 2014, and included in Appendix B, Regulatory Compliance Communications, of the Navy EW-EA) informing the USFWS of the updated information provided in the Navy EW-EA, and that this updated information did not require re-initiation of the Section 7 ESA consultation. Additionally the Navy engaged in consultation with USFWS for the Northwest Training and Testing EIS, which included a re-analysis of Navy training and testing activities in the northwest, to include EW training activities. This consultation was completed in July 2016, with a Biological Opinion issued by the USFWS. During NWTTEIS consultation, USFWS determined that Conferencing for fisher was not warranted or required.

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Concern [Seq#41]	The Forest Service should disclose consultation with regional Tribes and any responses received. [ID#51]	In accordance with Executive Order 13175, the Navy and the USFS are required to consult with regional tribes on regulations and actions that have substantial direct effects on one or more Indian tribes. Under NEPA, the tribes are also considered a stakeholder that is contacted at various phases in the NEPA process. Appendix C describes the Navy and USFS's public notice of the proposed action. Correspondence between the Navy and regional tribes as well as correspondence between the USFS and regional tribes is included in Appendix B (Regulatory Compliance Communications) of the Navy EW-EA. The Navy engaged in formal Government to Government consultation with several American Indian Tribes and Nations that have usual and accustomed territories and resources in and around the Olympic Peninsula; however, the outcomes of those consultations are considered a matter of confidentiality between the U.S. Government and the sovereign Tribes and Nations involved.
Concern [Seq#42]	The Forest Service should disclose any agreed upon mitigation (financial or other) for project impacts to the Quinault Indian Reservation. [ID#158]	Initial correspondence between the Navy and the Quinault Indian Nation as well as between the USFS and Quinault Indian Nation is included in Appendix B (Regulatory Compliance Communications) of the Navy EW-EA. Through these communications, the Navy and USFS provided information about the proposed action and engaged in Government to Government consultation as requested. The outcome of consultations between the U.S. Government and sovereign Tribes and Nations are considered confidential.
Concern [Seq#43]	The Forest Service should evaluate project impacts to treaty rights for lands and resources traditionally used by local tribes. [ID#93]	Both the Navy and USFS are required to notify potentially affected Tribes and Nations during the NEPA process and conduct consultations as necessary. Initial correspondence between the Navy and the regional Tribes and Nations as well as the USFS and regional Tribes and Nations is included in Appendix B (Regulatory Compliance Communications) of the Navy EW-EA.
Concern [Seq#44]	The Forest Service should collaborate with U.S. local and state agencies and non-governmental organizations, as well as Canadian government. [ID#82]	The Navy's and USFS's NEPA procedures require coordination with local and state agencies to the extent practicable. Furthermore, both the Navy's and USFS's NEPA procedures are designed to ensure the public has a voice in decisions on proposed projects and activities and that those decisions are well documented and disclosed to the public. Section 3.1.1 of the Navy's EW-EA lists agencies that Navy worked with in consultation and data collection process. (Colville National Forest, Okanogan-Wenatchee National Forest, Olympic National Forest, the State of Washington, Department of Archaeology and Historic Preservation, State Historic Preservation Officer, U.S. Navy, Naval Base Everett, and other organizations and agencies as appropriate). Entities of the Canadian government or Canadian citizens are not restricted in their ability to comment on the Navy's or the USFS's proposed action; however, there is no requirement that the Navy or USFS collaborate with foreign governments regarding U.S. military proposed actions on U.S. federal lands.
Concern [Seq#46]	The Forest Service should list all preparers of the Navy Permit EA. [ID#159]	The list of preparers of the Navy's NEPA document can be found in the United States (U.S.) Department of the Navy Electronic Warfare-Environmental Assessment, Chapter 6, (List of Preparers), Page 6-1.
Concern [Seq#48]	The Forest Service should provide a compelling need to	Please note that the Navy EW-EA does not discuss electronic warfare "testing", rather the activities conducted by the Navy in the currently designated airspace in this area are considered "training". Electronic warfare training in this airspace is on-going and has been conducted by the Navy in this area

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	conduct electronic warfare testing on public lands. [ID#69]	for over 40 years. The only proposed change to this on-going training is the intent to use ground based signal equipment vehicles at limited sites identified on existing, open National Forest System roads. This activity is described in the Navy EW-EA, Chapter 1 (Purpose and Need of the Proposed Action). Section 2 of the NavyEW-EA addresses the alternative locations considered for this proposed action and why the sites on these public lands are best suited for these support activities. The justification in EA and Special Use Application are different in that justification for road use required more detail for that particular action; however, the main points of flight distance reduction and costs savings are noted in both. The locations analyzed in the Navy EW-EA met the criteria and purpose and need of the proposed action, allowing the Navy totrain more efficiently and with more effective training for the aircrews.
Concern [Seq#49]	The Forest Service should expand the Navy Permit EA to provide a more comprehensive description of the Proposed Action that includes all relevant air- and ground-based actions. [ID#146]	A comprehensive description of the Proposed Action is provided in the Navy EW-EA, Chapter 2, (<i>Description of Proposed Action and Alternatives</i>). This chapter outlines all EW ground-based actions, and provides a brief outline of air activities. As the EA is tiered from the Navy Northwest Training Range Complex final EIS/OEIS of 2010, the Navy's airspace actions are incorporated by reference and addressed in detail in that document. Additional information on the air and ground based actions can be found in Section 2 of the Navy Northwest Training Range Complex Final EIS/OEIS (2010), Section 1 and 4.2 of the Navy EW-EA, as well as in the FONSI for the EW-EA. Additionally, aircraft flight activities are currently being reassessed and reanalyzed in the Navy's Northwest Training and Testing EIS, for which a Final EIS was publically released on October 2, 2015 and is available at www.NWTTEIS.com . The Northwest Training and Testing EIS 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, such as world events, deployment schedules for squadrons, budget allocations, and the cost of fuel. To allow flexibility of training in these areas, the Navy has estimated that a 10 percent increase in flights may occur related to EW training activities, which averages to less than one additional flightper day. With the EW training, the aircraft themselves will not be emitting EW signals, but instead will be passively receiving signals from the vehicle signal transmitters positioned on existing ForestService Roads. It should be noted that Navy use of the Special Use Airspace in this area has been occurringfor over 38 years, and the use and parameters of that airspace is not proposed to change with issuance of the Forest Service permits.

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Concern [Seq#51]	The Forest Service should provide additional details regarding the emitters operation and features. [ID#19]	The Navy EW-EA details the transmitter operations and features throughout the document. Specifically, Chapter 2, Section 2.1.1.4 (Operation of Mobile Electronic Warfare Training System [MEWTS] Mobile Emitters in the Olympic Peninsula on USFS and WSDNR Lands to facilitate Training in the Olympic Military Operations Areas [MOAs] and W-237), and Section 2.1.1.5 (Operation of MEWTS Mobile Emitters on USFS Lands to facilitate Training within Okanogan and Roosevelt MOAs). Additional details on the transmitters is provided in Chapter 3, Section 3.1.1.2.1 (Navy's Electromagnetic Devices and Electromagnetic Radiation Outputs). Further details are provided in Chapter 3, Section 3.1.1.5 (Public Access and Safety), as well as Section 3.1.1.6 (Standard Operating Procedures), and Section 3.3.3.3.3 (Operations Noise).

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Concern [Seq#52]	The Forest Service should respond to public comments and provide additional details on aircraft activity in the Navy Permit EA. [ID#64]	<p>The Navy EW-EA is about land-based activities to support current and on-going aircraft training requirements, and that the EA addresses the specific action of the installation and operation of the EW Range in the Pacific Northwest to support EW training events. The Navy EW-EA details that the EW training by aircraft, is already being conducted and has been in place for over 40 years in the various Special Use Airspace areas of the Northwest. The number, duration, and parameters of aircraft flights in and around the Olympic Peninsula are not projected to increase significantly 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 Range Complex EIS, completed in 2010. These flight activities are currently being reassessed and reanalyzed in the Northwest Training and Testing EIS. The Northwest Training and Testing EIS 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, such as world events, deployment schedules for squadrons, budget allocations, and the cost of fuel. 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, which averages to less than one additional flight per day. As the number of flights is not expected to increase significantly, and the flight altitudes at which this activity is conducted is not planned to change, there is no expected change in aircraft noise or other potential effects. The Navy's Northwest Training and Testing EIS includes an airspace noise analysis for the Olympic Military Operations Areas in Appendix J of the Final EIS. Information on the Northwest Training and Testing EIS can be found at www.NWTTEIS.com. The area covered in the EIS noise analysis is all inclusive of the area below the Olympic MOA, which overlays a portion of Olympic National Park. Noise monitoring is not planned by the Navy, but Olympic National Park has conducted some noise monitoring within the park in the past, and has stated that they plan to continue monitoring. The Navy completed noise modeling for aircraft activities in the Olympic Military Operations Areas (MOA); see Appendix J of the NWTT Final EIS. Noise modeling was conducted using the federal standard modeling tools and is based on actual recorded aircraft type noise. It should be noted that Federal Aviation Administration records indicate that Navy aircraft make up a small percentage of the total aircraft traffic that use the National Airspace in this area (others are commercial and private aircraft). Noise monitoring does not readily allow for distinguishing between Navy aircraft and other types.</p>

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Concern [Seq#53]	The Forest Service should disclose any use of electronic surveillance and attack weapons, as well as potential impacts within the Navy Permit EA. [ID#86]	<p>Training on the EW Range will not involve the use of any weapons. The activities in the Navy EW-EA involve the use of electromagnetic signal detection, location and identification only. During the proposed activities, it should be noted that the aircraft themselves will not be emitting EW signals, but instead will be passively receiving signals from the signal transmitters atop vehicles parked on logging roads. While there has been a significant amount of misinformation in the public realm about the EW training, aircraft will not be engaged in weapons use or electronic surveillance of the public.</p> <p>The Navy EW-EA details the transmitter operations and features throughout the document. Specifically, Chapter 2, Section 2.1.1.4 (Operation of Mobile Electronic Warfare Training System [MEWTS] Mobile Emitters in the Olympic Peninsula on USFS and WSDNR Lands to facilitate Training in the Olympic Military Operations Areas [MOAs] and W-237), and Section 2.1.1.5 (Operation of MEWTS Mobile Emitters on USFS Lands to facilitate Training within Okanogan and Roosevelt MOAs). Additional details on the transmitters is provided in Chapter 3, Section 3.1.1.2.1 (Navy's Electromagnetic Devices and Electromagnetic Radiation Outputs). Further details are provided in Chapter 3, Section 3.1.1.5 (Public Access and Safety), as well as Section 3.1.1.6 (Standard Operating Procedures), and Section 3.3.3.3.3 (Operations Noise). Additionally, as required by NEPA, impact analyses were conducted in the Navy EW-EA for all identified resource areas. Please see Chapter 3 (Affected Environment and Environmental Consequences) for each alternative. Chapter 4 addresses Cumulative Impacts.</p> <p>With regard to the impacts of the electromagnetic signals from the mobile transmitters, in Section 3 of the Navy EW-EA, the Navy evaluates the potential impact of the transmitter's electromagnetic signals on all Endangered Species Act (ESA) listed birds, mammals, amphibians, reptiles, invertebrates, and other non-listed wildlife species as well as vegetation that could be in the study area.</p>

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Concern [Seq#54]	The Forest Service should disclose and analyze the impact of future training growth. [ID#88]	<p>The Navy's EW-EA relates to the specific action of the installation and operation of ground-based EW Range activities to support the already occurring EW training events by providing enhanced training capabilities. The Navy EW-EA details that the number, duration, and frequency of training events in and around the Olympic Peninsula are not projected to increase significantly when the proposed improvements to the training are in place. The Forest Service permit will only address those actions included in the Navy's EA and Special Use Permit request.</p> <p>Aircraft flights in Northwest Special Use Airspace areas were addressed in the Navy's Northwest Training Range Complex EIS, completed in 2010. These flight numbers are currently being reassessed and reanalyzed in the ongoing Northwest Training and Testing EIS. The Northwest Training and Testing EIS 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, such as world events, deployment schedules for squadrons, budget allocations, and the cost of fuel. To allow flexibility of training in these areas, the Navy has estimated that a 10 percent increase in flights may occur related to EW training activities, which averages less than one additional flight per day. The Navy's Northwest Training and Testing EIS includes an airspace noise analysis for the Olympic Military Operations Areas in Appendix J of the Final EIS.</p>
Concern [Seq#55]	The Forest Service should disclose the nature of training activities and desired outcomes. [ID#118]	<p>The nature of the training activities is identified in the Navy EW-EA, Chapter 2 (Description of Proposed Action and Alternatives). The desired outcome is also fully disclosed in the Navy EW-EA, Chapter 1, Section 1.3 (<i>Purpose of and Need for the Proposed Action</i>). In short, the desired outcome is to sustain and enhance the level and type of EW training currently being conducted by assets using the Northwest Training Range Complex (NWTRC), to provide the ability to accommodate growth in future training requirements, and to maximize the ability of local units to achieve their training requirements on local ranges. Additional specific desired outcomes of establishing the EW range include meeting the training requirements of EA-18G Fleet Replacement Squadron personnel; supporting basic and intermediate EW training for all users of the NWTRC; conducting live training, augmented by virtual training; supporting unit EW certifications and sustainment level training; maximizing and balancing local unit quality of training with local unit quality of life; reducing the costs of training by conducting more training locally; and reducing the use of fossil fuel consumption by training locally, vice transiting to additional training sites outside of the Pacific Northwest.</p>

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Concern [Seq#56]	The Forest Service should provide additional description of growler aircraft and emitter radiation, including the intensity and frequency of emissions. [ID#166]	<p>The Navy EW-EA is centered on ground-based range enhancements that will better support EA-18G Growler aircraft training. As such, the focus of the Navy EW-EA is on those enhancements, not the Growler aircraft itself. With that said, the EA-18G Growler is the most modern, tactical aircraft in the U.S. Department of Defense (DoD) inventory that conducts the electronic warfare mission. The Growler replaced the EA-6B Prowler as the Navy's electronic attack aircraft, and began use at Naval Air Station (NAS) Whidbey Island in 2008. The Growler has an advanced electronic system that allows it to identify targets and protect itself and other aircraft from those targets. It also has advanced communication capabilities that allow it to interact more effectively with personnel on the ground and in the air, compared to the older Prowler aircraft.</p> <p>During EW training using the Pacific Northwest Electronic Warfare Range, the Growler does not emit signals, but detects, locates and identifies signals from the ground-based signal transmitters. As described in the Navy EW-EA, the intensity or power level from the mobile transmitter equipment can be varied from 100 to 300 watts. It is expected that normal power output during training activities will be at the lower end of this range and about 100 watts on average, as high output is not needed or desired for this type of signal. The fixed transmitter would be very similar to those used in the mobile transmitters, with expected normal power output of about 90 watts, and a frequency band of 2–18 gigahertz (GHz). The frequency band that the mobile transmitters are capable of transmitting within is 4–8 GHz. While these bands represent the theoretical limits of the transmitters, the Navy obtains permission to use specific discreet frequencies within the band via a comprehensive spectrum approval process attained through the Navy and Marine Corps Spectrum Office and reviewed and authorized by the Federal Communications Commission, the Federal Aviation Administration, and the National Telecommunications and Information Administration to ensure no conflicts with existing signals by licensed users. It should be noted that these frequencies 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. The mobile transmitter vehicles broadcast a signal skyward, aimed toward the participating Navy aircraft. To facilitate aircrew training, the signals are intentionally similar to some satellite communications, Wi-Fi devices, cordless phones, Bluetooth devices and weather radar systems.</p> <p>While the Navy EW-EA analyzed a theoretical maximum of 16 hours of operation in a single day and an average of 12 hours of daily operation, actual usage is expected to be much less and periodic due to the planned equipment operators schedule limits of 40 hours per week, and by the fact that the transmitters are only operated intermittently during training events (turned on and off).</p>

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Concern [Seq#61]	The Forest Service should provide a clear description and comparison across considered alternatives that demonstrate how impacts are reduced or differ. [ID#182]	As required by NEPA, alternatives were considered in Chapter 2 (Description of Proposed Action and Alternatives) of the Navy EW-EA. Chapter 3 (Affected Environment and Environmental Consequences) of the Navy EW-EA addresses the Affected Environment and Environmental Consequences for each alternative, and Chapter 4 addresses Cumulative Impacts. Table 3.2-2 shows how the effects on the species are reduced or differ. Overall, the USFS believes that the Navy EW-EA provides a clear description and comparison across considered alternatives and demonstrates the impacts of the considered alternatives.
Concern [Seq#62]	The Forest Service should provide additional analysis of the No Action Alternative. [ID#87]	<p>The Navy EW-EA fully analyzed the No Action Alternative. It should be noted that Navy EW training by aircraft has been conducted in this same airspace for over 40 years, and would continue at current levels under the No Action Alternative. Under the No Action Alternative, limited EW training, without the enhanced capability of fixed and mobile signal transmitters, would continue to be conducted in the existing airspace areas and intermediate-level EW training for certification would continue to occur at the Mountain home Air Force Base, 491 miles southeast of NAS Whidbey Island..</p> <p>The Navy's selected alternative for the EW-EA does not change the parameters of the airspace and only proposes a potential 10 percent increase in annual aircraft flights in this airspace, which averages out to less than one additional flight per day.</p>
Concern [Seq#63]	The Forest Service should conduct electronic warfare training using simulations. [ID#42]	<p>NAS Whidbey Island aircrews are already doing this type of instrumented electronic warfare training as described in the Navy EW-EA in a simulated manner when they currently train in the airspace as indicated in Section 2.1.3 of the EA. This simulated electronic warfare training has been on-going in this same area for over 40 years.</p> <p>While the Navy uses simulators in many kinds of training, all simulators have limitations. The Navy EW-EA addressed the operation of the Mobile Electronic Warfare Training System (MEWTS) to better support the existing simulated EW training already occurring in the Olympic, Okanogan or Roosevelt Military Operations Areas (MOA).</p> <p>Simulated training is discussed in the Northwest Training Range Complex EIS/OES section 2.3.2.2. Navy training includes extensive simulated training (not in the airspace), but that is an adjunct to and not a substitute for live training. Simulated training does not provide the requisite level of realism necessary to attain combat readiness. There are limits to realism that simulation can provide.</p> <p>Currently, electronic attack aircraft crews home-based at Naval Air Station Whidbey Island must commute to Mountain Home Air Force Base in Idaho, which is 491 miles from Naval Air Station (NAS) Whidbey Island. The Olympic Military Operations Area is 74 miles from Naval Air Station (NAS) Whidbey Island. Conducting training closer to where the aircraft are based will reduce fuel costs and air emissions, and reduce wear on the aircraft. This will save the government and taxpayers about \$5 million each year.</p>

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Concern [Seq#64]	The Forest Service should consider alternatives that limit the extent of activities or restrict them to emergency use only. [ID#70]	The Navy EW-EA details that EW training is already being conducted in the various Special Use Airspace areas of the Northwest, and has been doing so for over 40 years. The number, duration and frequency of aircraft flights in and around the Olympic Peninsula are not projected to increase significantly when the proposed improvements to the training area are in place. The proposed improvements will only enhance the fidelity of the training that is currently occurring. Annual flight requirements and actual flight activities tend to fluctuate from year-to-year based on many variables, such as world events, deployment schedules for squadrons, budget allocations and the cost of fuel and to allow flexibility of training in these areas. The Navy estimated a 10 percent increase in flights might occur related to electronic warfare training activities, which averages less than one additional flight per day.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#66]	The Forest Service should consider using drones instead of Growlers. [ID#188]	Although drones are increasingly being used in aviation operations, the technology does not currently exist for them to replace manned military aircraft used for the EW mission. Additionally, as described in the Navy EW-EA, EW training is conducted for the benefit of the aircrew, not the platform. If drones were used, the same range enhancements would exist and the same amount of flights would likely be needed, as the aircrew would still require training. The only difference is that with a drone, the aircrew would be located in a ground station, vice in an airborne platform (EA-18G Growler).

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#67]	The Forest Service should disclose what type of monitoring will be required and who will be responsible. [ID#20]	The extensive analysis undertaken by the Navy determined that the Proposed Activities in the Navy EW-EA, to include placement and use of the associated transmitters, will not harm people or animals, to include sensitive species (see EA, Chapter 3.2, Biological Resources; Chapter 7, References; and Appendix A. List of Species Potentially Found in the Study Area). This analysis demonstrated the proposed activity will not have a significant effect on people, animals, or the environment. After conducting an internal review and evaluating the science and conclusions reached in the Navy EW-EA, the USFS concurred with the analysis and believes that additional monitoring outside of that proposed in the EW-EA is not warranted. Navy monitoring during equipment operation identified in the EW-EA and as Standard Operating Procedures required of the Special Use Permit will be implemented by mobile transmitter vehicle operators as identified in sections 3.1.1.3 through 3.1.1.6 of the EA.
Concern [Seq#68]	The Forest Service should require Navy oversight and restoration of any damaged areas. [ID#60]	As described in the Navy EW-EA, the Navy does not anticipate any damage, as they are not altering the environment in any way under this project. Rather they will be using a small number of vehicles on existing logging roads and pull out areas that have been previously created in these locations. The operation of the mobile transmitters as well as aircraft overflights in the existing airspace will not damage USFS Areas or resources.
Concern [Seq#69]	The Forest Service should deny the Navy Permit. Because the cost is too high and not a good use of taxpayer dollars [ID#85]	As described in the Navy EW-EA, the Pacific Northwest EW Range is intended to meet the basic training requirements for new aircrew going through the Fleet Replacement Squadron training syllabus. By providing this local capability, the Navy will save taxpayer dollars. Mountain Home Air Force Base in Idaho is approximately 400 miles from Naval Air Station (NAS) Whidbey Island, where the aircraft are based. The Olympic Military Operations Area is approximately 74 miles from NAS Whidbey Island. Conducting training closer to where the aircraft are based will increase training efficiencies, while reducing fuel costs, air emissions, and wear on the aircraft. It is expected this will save the government and taxpayers about \$5 million each year.
Concern [Seq#74]	The Forest Service should address a wider range of impacts in the Navy Permit EA. [ID#16]	In the development of the Navy EW-EA, the Navy has complied with the obligations under the NEPA, including addressing the potential impacts from project activities. The Forest Service also complies with all NEPA requirements when evaluating the Navy EW-EA request.
Concern [Seq#75]	The Forest Service should evaluate the cumulative impact of all past, present, and reasonably foreseeable	In the development of the Navy EW-EA, the Navy has complied with all of the obligations under the NEPA, including a cumulative impact analysis in Chapter 4 (Cumulative Impacts). The Forest Service also complies with all NEPA requirements when evaluating the Navy EW-EA request, to include cumulative impacts of all past, present, and reasonable foreseeable activities on all affected resources.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
	activities on all affected resources. [ID#18]	
Concern [Seq#76]	The Forest Service should ensure that the Navy Permit EA uses best available science. [ID#57]	The Navy EW-EA demonstrates the use of best available science, including analysis of references on the potential impacts of the proposed activities (see EA, Chapter 3; Chapter 7, References; and Appendix A, List of Species Potentially Found in the Study Area). This analysis demonstrated the proposed activity will not have a significant effect on people, animals, or the environment.
Concern [Seq#77]	The Forest Service should disclose how they determined a finding of no significance and require additional information to justify this determination. [ID#72]	The Navy EW-EA examined potential impacts on public health and safety, biological resources, noise, air quality, and visual resources associated with each alternative. Based on the analysis and conclusions presented in the Navy EW-EA and coordination with the USFS, the Navy found that implementation of the Proposed Action by the means identified in the Preferred Alternative, as presented in the Navy EW-EA, will not significantly affect the quality of the human environment. Under NEPA, this conclusion means that an EIS does not need to be prepared, and the publication of the Finding of No Significant Impact (FONSI) is appropriate and justified. After conducting an internal review and evaluating the science and conclusions reached in the Navy EW-EA, and considering the additional information and concerns received from the public during the extended public comment period, the USFS supports the FONSI determination as discussed in the draft Decision Notice/FONSI.

<p>Concern [Seq#78]</p>	<p>The Forest Service should incorporate the new U.S. 2014 Navy NWTT EIS/OEIS findings into the Navy Permit EA. [ID#149]</p>	<p>The Northwest Training and Testing EIS/OEIS (2014) covers a broad spectrum of training and testing conducted in the Pacific Northwest, Electronic Warfare training is just one category analyzed in that document. The Northwest Training and Testing EIS/OEIS address the location, frequency and duration of the EW training conducted. The EW – EA proposed action is much more limited in scope. The Northwest Training and Testing Final EIS/OEIS was released for a 30-day wait/review period on 2 October 2015, and the record of decision is anticipated in 2016.</p>
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Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#79]	The Forest Service should define analysis areas for each resource and impact in the Navy Permit EA [ID#124]	The Navy EW-EA defines analysis areas for each resource in Chapter 1 (Proposed Action) and Chapter 2 (Description of the Proposed Action and Alternatives). As part of its review of the Navy EW-EA, the USFS analyzed each resource area for potential impact from the activities identified in the Navy EW-EA and agreed with the conclusions reached.
Concern [Seq#80]	The Forest Service should analyze impacts to air quality from aircraft activity and on-ground equipment and vehicles. [ID#28]	<p>EW aircraft training is already being conducted in the various Special Use Airspace areas of the Northwest. The number, duration and frequency of aircraft flights in and around the Olympic Peninsula are not projected to increase significantly when the proposed improvements to the training area are in place. Furthermore, by conducting the training closer to home, vice traveling to other locations, total air quality emissions are anticipated to decrease, as fewer flight hours are needed to conduct the required training. Aircraft training in the Special Use Airspace in this area is outside the scope of the Navy's special use permit request. The Navy has been flying in this area for over 40 years and flight activities will continue regardless of getting the special use permits. With that said, both the EW-EA and NWTT EIS address air quality analysis and wording was added to the text to reference these sections of the documents</p> <p>Additionally, Section 3.4 of the EW-EA (Air Quality) addressed the impacts attributable to the construction activities particular to the fixed transmitter at Pacific Beach and the increased ground vehicle and generator use associated with the mobile transmitters proposed to be parked on USFS existing roads. The emission levels did not exceed National Ambient Air Quality Standards.</p> <p>Section 3.2 of the NWTT Final EIS (Air Quality) addresses air quality emissions associated with various Navy activities in the northwest, including aircraft training.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#81]	The Forest Service should disclose the amount of greenhouse gas emissions produced and consider both project impacts to global warming as well as how climate change may magnify impacts. [ID#96]	<p>As required by NEPA, impact analyses were addressed in the Navy EW-EA, including an assessment on climate change and greenhouse gas emissions (see Chapter 4, Section 4.2.2.4, Climate Change and Greenhouse Gas Emissions). Additionally, please see Chapter 3.4 (Air Quality) of the Navy EW-EA, where the analysis indicates that emissions for the Proposed Action do not exceed National Ambient Air Quality Standards levels and no significant impacts to air quality would occur under the Proposed Action. In support of the global concern in addressing climate change and greenhouse gas emission, the Navy is actively developing and participating in energy, environmental, and climate change initiatives. It should be noted that by conducting the training closer to home, not traveling to other locations, total emissions and greenhouse gas emissions would be lower.</p> <p>Executive Order 13693 of March 19, 2015. Planning for Federal Sustainability in the Next Decade excludes aircraft and support equipment used in training from greenhouse gas emission reductions. Section 19 (k) states: "excluded vehicles and equipment" means any vehicle, vessel, aircraft, or non-road equipment owned or operated by an agency of the Federal Government that is used in combat support, combat service support, tactical or relief operations, or training for such operations or spaceflight vehicles (including associated ground-support equipment).</p>
Concern [Seq#82]	The Forest Service should approve the Navy Permit. Because the proposed project will reduce carbon dioxide emissions and help mitigate climate change [ID#192]	Comment is noted.
Concern [Seq#83]	The Forest Service should assess whether winter conditions may restrict testing timeframes. [ID#191]	Please note that the Navy EW-EA does not discuss "electronic warfare testing," but rather electronic warfare training. As stated in the Navy EW-EA, Chapter 2, Section 2.1.1.5 (Operation of MEWTS Mobile transmitters in the Olympic Peninsula on USFS and WSDNR Lands to Facilitate Training the Olympic MOAs and W-237), if the MEWTS crews encounter roads that are un-drivable, due to snow, washout, or any other blockage, they will either proceed to an alternate training site not affected by these conditions or cancel the training evolution. Additionally, the Navy does not anticipate that transmitter vehicles will operate during low visibility conditions such as fog or snow. If visibility is less than 101 ft., the vehicle operators will cease transmissions until conditions allow for a minimum of 101 ft. visibility.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#84]	The Forest Service should analyze project impacts to cultural resources and the Historic Preservation District. [ID#75]	As stated in Chapter 3 (Affected Environment and Environmental Consequences) of the Navy EW-EA, "The Proposed Action would not result in any negative impacts, change, or alter cultural resources of surrounding areas. Building 104 at the Navy Facility Pacific Beach would be renovated. In a letter from the State Historic Preservation Officer (SHPO) dated October 16, 2012, the extant building of the Navy Facility Pacific Beach has been determined not eligible for inclusion in the National Register of Historic Places due to low integrity. Additionally, the area of proposed renovations has been heavily disturbed over the years and has a low probability of containing undisturbed archaeological material. In an additional letter from the SHPO dated May 22, 2014, the SHPO concurred with the Navy's findings that no historic properties would be affected by the Proposed Action. Therefore, this resource area was not carried forward for detailed analysis."
Concern [Seq#84]	The Forest Service should deny the Navy Permit. Due to potential impacts to the environment and ecology of the area [ID#30]	The extensive analysis undertaken by the Navy determined that the Proposed Activities in the Navy EW-EA, to include placement and use of the associated transmitters, will not harm people or animals, to include sensitive species. The Navy issued a FONSI in August 2014.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#85]	The Forest Service should analyze the effects of chemical pollution and hazardous waste generation from project actions, as well as disclose any remediation plans and funding. [ID#129]	<p>As discussed in Section 3.1 (Public Health and Safety) of the Navy EW-EA, no chemical pollution or hazardous waste generation is anticipated from the project actions.</p> <p>Additionally, as stated in the Navy EW-EA, Section 3.2.3 (Affected Environment), with the exception of demolition/construction requirements to Building 104 on-board Navy-owned land at Naval Station Everett Annex Pacific Beach, the Navy's Proposed Action requires no physical alteration to the environment in any way, to include no tree cutting/removal, digging, construction, demolition, or utilization of currently undisturbed areas. As such, the Proposed Action, as described in the EA would not require additional or irreversible conversion of resource lands within the action area, and thus no remediation plans or funding would be required.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#86]	The Forest Service should evaluate potential fire risk from radiation, vehicle and aircraft operation, and other project actions. [ID#26]	Aircraft flights in Northwest Special Use Airspace areas were addressed in the Navy's Northwest Training Range Complex EIS, completed in 2010. These flight numbers are currently being reassessed and reanalyzed in the ongoing Northwest Training and Testing EIS. The Northwest Training and Testing EIS 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, such as world events, deployment schedules for squadrons, budget allocations, and the cost of fuel. 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, which amounts to less than one additional flight per day. As the number of flights is not expected to increase significantly, and the flight altitudes at which this activity is conducted is not planned to change, there is no expected change in fire risk from aircraft operations. Mobile transmitter trucks will use existing forest service roads and present no new vehicle fire hazards. Mobile transmitters would only transmit electromagnetic signals in frequency bands in accordance with approvals that are attained through the Navy Marine Spectrum Office and reviewed by the Federal Communications Commission, the Federal Aviation Administration, and the National Telecommunications and Information Administration. They are consistent with signals currently used in the study area by the public, such as cordless phones, Wi-Fi, and Bluetooth devices. The USFS operates within The National Cohesive Wildland Fire Management Strategy, to include provisions for managing human-caused ignitions. Mobile transmitter trucks will use existing forest service roads and present no new vehicle fire hazards, as each truck carries fire extinguishers.
Concern [Seq#87]	The Forest Service should disclose agency and community capacity to fight fires, as well as costs and funding for firefighting and restoration efforts. [ID#152]	The USFS operates within The National Cohesive Wildland Fire Management Strategy, to include provisions for managing human-caused ignitions. Though not part of this EA, the number of flights is not expected to increase significantly, and the flight altitudes at which this activity is conducted is not planned to change, there is no expected change in fire risk from aircraft operations. Mobile transmitter trucks will use existing forest service roads and present no new vehicle fire hazards, as each truck carries fire extinguishers. Additionally, personnel in the mobile transmitters will, just by their presence, enhance the fire reporting capabilities in the area. Current Forest Service fire management capacities are sufficient to support the proposed EW training activities. Navy operators will be able to report observed fires during the operation of the mobile transmitter vehicles through a variety of methods (e.g. cell phone and installed radio equipment). Procedures to report can be worked out with Navy to aid in this effort.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#88]	The Forest Service should develop a contingency plan for emergencies that includes evacuation routes, fire prevention methods, and any areas potentially off-limit to firefighting personnel and equipment. [ID#153]	The USFS operates within The National Cohesive Wildland Fire Management Strategy, to include provisions for managing human-caused ignitions. As the number of aircraft or training flights is not expected to increase significantly, and the flight altitudes at which this activity is conducted is not planned to change, there is no expected change in fire risk from aircraft operations. Mobile transmitter trucks will use existing National Forest System roads and present no new vehicle fire hazards, as each truck carries fire extinguishers. Current Forest Service fire management plans are sufficient to support the proposed EW training activities.
Concern [Seq#89]	The Forest Service should analyze potential tectonic activity from project actions [ID#132]	The USFS has developed local seismic hazard and risk maps using Federal and State information on earthquake location, magnitude, and frequency in accordance with Issuance 2880, <i>Geologic Resources and Services</i> , of the Forest Service Manual Series 2000, <i>National Forest Resource Management</i> . There is no expected tectonic activity from proposed action activities. Mobile transmitter trucks will use existing National Forest System roads and present no new vehicle tectonic activity risk outside of current Forest Service and public use.
Concern [Seq#90]	The Forest Service should deny the Navy Permit. Because it could result in harm to humans and wildlife [ID#24]	<p>The radio wave frequency signals used by Navy transmitters will pose no hazard to humans or wildlife, as both would need to be in close proximity to signal antennas (closer than 32 feet), directly in line with the transmission (14 feet above the ground), and remain there for an extended period (greater than 20 minutes) to be exposed to any measurable level energy. Considering the locations used for transmitter equipment, the duration of signals, the frequency band, antenna height and signal level output, there is no potential for exposure to people or wildlife. Specifically, the sites proposed to be used for the mobile transmitters are in clearings and open areas on existing National Forest System roads. Signals use low power output (between 100-300 watts) and are intermittent, with transmissions being turned on and off. Actual signal transmission time will vary per training event. The EW-EA analyzed a very conservative maximum amount of transmission time, with a 12 hour average training day used, and intermittent transmissions lasting a total of 45 minutes out of each hour, for a total transmission time of 9 hours a training day maximum. The duration of each actual transmission period is expected to be much less and will likely vary between approximately 15 and 45 minutes intermittently out of each hour. The 12 hour average training day estimate is very conservative also, and does not include travel time and equipment set up time at each site, during which transmissions will not be occurring. See section 2.1.1.4 of the EW-EA.</p> <p>Other electromagnetic signal equipment in these same areas use similar frequency bands, but use signals of much greater strength with continuous outputs operating 24 hours a day, 365 days a year. This includes numerous cell phone towers, radio antennas and radar sites. There are no documented effects from these much more significant signal sources on people or wildlife. There are no confirmed,</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
		<p>commonly used electronic equipment utilizing radio wave and micro wave frequency transmissions. There is ongoing debate and research regarding transmissions such as cell phones, etc., but with a focus on long term exposures with transmissions that occur in close proximity to individuals. This is a very different configuration and situation than the Navy's proposed transmission equipment, which will have no one nearby and is at relatively low power outputs.</p> <p>Additionally, Navy systems will be monitored while in use, and will have additional precautionary procedures in place, requiring signal shut down if people or wildlife persist in the immediate area of the equipment. : Procedures for safe operation and shut down of equipment is addressed in section 3.1.1.5 of the EW-EA. Because training sites were selected to optimize signal transmission in the direction of the training aircraft (e.g., along ridgelines, hill tops, and cliff faces), the directional antennas of the mobile signal transmitters will be pointed away from areas of public accessibility, thus minimizing the potential for anyone to be directly in the path of the signal. Additionally, signal will be directed upward toward participating aircraft at relatively high altitudes and will not be pointed toward the ground. Actual angle of equipment antenna will vary depending on the training event, the topography of each site and the location of aircraft participating in the event. The signal antennas are not directed at the ground and with the operating procedures described in section 3.1.1.5 of the EW-EA, the public will be exposed to no signal transmissions.</p> <p>The Navy's EA evaluated potential impacts of the transmitter's electromagnetic signals on all ESA-listed wildlife species and non-federally listed wildlife species, as well as vegetation that could be in the study area (see EW-EA, Chapter 3.2, Biological Resources; Chapter 7, References; and Appendix A, List of Species Potentially Found in the Study Area). The Navy reviewed numerous references, including studies on how electromagnetic fields can impact certain species. This analysis demonstrated the proposed activity would have no significant effect on people, animals, or the environment.</p> <p>The Navy EW-EA used the Institute of Electrical and Electronics Engineers (IEEE) C95.1a-2010, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," as amended 16 March 2010 to make its determinations. Additionally, the Navy, as well as the other armed services, have decades of experience successfully operating similar fixed and mobile transmitters at a variety of locations across the nation with no record of associated long-term adverse effects. There is a long history of these systems being safely employed to provide our aviators the training they need without incident or adverse effects.</p> <p>As the Navy EW-EA states, if an animal or person is sighted within the exclusion zone of 101 ft., a shutdown can be initiated within a matter of seconds. Once a shutdown is initiated, the signal source is stopped within milliseconds of the power switch being secured, with no residual transmission of energy. The 101 ft. exclusion zone (a no-loiter zone) that the Navy has adopted incorporates an ultra-cautious standoff distance for people and animals to ensure that there is no chance of any living creature being placed in a hazardous condition or interfering with the operation of the transmitter. Industry and occupational safety and health standards for the mobile signal transmitters dictate a maximum</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
		<p>permissible exposure (MPE) distance of 32 ft. from the transmission source, if directly within the signal of the antenna. The Navy has extended this 32 ft. MPE distance out to 101 ft. as an extra protective zone. Established exclusion zones are based on maximum power output levels for the signal equipment, and it is expected that actual usage for transmissions will be well below the maximum settings. Nevertheless, the Navy will apply the 101 ft. exclusion zone in all directions from the antenna and will secure the source of the signal if people or animals loiter within this zone. A vehicle, person or animal temporarily moving through the 101 ft. zone will not require immediate shut down of the signal, but if a person or animal loiters within this area and does not move on, a shutdown would be performed as an extra measure of safety. It is not expected that animals will linger within the exclusion zone because of the human activity, but the same shutdown procedures will be applied to animals should they loiter in the exclusion zone.</p>
Concern [Seq#91]	<p>The Forest Service should incorporate recent studies and analyze the potential impacts of non-thermal or non-ionizing radiation impacts to human health. [ID#49]</p>	<p>The Navy prepared a safety review report for the equipment utilized, to assess the potential health and safety risks from electromagnetic transmissions, under the Action Alternatives in Section 3.1 (Public Health and Safety) of the Navy EW-EA. The purpose of the review was to identify potential Radiation Hazard (RADHAZ) problems associated with the proposed installation and operations of transmitters.</p> <p>That review is done as required through OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, of 21 July 2011 (hereinafter referred to as OPNAVINST 5100.23G) for its transmission protection requirements and safety guidelines. OPNAVINST 5100.23G follows the Institute of Electrical and Electronics Engineers (IEEE) C95.1a-2010, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," as amended 16 March 2010 to make determination. OPNAVINST 5100.23G defines the exposure limits to personnel based on these studies.</p> <p>One of the specific areas of consideration in the safety reviews was the potential of Hazards of Electromagnetic Radiation to Personnel (HERP). The information in this report was used to determine safety radii around the mobile transmitters and is cited heavily throughout the EA. These safety radii reduce the potential for physiological impacts to humans to non-significant levels. Based on these studies, standard operating procedures (SOPs) were developed for EW training activities for the Proposed Action that included safety measures were established, to include exclusion zones and distances. See Table 3.1-1 of the EW-EA: Radiation Hazard Minimum Safe Separation Distances.</p> <p>Established exclusion zones are based on maximum power output levels for the signal equipment, and it is expected that actual usage for transmissions will be well below the maximum settings. The Navy will apply the 101 ft. exclusion (no loiter zone) zone in all directions from the antenna and will turn off the source of the signal if people or animals loiter within this zone. A vehicle or person temporarily moving through the 101 ft. zone will not require immediate shut down of the signal, but if a person loiters within this area and does not move on, a shutdown would be performed. If an animal or person is sighted within the exclusion zone of 101 ft., a shutdown can be initiated within a matter of seconds. Once a shutdown is initiated, the signal source is stopped within milliseconds of the power switch being secured,</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
		<p>with no residual transmission of energy. It is not expected that animals will linger within the exclusion zone because of the human activity, but the same shutdown procedures will be applied to animals, should they loiter in the zone. The mobile signal transmitters will have a two-person crew who will remain at the transmitter site for the duration of the training event. One person will operate the transmitter and the other will observe the surrounding area for people or animals that may come within 101 ft. of the transmitter.</p> <p>Industry and occupational safety and health standards for the mobile signal transmitters dictate a MPE distance of 32 ft. from the transmission source, if directly within the signal of the antenna. The Navy has extended this 32 ft. MPE distance out to 101 ft. as an extra protective zone. Because training sites were selected to optimize signal transmission in the direction of the training aircraft (e.g., along ridgelines, hill tops, and cliff faces), the directional antennas of the mobile signal transmitters will be pointed away from areas of public accessibility, thus minimizing the potential for anyone to be directly in the path of the signal. Additionally, signal s will be directed upward toward participating aircraft at relatively high altitudes and will not be pointed toward the ground. During EW training, the Navy would ensure that all necessary safety precautions and SOPs are followed to minimize the risk to the public.</p> <p>Of note, the Navy as well as other armed services have decades of experience safely operating similar fixed and mobile transmitter at a variety of locations across the nation. There is a long history of these systems being safely employed to provide our aviators the training they need without incident or adverse effects to the surrounding community.</p>
Concern [Seq#92]	The Forest Service should address potential impacts to reproduction and fertility due to exposure to electromagnetic radiation. [ID#169]	Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G and the Navy's SOPs that will protect the general public's health and safety. The electronic energy and frequencies transmitted from the transmitters are similar to those used in everyday civilian and residential applications, such as those for satellite communications, some Wi-Fi devices, wireless telephones, television news trucks, Bluetooth devices, and weather radar systems. The intensity or power level that will be used for the mobile and fixed transmitters is about 90–100 watts, as higher output is not needed or desired for this training. The output of the mobile transmitters can vary from 100 to 300 watts, but is expected to be about 100 watts. For comparison, people commonly use 60–100-watt light bulbs at home, and many commercial radio stations in the Puget Sound area have antenna power output levels of 100,000 watts or more.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#93]	The Forest Service should address potential damage to the blood-brain barrier from exposure to electromagnetic radiation. [ID#170]	As the Navy EW-EA analysis demonstrates, there are no expected impacts to human physiology. Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G and the Navy's SOPs that will protect the general public's health and safety. Additionally, as noted in the Safety Report authored for the Navy EW-EA, the fact that the antennae are typically over 14 ft. off the ground and pointed up and away from the ground, the presence of the exclusion zone, and the Navy's standard operating procedures that include immediate shutdown procedures if someone enters and remains in the exclusion zone, make it highly unlikely that physiological impacts would occur.
Concern [Seq#94]	The Forest Service should conduct an analysis of potential health effects from radiation. [ID#165]	As discussed in Section 3.1 (Public Health and Safety) of the EW-EA, the Navy prepared a safety review for the Mobile Transmitters utilized under the Action Alternatives identified in the Navy EW-EA. The information in this report was used to determine safety radii around the mobile transmitters and is cited heavily throughout the EW-EA. The conclusions are that no significant harm to people, animals, or the environment would occur from the implementation of the Proposed Action. The USFS concluded that no additional analysis was required, based upon the studies in the Navy EW-EA and the safety precautions to be implemented by the Navy. Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G and the Navy's SOPs that will protect the general public's health and safety.
Concern [Seq#95]	The Forest Service should review and incorporate additional, recent scientific studies on radiation effects in the Navy Permit EA. [ID#104]	As discussed in Section 3.1 (Public Health and Safety) of the EW-EA, the Navy prepared a safety review utilizing best available science for the Mobile Transmitters utilized under the Action Alternatives identified in the Navy EW-EA. The information in this report was used to determine safety radii around the mobile transmitters and is cited heavily throughout the EW-EA. The conclusions are that no significant harm to people, animals, or the environment would occur from the implementation of the Proposed Action. The USFS concluded that no additional analysis was required, based upon the studies in the Navy EW-EA and the safety precautions to be implemented by the Navy.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#96]	The Forest Service should deny the Navy Permit. Because electromagnetic radiation is a carcinogen [ID#168]	Because of the potential impacts from electromagnetic transmissions, the Navy prepared a safety review for the equipment utilized under the Action Alternatives in the Navy EW-EA. Specific areas of consideration were HERP and HERF. The information in this report was used to determine safety radii around the mobile transmitters and is cited heavily throughout the Navy EW-EA. Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G and the Navy's SOPs that will protect the general public's health and safety. The USFS concluded that no additional analysis was required, based upon the studies in the Navy EW-EA and the safety precautions to be implemented by the Navy.
Concern [Seq#97]	The Forest Service should address the potential for gene mutations and DNA fragmentation from electromagnetic radiation. [ID#157]	Because of the potential impacts from electromagnetic transmissions, the Navy prepared a safety review for the equipment utilized under the Action Alternatives in the Navy EW-EA. Specific areas of consideration were Hazards of Electromagnetic Radiation to Personnel (HERP) and Hazards of Electromagnetic Radiation to Fuel (HERF). The information in this report was used to determine safety radii around the mobile transmitters and is cited heavily throughout the Navy EW-EA, which concluded that that the proposed action will not significantly impact people, animals, or the environment. Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G and the Navy's SOPs that will protect the general public's health and safety. The USFS concluded that no additional analysis was required, based upon the studies in the Navy EW-EA and the safety precautions to be implemented by the Navy.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#98]	The Forest Service should either provide compelling proof that human health will not be affected by the proposed project or err on the side of caution and deny the Navy Permit. [ID#105]	<p>Because of the potential impacts from electromagnetic transmissions, the Navy prepared a safety review for the equipment utilized under the Action Alternatives in the Navy EW-EA. Specific areas of consideration were Hazards of Electromagnetic Radiation to Personnel (HERP) and Hazards of Electromagnetic Radiation to Fuel (HERF). The information in this report was used to determine safety radii around the mobile transmitters and is cited heavily throughout the Navy EW-EA, which concluded that the proposed action will not significantly impact people, animals, or the environment. Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G and the Navy's SOPs that will protect the general public's health and safety. The USFS concluded that no additional analysis was required, based upon the studies in the Navy EW-EA and the safety precautions to be implemented by the Navy. For comparison, people commonly use 60–100-watt light bulbs at home, and many commercial radio stations in the Puget Sound area have antenna power output levels of 100,000 watts or more.</p> <p>Additionally, the Navy has established EW Range capabilities located across the United States. Similar to what is proposed for the Pacific Northwest, DON 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 USFS and Bureau of Land Management (BLM) lands without incident or adverse effect.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#99]	The Forest Service should re-calculate radiation hazard minimum separation distances using lower exposure levels and evaluate impacts to individuals within this distance. [ID#99]	The transmission hazard calculations in the Safety Review, referenced in the EW-EA, were based on the maximum operational parameters of the transmitters to be used in conjunction with minimum safe separation distances for Controlled and Action Level environments, as described in the Navy EW-EA Section 3.1.1.3 (Current Requirements and Management Practices). The Navy performed the analysis utilizing the maximum operational parameters to be conservative in the calculation of exclusion zone. Further, the Navy applied an additional level of caution by extending the safety zone to 101 ft. in all directions around the antennae, which ensures that transmission levels are well below potential impact levels. Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G and the Navy's SOPs that will protect the general public's health and safety. It is not necessary to recalculate and reevaluate impacts.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#100]	The Forest Service should use caution in applying IEEE standards to determine health risks and disclose how exposure limits were determined. [ID#102]	<p>The Navy used IEEE C95.1a-2010, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," as amended 16 March 2010 to make its determinations.</p> <p>The exposure limits are based on IEEE C95.1a-2010, which serves as a consensus federal standard developed by representatives of industry, government agencies, the scientific community and the public. In an abundance of caution, the Navy imposes an additional safety factor when calculating exposure limits, which results in an extension of the 32 ft. safety zone to 101 ft. The 101 ft. exclusion zone that the Navy has adopted incorporates an ultra-cautious standoff distance for people and animals to ensure that there is no chance of any living creature being placed in a hazardous condition or interfering with the operation of the transmitter. Industry and occupational safety and health standards for the mobile signal transmitters dictate a MPE distance of 32 ft. from the transmission source, if directly within the signal of the antenna. The Navy has extended this 32 ft. MPE distance out to 101 ft. as an extra protective zone. Established exclusion zones are based on maximum power output levels for the signal equipment, and it is expected that actual usage for transmissions will be well below the maximum settings. Nevertheless, the Navy will apply the 101 ft. exclusion zone in all directions from the antenna and will secure the source of the signal if people or animals loiter within this zone. Because training sites were selected to optimize signal transmission in the direction of the training aircraft (e.g., along ridgelines, hill tops, and cliff faces), the directional antennas of the mobile signal transmitters will be pointed away from areas of public accessibility, thus minimizing the potential for anyone to be directly in the path of the signal. Additionally, signals will be directed upward toward participating aircraft at relatively high altitudes and will not be pointed toward the ground. A vehicle or person temporarily moving through the 101 ft. zone will not require immediate shut down of the signal, but if a person loiters within this area and does not move on, a shutdown would be performed. It is not expected that animals will linger within the exclusion zone because of the human activity, but the same shutdown procedures will be applied to animals should they loiter in the exclusion zone. Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G, the Navy's Occupational Safety and Health Program Manual, and the Navy's Standard Operating Procedures for use of EW Range equipment that will protect the general public's health and safety as well as protection of wildlife.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#101]	The Forest Service should reassess the finding of no significant impact from radiation on humans because cited research uses a significantly lower frequency radiation than what is proposed by the Navy. [ID#108]	Because of the potential impacts from electromagnetic transmission, the Navy prepared a safety review for the equipment utilized under the Action Alternatives in the Navy EW-EA. Specific areas of consideration were HERP and HERF. The information in this report was used to determine safety radii around the mobile transmitters and is cited heavily throughout the Navy EW-EA, which concluded that the proposed action will not significantly impact people, animals, or the environment. The Navy performed the analysis utilizing appropriate scientific information as well as the maximum operational parameters to be conservative in the calculation of the exclusion zone. Further, the Navy applied an additional level of caution by extending the safety zone to 101 ft. in all directions around the antennae, which ensures that emitted transmission levels are well below potential impact levels. This exclusion zone (and associated shutdown procedures, if necessary) provides an additional safety area and further reduces the potential for impacts. Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G and the Navy's SOPs that will protect the general public's health and safety.
Concern [Seq#102]	The Forest Service should deny the Navy Permit. Because it would adversely affect the health of individuals that experience electromagnetic hypersensitivity [ID#107]	Because of the potential impacts from electromagnetic transmissions, the Navy prepared a safety review for the equipment utilized under the Action Alternatives in the Navy EW-EA. Specific areas of consideration were Hazards of Electromagnetic Radiation to Personnel (HERP) and Hazards of Electromagnetic Radiation to Fuel (HERF). The information in this report was used to determine safety radii around the mobile transmitters and is cited heavily throughout the Navy EW-EA, which concluded that the proposed action will not significantly impact people, animals, or the environment. Section 3.1.1.5 of the Navy's EW-EA sets forth the steps identified in OPNAVINST 5100.23G, the Navy's Occupational Safety and Health Program Manual and the Navy's Standard Operating Procedures for use of EW Range equipment that will protect the general public's health and safety as well as protection of wildlife. The USFS concluded that no additional analysis was required, based upon the studies in the Navy EW-EA and the safety precautions to be implemented by the Navy. Historical records indicate that over 97% of Navy flights occur at or above 10,000 ft. MSL. Per the Federal Aviation Administration, during one month of recording, in August of 2015, there were 3,922 flights which overflew the Olympic National Park, of those, 11% were military flights and almost all of these were NUW (NAS Whidbey Island) planes; the vast majority of flights (77%) which overfly the Park are air carrier jets, most of which are landing either at Sea-Tac or Vancouver, BC.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#103]	The Forest Service should analyze noise and vibration impacts to human health and safety. [ID#144]	<p>Noise and vibration impacts to human health and safety from operations as analyzed in the Navy EW-EA are not an issue because training is conducted between 10,000 and 35,000 ft. above mean sea level. The number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA for the last 37 years, and the flight altitudes at which this activity is currently conducted will not change. Additionally, noise from the ground vehicles was analyzed in the Navy EW-EA (Chapter 3.3, Noise) and was determined not to have any potential significant impact because the noise levels at 50 ft. (from the generators powering the vehicles during operations) would be at or near ambient noise levels, and the sound level at 100 ft. is estimated to be below the expected ambient noise level. Please see the Navy EW-EA Chapter 3.1 (Public Health and Safety) for additional analysis on effects to the public from the Navy's Proposed Action, as well as the 2010 Northwest Training Range Complex EIS/OEIS from which this EA was tiered.</p> <p>Additionally, in the Navy's Northwest Training and Testing EIS (October 2015), an airspace noise analysis for the Olympic Military Operations Areas was completed as Appendix J of the Final EIS.</p>
Concern [Seq#104]	The Forest Service should evaluate the potential risks to civilian life from plane crashes or subsequent release of toxic materials and fumes. [ID#133]	<p>The USFS Fire & Aviation Management operates within The National Cohesive Wildland Fire Management Strategy, to include provisions for managing human-caused ignitions, including aircraft accidents. As the number of flights is not expected to increase significantly, and the flight altitudes at which this activity is conducted is not planned to change, there is no expected change in risk from aircraft operations. Current USFS Fire and Aviation Management capabilities are detailed in the USFS <i>National Aviation Safety and Management System Guide</i>. The guide describes authority, roles, responsibilities, programs, and activities for the application, implementation, and maintenance of Aviation Safety Management System (SMS) in the USFS. Although this SMS primarily supports USFS aviation activities, most USFS aviation assets are former U.S. military aircraft that pose the same hazards as the proposed EW training activities. As such, the implemented system is sufficient to support the proposed EW training activities.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#105]	The Forest Service should disclose potential radiation effects to the operation of medical devices. [ID#54]	A medical device can be vulnerable to Electromagnetic Interference (EMI) if the levels of electromagnetic energy in its environment exceed the electromagnetic immunity (resistance) to which the device was designed and tested. Because the Navy has developed extremely conservative exclusive zones around the transmitter locations during operation, it is highly unlikely that the level of EMI would exceed the Electromagnetic (EM) immunity of the medical device. Further, the Navy follows Chief of Naval Operations Instruction (OPNAVINST) 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, of 21 July 2011 (hereinafter referred to as OPNAVINST 5100.23G) for its protection requirements and safety guidelines. OPNAVINST 5100.23G follows IEEE C95.1a-2010, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," as amended 16 March 2010, which further reduces the potential effects to medical devices.
Concern [Seq#106]	The Forest Service should deny the Navy Permit. Because proposed actions are not an appropriate use of public lands [ID#61]	Mobile transmitter trucks will use existing forest service roads and are of equivalent size and configuration to most USFS and public recreational vehicles that make up the bulk of traffic in the proposed forest areas. USFS assesses that the proposed activities are consistent with ongoing appropriate use of public land per 36 CFR 212.6(c).

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#107]	The Forest Service should conduct warfare exercises in a different location. [ID#13]	<p>The Northwest Training Range Complex has been used for several decades to conduct exercises and EW training. The Special Use Airspace in this area was established by the Federal Aviation Administration to support military training and use of the airspace is not projected to change with the proposed use of EW signal transmitters on the ground. The Navy EW-EA Proposed Action is to sustain and enhance the EW training that is currently being conducted by Navy aircraft using this existing airspace, to maximize the ability of local units to achieve their training requirements on local ranges, all while saving taxpayer dollars (approx. \$5M/year). Training on other Navy ranges outside of the Pacific Northwest does not meet the Purpose and Need of the Navy EW-EA. The sites on Forest Servicelands are needed due to several factors: 1) existing access (serviceable roads in remote and large expanses of Federal ownership); 2) locations are within the existing Military Operating Area airspaces; 3) Different elevations allow for testing at various times of the year without delays due to the weather; 4) Sites which allow unrestricted transmission sites with westerly exposure to best effect successful signal reception by aircraft; and 5) Sites allowing variations of angle-off for aircraft receiving signals. Additionally, the DoD has an existing agreement with USDA (USFS) which accommodates military activities and utilizing available Federal lands under existing Northwest Training Range Complex assigned airspace, allows local scheduling and control of training activities.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#108]	The Forest Service should require training to occur on existing military locations. [ID#90]	<p>The Northwest Training Range Complex Has been used for several decades to conduct exercises and EW training. The Northwest EW Range is intended to meet the basic training requirements for new aircrew going through the Fleet Replacement Squadron training syllabus. The Navy EW-EA Proposed Action is to sustain and enhance the level and type of EW training currently being conducted by Whidbey Island-based aircraft using the NWTRC, to provide the ability to better accommodate training requirements, and to maximize the ability of local units to achieve their training requirements on local ranges, all while saving taxpayer dollars (approx. \$5M/year). In addition, this reduces deployment away from home time for service members, reduces travel related costs and reduces the overall carbon footprint of Whidbey Island-based aircraft. Training on other Navy ranges outside of the Pacific Northwest does not meet the Purpose and Need of the Navy EW-EA.</p> <p>It should be noted that the Navy has established EW Range capabilities located across the nation. 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 USFS 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.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#109]	The Forest Service should require an analysis of whether there are other "suitable and available" sites for testing. [ID#63]	Please note that the Navy EW-EA does not discuss "electronic warfare testing," but is focused on electronic warfare training. Currently, the Navy does train on other established EW Ranges located across the nation. However, training on other ranges outside of the Pacific Northwest does not meet the Purpose and Need of the Navy EW-EA. The entirety of the Navy's Electronic Attack aircraft reside in the Pacific Northwest and the Northwest EW Range is intended to meet the basic training requirements for new aircrew going through the Fleet Replacement Squadron training syllabus. By providing this local capability, the Navy will be able to provide this needed training while saving taxpayer dollars (approx. \$5M/year). In addition, by training locally, aircrews will have to spend less time away from their home base, which will reduce their already high operational tempo and reduce the overall carbon footprint of Naval Air Station Whidbey Island-based aircraft.
Concern [Seq#110]	The Forest Service should deny the Navy Permit. Because it would set a precedent for additional military expansion on public lands [ID#62]	As described in the Navy EW-EA, mobile transmitter trucks will use existing USFS roads and are of equivalent size and configuration to most USFS and public recreational vehicles that make up the bulk of traffic in the proposed forest areas. The USFS assesses that the proposed activities are consistent with ongoing appropriate use of public land. The USFS does not believe that the operation of the mobile transmitters sets a precedent for additional military expansion on public lands. Any future expansion proposals would require subsequent NEPA and public review.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#111]	The Forest Service should assess impacts to current land uses in the Navy Permit project area. [ID#190]	As described in Table 3.0-1 of the Navy EW-EA, the Proposed Action would not change the manner of use or quality of land, land encroachments, or land forms and soil. Additionally, the Proposed Action would not change the intended use and purpose of existing National Forest System roads throughout the Study Area. The Proposed Action does not include construction on undeveloped lands or ground-disturbing activities over an undisturbed area. For this reason, the USFS does not believe it is necessary to further assess impacts to current land uses in the proposed project area.
Concern [Seq#112]	The Forest Service should deny the Navy Permit. Because it would degrade the character of the UNESCO World Heritage Site, International Biosphere Reserve, Marine Sanctuary, and other regional land designations [ID#77]	<p>The Navy's proposed action, as detailed in the Navy EW-EA and permit request, does not occur within the Olympic National Park and will have no impact on the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site, International Biosphere Reserve, or National Marine Sanctuary. Additionally, the USFS can find no indication the Navy's proposed action has the potential to degrade other regional land designations of degradation to other regional land designations. It should be noted that the number, duration, and frequency of aircraft flights in and around the Olympic Peninsula are not projected to increase significantly with the implementation of the proposed action. Aircraft flights in Northwest Special Use Airspace areas were addressed in the Navy's Northwest Training Range Complex EIS, completed in 2010, and were reanalyzed in the Northwest Training and Testing EIS, completed in October 2015. See Appendix K of the NWTT Final EIS for World Heritage Site Analysis. The Northwest Training and Testing EIS does not propose significant increases in numbers of flights and airspace parameters are not proposed to change from what has been in place for several decades. Though a small portion of the Olympic MOA Special Use Airspace overlays the Olympic National Park, Navy aircraft spend on average more than 97% of flight time at altitudes above 10,000 feet above mean sea level. Additionally, with the self-imposed limitations for on the ground activities of the mobile transmitters (driving on existing roads and parking on existing pull-outs), no degradation of National Forest qualities is anticipated or expected.</p> <p>Per the Federal Aviation Administration, during one month of recording, in August of 2015, there were 3,922 flights which overflew the Olympic National Park, of those, 11% were military flights and almost all of these were NUW (NAS Whidbey Island) planes; the vast majority of flights (77%) which overfly the Park are air carrier jets, most of which are landing either at Sea-Tac or Vancouver, BC.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#113]	The Forest Service should analyze project effects to the Olympic National Park and Lake Quinault. [ID#189]	The Navy, in the development of the Navy EW-EA, has complied with all of the obligations under NEPA, including analyzing the project's potential impacts to the Olympic National Park and Lake Quinault. As part of its review of the Navy EW-EA, the USFS also complies with all NEPA requirements and has found that No Significant Impacts will occur due to the proposed action. None of the sites included in the Special Use Permit request are within ONP or in close proximity to Lake Quinault; however the Navy analyzed potential impacts to ONP from aircraft training in Appendix K of the NWTT EIS.
Concern [Seq#114]	The Forest Service should address project interference with scientific research conducted by other entities [ID#101]	USFS is not aware of any ongoing scientific research that could be affected by the proposed action, nor are there any USFS research programs affected by the proposed action. It should be noted that the USFS's NEPA procedures ensure the public, including members of the scientific community, are given an opportunity to comment on proposed actions, and the USFS considers all comments and decisions are well documented and disclosed to the public.
Concern [Seq#115]	The Forest Service should deny the Navy Permit. Because the proposed project would degrade the peace and quiet of the region [ID#65]	<p>Noise from the ground vehicles was analyzed in the Navy EW-EA (Chapter 3.3, Noise) and was determined not to have any potential significant impact because the noise levels at 50 ft. (from the generators powering the vehicles during operations) would be at or near ambient noise levels, and the sound level at 100 ft. is estimated to be below the expected ambient noise level. Noise from air operations in the EW Range is not addressed in the EW-EA as air operations are addressed in the Northwest Training Range Complex EIS and Northwest Training and Testing EIS documents. The Northwest Training and Testing EIS specifically has an aircraft noise analysis in Appendix J. However, it should be noted that over 97% of Navy aircraft flight time occurs above 10,000 feet above mean sea level and the number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA for the last 38 years. Special Use Airspace flight altitudes and parameters at which training activities are currently conducted will not change.</p> <p>Per the Federal Aviation Administration, during one month of recording, in August of 2015, there were 3,922 flights which overflew the Olympic National Park, of those, 11% were military flights and almost all of these were NUW (NAS Whidbey Island) planes; the vast majority of flights (77%) which overfly the Park are air carrier jets, most of which are landing either at Sea-Tac or Vancouver, BC.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#116]	The Forest Service should deny the Navy Permit. Because the proposed project would increase aviation noise levels in the region [ID#4]	Noise from air operations in the EW Range is not addressed in the EW-EA as air operations are addressed in the Northwest Training Range Complex EIS/OEIS document, completed in 2010. However, the number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA for the last 37 years, and the flight altitudes at which this activity is currently conducted will not change. These flight numbers are currently being reassessed and reanalyzed in the ongoing Northwest Training and Testing EIS. The Northwest Training and Testing EIS 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, such as world events, deployment schedules for squadrons, budget allocations, and the cost of fuel. 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, which averages less than one additional flight per day. As the number of flights is not expected to increase significantly, and the flight altitudes at which this activity is conducted is not planned to change, there is no expected change in aircraft noise.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#117]	The Forest Service should analyze and disclose changes in noise level from aircraft activity. [ID#171]	<p>Noise from air operations in the EW Range is not addressed in the EW-EA as air operations are addressed in the Northwest Training Range Complex EIS/OEIS document, completed in 2010. However, the number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA for the last 37 years, and the flight altitudes at which this activity is currently conducted will not change.</p> <p>EW training is already being conducted in the various Special Use Airspace areas of the Northwest and constitutes less than half of the EA-18G events in the Olympic Military Operating Area.</p> <p>The number, duration, and frequency of aircraft flights in and around the Olympic Peninsula are not projected to increase significantly 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 Range Complex EIS, completed in 2010. These flight numbers were reassessed and reanalyzed in the Final Northwest Training and Testing EIS, completed in October 2015. Appendix J of the EIS provides an Airspace Noise Analysis addressing past and current aircraft types. The Navy 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, such as world events, deployment schedules for squadrons, budget allocations, and the cost of fuel. 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, which averages less than one additional flight per day. As the number of flights is not expected to increase significantly, and the flight altitudes at which this activity is conducted is not planned to change, there is no expected change in aircraft noise.</p>
Concern [Seq#118]	The Forest Service should re-analyze potential noise impacts to the soundscape of ONP using a lower ambient noise baseline. [ID#53]	<p>Please note that although the vehicle generators are designed to meet NPS standards, the equipment will not be operated within NPS and will not impact the Olympic National Park. As required by NEPA, impact analyses were conducted in the Navy EW-EA. Please see Chapter 3 (Affected Environment and Environmental Consequences) for each alternative; Chapter 4 addresses cumulative impacts. Section 3.2.4 of the Navy EW-EA (Environmental Consequences) addresses ambient noise on USFS land. The generators selected to power the mobile transmitters have specifications that state they meet NPS sound level requirements (60 dBA at 50 ft.) for National Park use. With muffling and attenuation factors, the sound level of this generator at 50 ft. is estimated at or near ambient noise levels and the sound level at 100 ft. is estimated to be below the expected ambient noise level (the Olympic National Forest programmatic biological assessment uses an estimated ambient level of 40 dBA for undisturbed forested areas).</p> <p>Per the Federal Aviation Administration, during one month of recording, in August of 2015, there were 3,922 flights which overflew the Olympic National Park, of those, 11% were military flights and almost all of these were NUW (NAS Whidbey Island) planes; the vast majority of flights (77%) which overfly the Park are air carrier jets, most of which are landing either at Sea-Tac or Vancouver, BC.</p> <p>Additionally, the Navy completed an Airspace Noise Analysis as Appendix J to the Northwest Training and Testing EIS. It should be noted that over 97% of Navy aircraft flight time occurs above 10,000 feet above mean sea level and the number of flights is not anticipated to increase significantly over what the</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
		<p>Navy has been flying in the Olympic MOA airspace for the last 38 years. Special Use Airspace flight altitudes and parameters at which training activities are currently conducted will not change.</p>
<p>Concern [Seq#120]</p>	<p>The Forest Service should not issue the Navy Permit. Because of potential impacts to quality of life [ID#7]</p>	<p>The USFS concurs with the extensive analysis undertaken by the Navy in the development of the Navy EW-EA, determining that the Proposed Action, to include the placement and use of the associated transmitters, will not harm people or animals, and therefore will not impact quality of life. The electromagnetic energy and frequencies transmitted from the transmitters are similar to those used in everyday civilian and residential applications, such as those for satellite communications, some Wi-Fi devices, wireless telephones, television news trucks, Bluetooth devices, and weather radar systems. As the number of flights is not expected to increase significantly, and the flight altitudes at which this activity is conducted is not planned to change, there is no expected added impact from aircraft operations. Mobile transmitter trucks will use existing forest service roads and present no new vehicle impact outside of current USFS and public use of existing roads, and the mobile transmitter sites are primarily located on "managed USFS Lands" that have been disturbed or logged. For comparison, people commonly use 60–100-watt light bulbs at home, and many commercial radio stations in the Puget Sound area have antenna power output levels of 100,000 watts or more.</p>

<p>Concern [Seq#122]</p>	<p>The Forest Service should analyze proposed project impacts to users' recreational experience. [ID#78]</p>	<p>As required by NEPA, impact analyses were conducted in the Navy EW-EA. Chapter 3 (Affected Environment and Environmental Consequences) of the Navy EW-EA addresses all aspects of the affected environment, to include recreational users. Navy's policy for use of mobile signal transmitter sites requested in the USFS Special Use Permit is to not utilize sites if others are present at those locations, so no impacts to recreational users is anticipated (see section 3.1.1.5 of EW-EA). As the number of flights is not expected to increase significantly, and the flight altitudes at which this activity is conducted is not planned to change, there is no expected added impact from aircraft operations. Mobile transmitter trucks will use existing forest service roads and present no new vehicle recreational impact outside of current Forest Service and public use of existing roads, and the mobile transmitter sites are primarily located on "managed USFS Lands" that have been disturbed or logged and are not prime recreational areas. Additionally, noise from the ground vehicles was analyzed in the Navy EW-EA (Chapter 3.3, Noise) and was determined to not to have any potential significant impact because the noise levels at 50 ft. (from the generators powering the vehicles during operations) would be at or near ambient noise levels, and the sound level at 100 feet is estimated to be below the expected ambient noise level. The USFS fully supports this thorough level NEPA-compliant analysis. The proposed action is not expected to significantly impact users' recreation experience.</p> <p>Per the Federal Aviation Administration, during one month of recording, in August of 2015, there were 3,922 flights which overflew the Olympic National Park, of those, 11% were military flights and almost all of these were NUW (NAS Whidbey Island) planes; the vast majority of flights (77%) which overfly the Park are air carrier jets, most of which are landing either at Sea-Tac or Vancouver, BC.</p> <p>Additionally, the Navy completed an Airspace Noise Analysis as Appendix J to the Northwest Training and Testing EIS. It should be noted that over 97% of Navy aircraft flight time occurs above 10,000 feet above mean sea level and the number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA airspace for the last 38 years. Special Use Airspace flight altitudes and parameters at which training activities are currently conducted will not change.</p>
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Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#123]	The Forest Service should disclose whether exercise dates would conflict with elk season. [ID#121]	Chapter 2 (Description of Proposed Action and Alternative) of the Navy EW-EA discusses that there are 260 flying days per year that the transmitters could be scheduled to support. These dates would most likely coincide with elk season, but no significant impact to elk hunting or other similar activities is expected, as the vehicles would remain on existing roads and pull-outs and applicable safety procedures have been thoroughly discussed in the Navy EW-EA. Navy has identified 12 different sites, so if some are limited because of hunting restriction or safety issues, that should not be an issue for the Navy. Additionally, most Navy training days are expected to occur on weekdays, and weekends are expected to have minimal Navy use for training events.
Concern [Seq#124]	The Forest Service should disclose what methods would be used to notify users of testing activities. [ID#79]	Please note that the Navy EW-EA does not discuss “electronic warfare testing,” but is focused on electronic warfare training. Chapter 2 (Description of Proposed Action and Alternative) of the Navy EW-EA provides an extensive description of both the nature of the training activities and the frequency of training operations. In every instance, the conduct of training support on USFS land will not cause an obstruction for other vehicles or ground disturbance. Once at the designated training location, but prior to commencing a training activity, the mobile transmitter crews will set up the safety zones, as applicable, to include warning tape and removable “Electromagnetic Radiation Hazard” signage, which would warn people to not linger inside the taped area. Given the conclusion in the EW-EA that there is no significant impact from the activities proposed, notification is unnecessary.
Concern [Seq#125]	The Forest Service should disclose operating procedures for ensuring that humans do not loiter during testing. [ID#183]	<p>Please note that the Navy EW-EA does not include “electronic warfare testing,” but is focused on electronic warfare training. The Navy follows OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, of 21 July 2011 (hereinafter referred to as OPNAVINST 5100.23G) for its electromagnetic protection requirements and safety guidelines. OPNAVINST 5100.23G follows the IEEE C95.1a-2010, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” as amended 16 March 2010, which further reduces the potential effects humans from electromagnetic transmissions.</p> <p>As described in section 3.1.1.5 of the Navy EW-EA, the mobile signal transmitters will have a two-person crew who will remain at the transmitter site for the duration of the training event. One person will operate the transmitter, and the other will observe the surrounding area for any people or animals that may come within 101 feet of the transmitter. If people or animals enter the 101 foot perimeter and remain in that area (loiter), the procedure will be to shut off the transmitter signal. Equipment operators will discuss the</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
		<p>procedure and explain the Navy’s activity to people who intend to remain within the safety area, and request that they move outside the area. If they refuse to leave, then the signal transmission will not be turned on until the area is clear, or the vehicle operators may choose to relocate to another site.</p> <p>Please note that the transmitter antenna is mounted 14 ft. above the ground on a parked vehicle and directed toward the receiving aircraft and not toward the surrounding area. If an animal or person is sighted within the exclusion zone of 101 ft., a shutdown can be initiated within a matter of seconds. Once a shutdown is initiated, the signal source is stopped within milliseconds of the power switch being secured, with no residual transmission of energy.</p> <p>The 101 ft. exclusion zone that the Navy has adopted incorporates an ultra-cautious standoff distance for people and animals to ensure that there is no chance of any living creature being placed in a hazardous condition or interfering with the operation of the transmitter. Industry and occupational safety and health standards for the mobile signal transmitters dictate a MPE distance of 32 ft. from the transmission source, if directly within the signal path of the antenna. The Navy has extended this 32 ft. MPE distance out to 101 ft. as an extra protective zone. Established exclusion zones are based on maximum power output levels for the signal equipment, and it is expected that actual usage for transmissions will be well below the maximum settings. Nevertheless, the Navy will apply the 101 ft. exclusion zone in all directions from the antenna and will secure the source of the signal if people or animals loiter within this zone. Because training sites were selected to optimize signal transmission in the direction of the training aircraft (e.g., along ridgelines, hill tops, and cliff faces), the directional antennas of the mobile signal transmitters will be pointed away from areas of public accessibility, thus minimizing the potential for anyone to be directly in the path of the signal.</p> <p>Additionally, signal s will be directed upward toward participating aircraft at relatively high altitudes and will not be pointed toward the ground. The angle of the antenna will vary based on the site used and aircraft location, but will not be oriented toward the ground, as the signal beam is relatively narrow and would not be detectable by the aircraft. Additionally, the sites were specifically chosen for terrain that allowed for open air signal projection without ground or tree canopy interference. A vehicle or person temporarily moving through the 101 ft. zone will not require immediate shut down of the signal, but if a person loiters within this area and does not move on, a shutdown would be performed. It is not expected that animals will linger within the exclusion zone because of the human activity, but the same shutdown procedures will be applied to animals should they loiter in the exclusion zone. Please not that “loitering” for the purposes of the EW-EA refers to a person or animal remaining in the area.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#126]	The Forest Service should evaluate potential project impacts to the surrounding communities. [ID#140]	<p>The extensive analysis undertaken by the Navy across all the resource areas identified in the Navy EW-EA determined that the proposed action will not harm people, animals, or the economy. The electronic energy and frequencies transmitted from the transmitters are similar to those used in everyday civilian and residential applications, such as those for satellite communications, some Wi-Fi devices, wireless telephones, television news trucks, Bluetooth devices, and weather radar systems. Neither the limited increase in the number of yearly flights or the operation of mobile transmitter trucks on existing USFS roads will impact the surrounding communities' quality of life..</p> <p>Per the Federal Aviation Administration, during one month of recording, in August of 2015, there were 3,922 flights which overflew the Olympic National Park, of those, 11% were military flights and almost all of these were NUW (NAS Whidbey Island) planes; the vast majority of flights (77%) which overfly the Park are air carrier jets, most of which are landing either at Sea-Tac or Vancouver, BC.</p> <p>For comparison, people commonly use 60–100-watt light bulbs at home, and many commercial radio stations in the Puget Sound area have antenna power output levels of 100,000 watts or more. Additionally, the Navy completed an Airspace Noise Analysis as Appendix J to the Northwest Training and Testing EIS. It should be noted that over 97% of Navy aircraft flight time occurs above 10,000 feet above mean sea level and the number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA airspace for the last 38 years. Special Use Airspace flight altitudes and parameters at which training activities are currently conducted will not change.</p>
Concern [Seq#127]	The Forest Service should analyze project impacts to tourism. [ID#15]	As described in Chapter 3.0 (Affected Environment and Environmental Consequences) of the Navy EW-EA, "The Proposed Action would not result in any negative impacts or additional burdens on the local economy, public services, or utilities", including impacts to tourism. Additionally, please note that the mobile transmitter sites are primarily located on "managed USFS Lands" that have been previously logged and treated.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#128]	The Forest Service should deny the Navy Permit. Because it would negatively impact the economy [ID#114]	As described in Chapter 3.0 (Affected Environment and Environmental Consequences) of the Navy EW-EA, "The Proposed Action would not result in any negative impacts or additional burdens on the local economy, public services, or utilities." Conducting EW training missions outside of the NWTRC increases aircrew time away from home and increases associated costs to the government. By providing this local capability, aircrews will have to spend less time away from home and will reduce the overall carbon footprint of Naval Air Station Whidbey Island based aircraft.
Concern [Seq#129]	The Forest Service should disclose potential project impacts to property values in the Navy Permit EA. [ID#91]	<p>As described in Chapter 3.0 (Affected Environment and Environmental Consequences) of the Navy EW-EA, "The Proposed Action would not result in any negative impacts or additional burdens on the local economy, public services, or utilities. Use of mobile transmitter vehicles will be completely unnoticeable by the public (1-3 pickup trucks used up to 260 days a year).</p> <p>Per the Federal Aviation Administration, during one month of recording, in August of 2015, there were 3,922 flights which overflew the Olympic National Park, of those, 11% were military flights and almost all of these were NUW (NAS Whidbey Island) planes; the vast majority of flights (77%) which overfly the Park are air carrier jets, most of which are landing either at Sea-Tac or Vancouver, BC.</p> <p>Airspace use has been occurring for over 40 years and flight hours are not proposed to change substantially (approximately 1 additional flight per day), so there's no reason to expect housing values to be negatively affected. Additionally, the Navy completed an Airspace Noise Analysis as Appendix J to the Northwest Training and Testing EIS. It should be noted that over 97% of Navy aircraft flight time occurs above 10,000 feet above mean sea level and the number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA airspace for the last 38 years. Special Use Airspace flight altitudes and parameters at which training activities are currently conducted will not change.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#130]	The Forest Service should deny the Navy Permit. Because of disproportionate impacts to the Quinault Indian Reservation and Colville Indian Reservation [ID#43]	The USFS can find no compelling evidence of potential disproportionate impacts to the Quinault Indian Reservation and Colville Indian Reservation. The analysis in the EW-EA concludes that there will be no significant impact from the proposed ground operations required to support EW training as detailed in the EW-EA. Please reference Appendix B (Regulatory Compliance Communications) of the NavyEW-EA for correspondence between the USFS, the Navy, and the regional tribes. Additionally, it should be noted that the associated training flights are conducted between 10,000 and 35,000 feet above mean sea level, which would not disproportionately impact any single area. The number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA for the last 37 years, and the flight altitudes at which this activity is currently conducted will not change. The Navy conducted formal Government to Government consultation with the Quinault Nation and responded to tribal staff questions from the Confederated Tribes of the Colville Reservation. That meeting and correspondence concluded with no objections to the Navy's proposed activities.
Concern [Seq#131]	The Forest Service should deny the Navy Permit. Because forest resources should be preserved for future generations [ID#48]	As described in Chapter 3.0 (Affected Environment and Environmental Consequences) of the Navy EW-EA, "The Proposed Action would not result in any negative impacts or additional burdens on the local economy, public services, or utilities." The extensive analysis undertaken by the Navy in the development of the Navy EW-EA determined that the Proposed Action will not harm people, animals, the environment, or the local economy in the Project Area. No Forest resources would be removed by the proposal.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#132]	The Forest Service should disclose potential radiation impacts to the operation of unshielded electronics such as computers, phones, televisions, and radios. [ID#55]	As described in Section 3.1.1.2 and 3.2.4.3.2, the Navy EW-EA, the frequency band that the mobile transmitters are capable of transmitting within is 4–8 GHz. While these bands represent the theoretical limits of the transmitters, the Navy obtains permission to use specific discreet frequencies within the band via a comprehensive spectrum approval process attained through the Navy Marine Spectrum Office and reviewed by the Federal Communications Commission, the Federal Aviation Administration, and the National Telecommunications and Information Administration to ensure no conflicts with existing licensed users. For comparison, people commonly use 60–100-watt light bulbs at home, and many commercial radio stations in the Puget Sound area have antenna power output levels of 100,000 watts or more.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#133]	The Forest Service should conduct a cost-benefit analysis that quantifies the project benefits versus the costs to the local economy and environment. [ID#125]	As described in Chapter 3.0 (Affected Environment and Environmental Consequences) of the Navy EW-EA, "The Proposed Action would not result in any negative impacts or additional burdens on the local economy, public services, or utilities". All action alternatives are developed to include project design criteria for resource protection of species and their habitat. The extensive analysis undertaken by the Navy in the development of the Navy EW-EA determined that the Proposed Action will not harm people, animals, the environment, or the local economy in the Project Area. By providing local training, aircrews will have to spend less time away from home and will reduce the overall carbon footprint of Naval Air Station Whidbey Island based aircraft.
Concern [Seq#134]	The Forest Service should evaluate impacts to transportation navigation aids [ID#119]	<p>There will not be any negative impacts to transportation navigation aids. The Navy follows OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, of 21 July 2011 (hereinafter referred to as OPNAVINST 5100.23G) for its electromagnetic transmission protection requirements and safety guidelines. OPNAVINST 5100.23G follows the IEEE C95.1a-2010, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," as amended 16 March 2010, which further reduces the potential effects humans from electromagnetic transmissions .</p> <p>The Navy obtains permission to use specific discreet frequencies via a comprehensive spectrum approval process attained through the Navy Marine Spectrum Office. The Federal Communications Commission, the Federal Aviation Administration, and the National Telecommunications and Information Administration review these frequency assignments to ensure no conflicts with existing licensed users. Because the mobile transmitter vehicles broadcast a signal skyward, aimed at the participating Navy aircraft to facilitate aircrew training, the USFS has evaluated that there are no impacts to transportation navigation aids.</p>
Concern [Seq#135]	The Forest Service should conduct a survey and thorough analysis of all project impacts to flora and fauna. [ID#185]	The extensive analysis undertaken by the Navy determined that implementation of the proposed action will not negatively impact the wilderness, nor will it harm people, animals, or the environment. In the Navy EW-EA, all action alternatives were developed to include project design criteria for resource protection which included protection of federally listed (ESA) species as well as sensitive species and their habitat. Effects to federally listed species and their habitat are part of the consultation process with the USFWS to ensure project compliance with the ESA. The electronic energy and frequencies

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
		<p>transmitted from the transmitters are similar to those used in everyday civilian and residential applications, such as those for satellite communications, some Wi-Fi devices, wireless telephones, television news trucks, Bluetooth devices and weather radar systems.</p> <p>Additionally, as stated in the Navy EW-EA, Section 3.2.3 (Affected Environment), with the exception of demolition/construction requirements to Building 104 on-board Navy-owned land at Naval Station Everett Annex Pacific Beach, the Navy's Proposed Action requires no physical alteration to the environment in any way, to include no tree cutting/removal, digging, construction, demolition, or utilization of currently undisturbed areas.</p>
Concern [Seq#139]	The Forest Service should disclose the location and amount of building, clearing, and use on old growth and forest reserve habitat. [ID#163]	There will be no burning, clearing or use of any old growth and forest reserve habitat in the Olympic National Forest. Vehicles with the mobile transmitters will be on only established roads within the USFS lands. As stated in the Navy EW-EA, Section 3.2.3 (Affected Environment), with the exception of demolition/construction requirements to Building 104 on-board Navy-owned land at Naval Station Everett Annex Pacific Beach, the Navy's Proposed Action requires no physical alteration to the environment in any way, to include no tree cutting/removal, digging, construction, demolition, or utilization of currently undisturbed areas. As such, the Proposed Action, as describe in the EA would not require additional or irreversible conversion of resource lands within the action area. Additionally, please note that the mobile transmitter sites are primarily in "managed USFS lands" that have been disturbed or logged and are not "old growth and forest reserve habitat" areas. Please see Chapter 1 (Proposed Action) and Chapter 2 (Description of the Proposed Action and Alternatives) of the Navy EW-EA for an extensive description of the project.
Concern [Seq#143]	The Forest Service should deny the Navy Permit. Because it will negatively impact wilderness [ID#29]	The extensive analysis undertaken by the Navy determined that implementation of the proposed action will not negatively impact the wilderness, nor will it harm people, animals, or the environment. As described and analyzed in the Navy training EW-EA, the Navy has concluded with a Finding of No Significant Impact and the USFS concurs. The electronic energy and frequencies transmitted from the transmitters are similar to those used in everyday civilian and residential applications, such as those for satellite communications, some Wi-Fi devices, wireless telephones, television news trucks, Bluetooth devices and weather radar systems. Additionally, as stated in the Navy EW-EA, Section 3.2.3 (Affected Environment), with the exception of demolition/construction requirements to Building 104 on-board Navy-owned land at Naval Station Everett Annex Pacific Beach, the Navy's Proposed Action requires no

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
		<p>physical alteration to the environment in any way, to include no tree cutting/removal, digging, construction, demolition, or utilization of currently undisturbed areas.</p> <p>Per the Federal Aviation Administration, during one month of recording, in August of 2015, there were 3,922 flights which overflew the Olympic National Park, of those, 11% were military flights and almost all of these were NUW (NAS Whidbey Island) planes; the vast majority of flights (77%) which overfly the Park are air carrier jets, most of which are landing either at Sea-Tac or Vancouver, BC.</p> <p>Additionally, the Navy completed an Airspace Noise Analysis as Appendix J to the Northwest Training and Testing EIS. It should be noted that over 97% of Navy aircraft flight time occurs above 10,000 feet above mean sea level and the number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA airspace for the last 38 years. Special Use Airspace flight altitudes and parameters at which training activities are currently conducted will not change.</p>
Concern [Seq#144]	The Forest Service should analyze project impacts to wilderness values in all affected Wilderness areas. [ID#34]	<p>The extensive analysis undertaken by the Navy determined that implementation of the proposed action will not negatively impact the wilderness, nor will it harm people, animals, the environment, or the wilderness value. As described and analyzed in the Navy EW-EA, the Navy has concluded with a FONSI and the USFS concurs. The electronic energy and frequencies transmitted from the transmitters are similar to those used in everyday civilian and residential applications, such as those for satellite communications, some Wi-Fi devices, wireless telephones, television news trucks, Bluetooth devices and weather radar systems.</p> <p>Per the Federal Aviation Administration, during one month of recording, in August of 2015, there were 3,922 flights which overflew the Olympic National Park, of those, 11% were military flights and almost all of these were NUW (NAS Whidbey Island) planes; the vast majority of flights (77%) which overfly the Park are air carrier jets, most of which are landing either at Sea-Tac or Vancouver, BC.</p> <p>Additionally, as stated in the Navy EW-EA, Section 3.2.3 (Affected Environment the Navy's Proposed Action requires no physical alteration to the environment in any way, to include no tree cutting/removal, digging, construction, demolition, or utilization of currently undisturbed areas.</p> <p>The Navy completed an Airspace Noise Analysis as Appendix J to the Northwest Training and Testing EIS. It should be noted that over 97% of Navy aircraft flight time occurs above 10,000 feet above mean sea level and the number of flights is not anticipated to increase significantly over what the Navy has been flying in the Olympic MOA airspace for the last 38 years. Special Use Airspace flight altitudes and parameters at which training activities are currently conducted will not change.</p>
Concern [Seq#150]	The Forest Service should provide for all forms of comment submission. [ID#150]	The USFS has complied with all of the obligations under NEPA in terms of receiving comments in all forms possible. Comments were accepted in the form of letters received and through the project website as well as oral and written comments that were submitted during public meetings.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#151]	The Forest Service should disclose what roads will be affected, how roads were selected, and what potential impacts to road conditions and maintenance may occur. [ID#151]	<p>The geographic coordinates of the training sites as well as the roads that will be used to access those sites are listed in Chapter 1, Table 1.3-1 of the Navy EW-EA. The main focus for selecting training sites was to select sites that were already available and that optimize signal transmission in the direction of the training aircraft (e.g., cleared of vegetation, along ridgelines, hill tops, and cliff faces. Based upon the concept of operations as described in the Navy EW-EA, if three vehicles were used at the maximum extent to support training operations, it would add up to an additional 780 trips a year to the roads in the study area. However, it is unlikely that these vehicles will make 780 total trips a year. The training event are expected to be dispersed among the 12 proposed sites, and it is expected that usually only two vehicles would be used on any individual training day. So on average, less than 50 trips per year are expected on each of the service roads proposed for use.</p> <p>Navy transmitter vehicles are a modified Ford 550 pickup truck with about 13,000 pounds total weight. These vehicles are consistent or smaller in size than many other user vehicles on these roads, so there are no anticipated additional or significant impacts to road conditions or additional maintenance anticipated due to proposed vehicle usage.</p>

<p>Concern [Seq#152]</p>	<p>The Forest Service should deny the Navy Permit. Because it will harm marine life [ID#97]</p>	<p>The radio wave frequency signals used by Navy transmitters will pose no hazard to wildlife, as animals would need to be in close proximity to signal antennas (closer than 32 feet), directly in line with the transmission, and remain there for an extended period (greater than 20 minutes) to be exposed to any measurable level energy. Considering the locations used for transmitter equipment, the duration of signals, the frequency band, and signal level output, there is no potential for exposure to either terrestrial or marine wildlife or people. Additionally, mobile signal transmitter sites are not near ocean areas and transmissions during training activities will not be directed toward land or water surfaces; therefore, no impacts to marine life is possible. As explained in the Navy EW-EA, training sites were selected to optimize signal transmission in the direction of the training aircraft (e.g., along ridgelines, hill tops, and cliff faces), and the directional antennas of the mobile signal transmitters will be directed upward toward participating aircraft at relatively high altitudes and will not be pointed toward the water surface. Based on the safety analysis conducted in the Navy EW-EA, transmissions will not be directed toward land or water surfaces; therefore, no impacts are anticipated.</p>
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Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#153]	The Forest Service should analyze project impacts to affected marine life and develop mitigation measures if emissions are aimed toward the ocean. [ID#160]	<p>The radio wave frequency signals used by Navy transmitters will pose no hazard to wildlife, as animals would need to be in close proximity to signal antennas (closer than 32 feet), directly in line with the transmission, and remain there for an extended period (greater than 20 minutes) to be exposed to any measurable level energy. Considering the locations used for transmitter equipment, the duration of signals, the frequency band, and signal level output, there is no potential for exposure to wildlife or people.</p> <p>As explained in the Navy EW-EA, mobile signal transmitter sites are not in proximity to ocean areas and were selected to optimize signal transmission in the direction of the training aircraft (e.g., along ridgelines, hill tops, and cliff faces), and the directional antennas of the mobile signal transmitters will be directed upward toward participating aircraft at relatively high altitudes and will not be pointed toward the water surface. Based on the safety analysis conducted in the Navy EW-EA, transmissions will not be directed toward land or water surfaces, and thus, no impacts to marine life is possible. Based on the analysis in the Navy EW-EA, additional safety precautions and mitigation measures are not warranted.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#154]	The Forest Service should not exclude amphibians and reptiles from analysis because they are likely to be present and could be affected by radiation. [ID#138]	The Navy EW-EA evaluated potential impacts of the transmitter's electromagnetic signals on ESA-listed wildlife species and non-federally listed wildlife species, as well as vegetation that could be in the study area (see the Navy EW-EA, Chapter 3.2, Biological Resources; Chapter 7, References; and Appendix A, List of Species Potentially Found in the Study Area). Amphibians and reptiles are specifically discussed in Section 3.2.3.2 (Amphibians and Reptiles and in section 3.2.4.3.2). As stated in the Navy EW-EA, the proposed activities will not occur on marshes or in meadows; therefore, it is highly unlikely that amphibians or reptiles would occur in the project. Furthermore, because the proposed activities would all occur on disturbed areas, it is unlikely that amphibians or reptiles would be present in the project area. Additionally, the Navy reviewed numerous references including studies on how electromagnetic fields can impact certain species. This analysis demonstrated the activity will not have a significant effect on people, animals or the environment. It should be pointed out that the electronic energy and frequencies transmitted from the transmitters are similar to those used in everyday civilian and residential applications, such as those for satellite communications, some Wi-Fi devices, wireless telephones, television news trucks, Bluetooth devices and weather radar systems. The extensive analysis undertaken by the Navy determined that implementation of the proposed action will not harm amphibians or reptiles.
Concern [Seq#155]	The Forest Service should provide additional impact analysis for sensitive species. [ID#100]	<p>Effects to Forest Service sensitive species and their habitat were included in the analyses – provide location in NEPA document. The electronic energy and frequencies transmitted from the transmitters are similar to those used in everyday civilian and residential applications, such as those for satellite communications, some Wi-Fi devices, wireless telephones, television news trucks, Bluetooth devices, and weather radar systems.</p> <p>The analysis by the Navy determined that the Proposed Action in the Navy EW-EA, to include placement and use of the associated transmitters, will not harm people or animals, to include the sensitive species (see Appendix A, List of Species Potentially Found in the Study Area, of the Navy EW-EA). Additionally, please see Appendix B (Regulatory Compliance Communications) for correspondence between the Navy and the USFWS.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#156]	The Forest Service should analyze potential radiation impacts to pollinators in compliance with the Presidential Memo to promote pollinator health. [ID#56]	<p>The Navy EW-EA evaluated potential impacts of the transmitter's electromagnetic signals on all ESA-listed birds, ESA-listed mammals, amphibians, reptiles, invertebrates, and other non-listed birds and mammals, as well as vegetation that could be in the study area (see the Navy EW-EA, Chapter 3.2, Biological Resources; Chapter 7, References; and Appendix A, List of Species Potentially Found in the Study Area). While pollinators are not specifically discussed in the Navy EW-EA, the proposed activities will not have a significant effect on animals or the environment, including pollinators and their habitat. Furthermore, because the proposed activities would all occur on disturbed areas, it is unlikely that pollinators or their associated habitats would be present in the project area.</p> <p>Additionally, President Obama signed a Presidential Memorandum, "Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators," on June 20, 2014. The memorandum established a task force of various federal agencies, including the U.S. Department of the Agriculture (USDA), and tasked this group to produce the "National Strategy to Promote the Health of Honey Bees and Other Pollinators," which was released on May 19, 2015. This document does not mention radiation as a potential stressor to pollinator health. However, the strategy document specifies requirements for the USDA facilities (including Forest Service) to review facilities management practices to increase pollinator habitat. The proposed action does not interfere with USDA commitments, as a member of the task force, to comply with the presidential memo. The strategy document is available online at: https://www.whitehouse.gov/sites/default/files/microsites/ostp/Pollinator%20Health%20Strategy%202015.pdf.</p>
Concern [Seq#157]	The Forest Service should address the potential for gene mutations and DNA fragmentation from electromagnetic radiation. [ID#157]	<p>It should be noted 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. As presented in Section 3.1 (Public Health and Safety) of the Navy EW-EA, there are no conclusive direct hazards to human tissue as a result of electromagnetic transmissions. Links to DNA fragmentation, leukemia, and cancer due to intermittent exposure to extremely high levels of electromagnetic transmissions are speculative; study data are inconsistent and insufficient at this time (Focke et al. 2009).</p> <p>Additionally, because the Navy has developed extremely conservative exclusion zones around the transmitter locations during operation, it is highly unlikely that at distances greater than the exclusion zone, the level of electromagnetic transmissions would cause gene mutations and DNA fragmentation. Further, the Navy follows OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, of 21 July 2011 (hereinafter referred to as OPNAVINST 5100.23G) for its electromagnetic transmission protection requirements and safety guidelines. OPNAVINST 5100.23G follows the IEEE C95.1a-2010, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," as amended 16 March 2010, which further reduces the potential effects humans from electromagnetic transmissions.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#158]	The Forest Service should deny the Navy Permit. Because it will harm threatened and endangered species [ID#25]	<p>Effects to federally listed species and their habitat are part of the consultation process with USFWS and NMFS to ensure project compliance with the ESA. The electronic energy and frequencies transmitted from the transmitters are similar to those used in everyday civilian and residential applications, such as those for satellite communications, some Wi-Fi devices, wireless telephones, television news trucks, Bluetooth devices, and weather radar systems.</p> <p>The analysis by the Navy determined that the Pacific Northwest Electronic Warfare Range, to include placement and use of the associated transmitters, will not harm people or animals, to include the threatened and endangered species (see Appendix A, List of Species Potentially Found in the Study Area, of the Navy EW-EA). Please see Appendix B (Regulatory Compliance Communications) for correspondence between the Navy and the USFWS.</p> <p>Additionally, in the Northwest Training Range Complex EIS, completed in 2010, and the Northwest Training and Testing EIS, Final EIS completed in October 2015, the Navy analyzed potential impacts to threatened and endanger species, and completed formal consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. Please refer to those documents for in depth effects analyses and consultation documentation. At the follow websites</p> <p>NWTT EIS (October 2015): www.NWTTEIS.com</p> <p>NWTRC EIS (September 2010):</p> <p>http://www.navfac.navy.mil/products_and_services/ev/products_and_services/environm_ental-planning/at_sea_compliance.html</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#159]	The Forest Service should revise the Navy Permit EA by confirming or adding to the list of wildlife species that are evaluated. [ID#177]	<p>The EA determined that the Pacific Northwest Electronic Warfare Range, to include placement and use of the associated transmitters, will not harm people or animals in the Project Area (see Appendix A, List of Species Potentially Found in the Subject Area, of the Navy EW-EA for a full list of species potentially occurring in the project area). Additionally, please see Appendix B (Regulatory Compliance Communications) for correspondence between the Navy and the USFWS.</p> <p>Additionally, in the Northwest Training Range Complex EIS, completed in 2010, and the Northwest Training and Testing EIS, Final EIS completed in October 2015, the Navy analyzed potential impacts to threatened and endangered species, and completed formal consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. Please refer to those documents for in depth effects analyses and consultation documentation. At the follow websites</p> <p>NWTT EIS (October 2015): www.NWTTEIS.com</p> <p>NWTRC EIS (September 2010):</p> <p>http://www.navfac.navy.mil/products_and_services/ev/products_and_services/environmental-planning/at_sea_compliance.html</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#161]	The Forest Service should provide additional information to inform the "may affect, not likely to adversely affect" determination for Northern Spotted Owl and Marbled Murrelet. [ID#175]	<p>For the following reasons, long-term consequences to individual marbled murrelets and northern spotted owls or populations are not expected to result from proposed training activities as described in the Navy EW-EA. As presented in Section 3.2.4.3 (Alternative 1) subsection "ESA-Listed Birds" of the Navy EW-EA, discussion of impacts to ESA species are discussed. The impact from signal transmission is expected to be minimal, short term, and recoverable based on: (1) the source of signal transmission does not expose wildlife species to constant electromagnetic transmission; in other words, no area of the project area is continuously saturated with electromagnetic fields because three of the transmitters are mobile, and the stationary transmitter is not constantly running; (2) signal transmissions (e.g., from EW training) may expose birds in flight to increased levels of electromagnetic transmissions; however, the birds in flight would be moving through the area and potentially out of the area of the main signal, once again keeping them from continuous or long-duration exposure (especially since non-soaring birds have relatively quick airspeeds); and (3) the signal pattern emitted is directional, which minimizes the area exposed.</p> <p>It should also be noted 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.</p> <p>Additionally, in the Northwest Training Range Complex EIS, completed in 2010, and the Northwest Training and Testing EIS, Final EIS completed in October 2015, the Navy analyzed potential impacts to threatened and endanger species, and completed formal consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. Please refer to those documents for in depth effects analyses and consultation documentation. At the follow websites</p> <p>NWTT EIS (October 2015): www.NWTTEIS.com</p> <p>NWTRC EIS (September 2010):</p> <p>http://www.navfac.navy.mil/products_and_services/ev/products_and_services/environmental-planning/at_sea_compliance.html</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#162]	The Forest Service should further evaluate radiation exposure to listed bird species due to the location or timing of testing near known nest sites. [ID#176]	<p>There are no known nesting sites that will be impacted by the mobile transmitters driving on logging or paved roads in the action area, and murrelets are unlikely to create nests near these sites because these areas are already cleared and murrelets prefer heavy canopy areas for nesting. Furthermore, 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.</p> <p>The radio wave frequency signals used by Navy transmitters will pose no hazard to wildlife, as animals would need to be in close proximity to signal antennas (closer than 32 feet), directly in line with the transmission, and remain there for an extended period (greater than 20 minutes) to be exposed to any measurable level energy. Considering the locations used for transmitter equipment, the duration of signals, the frequency band, and signal level output, there is no potential for exposure to wildlife.</p>
Concern [Seq#163]	The Forest Service should disclose the presence of other ESA-listed species in the project area. [ID#174]	<p>All action alternatives are developed to include project design criteria for resource protection, which includes protection of federally listed (ESA) species and their habitat. Effects to federally listed species and their habitat are part of the consultation process with the USFWS to ensure project compliance with the ESA. All ESA-listed species that could occur in the project area are addressed in the EA. The extensive analysis undertaken by the Navy determined that the Proposed Action in the Navy EW-EA, to include placement and use of the associated transmitters, will not harm people or animals in the Project Area (see Appendix A, List of Species Potentially Found in the Study Area, of the Navy EW-EA). Additionally, please see Appendix B (Regulatory Compliance Communications) for correspondence between the Navy and the USFWS.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#164]	The Forest Service should analyze potential shocks and burns to wildlife from contact with electromagnetically charged materials. [ID#98]	<p>The radio wave frequency signals used by Navy transmitters will pose no hazard to wildlife, as animals would need to be in close proximity to signal antennas (closer than 32 feet), directly in line with the transmission, and remain there for an extended period (greater than 20 minutes) to be exposed to any measurable level energy. Considering the locations used for transmitter equipment, the duration of signals, the frequency band, and signal level output, there is no potential for exposure to wildlife or people.</p> <p>Additionally, the mobile signal transmitters will have a two-person crew who will remain at the transmitter site for the duration of the training event (See Section 3.2.4.3.2, 3.1.1 and 3.1.2 and chapter 7, Section 3.2 of Navy EW-EA). One person will operate the transmitter, and the other will observe the surrounding area for any people or animals that may come within 101 ft. of the transmitter antenna. If an animal or person is sighted within the exclusion zone of 101 ft., a shutdown can be initiated within a matter of seconds. Once a shutdown is initiated, the signal source is stopped within milliseconds of the power switch being secured, with no residual transmission of energy. While there is a potential Radio Frequency (RF) shock/burn hazard if something inadvertently comes into direct contact with an antenna's radiating element, the radiating elements are placed above ground level (approximately 14 ft. for the mobile transmitters) and continually move in a sweeping motion during operation, which reduces the possibility of a bird landing on the radiating element.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#165]	The Forest Service should analyze the effects of radiation on wildlife. [ID#33]	<p>The radio wave signals used by Navy transmitters are not a form of ionizing radiation and will pose no hazard to wildlife, as animals would need to be in close proximity to signal antennas (closer than 32 feet), directly in line with the transmission, and remain there for an extended period (greater than 20 minutes) to be exposed to any measurable level energy. Considering the locations used for transmitter equipment, the duration of signals, the frequency band, and signal level output, there is no potential for exposure to wildlife or people.</p> <p>The Navy EW-EA evaluated potential impacts of the transmitter's electromagnetic signals on all ESA-listed and non-federally listed species as well as vegetation that could be in the study area (see EW-EA, Chapter 3.2, Biological Resources; Chapter 7, References; and Appendix A, List of Species Potentially Found in the Study Area). Therefore, further analysis by the Forest Service is not necessary. The Navy reviewed numerous references, including studies on how electromagnetic fields can impact certain species. Section 3.1.2 which references OPNAVINST 5100.23G and the E3 safety, indicated that the activity will not have a significant effect on people, animals or the environment. Any impact to wildlife from electromagnetic transmission is expected to be minimal, short term, and recoverable based on reasons stated in the analysis of the EW-EA (Chapter 3.2, Biological Resources). Additionally, the radiating elements are placed above ground and atop parked vehicles at a level (14 ft. for the mobile transmitters), which eliminates the risk potential for any terrestrial wildlife. Furthermore, 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.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#166]	The Forest Service should analyze non-thermal radiation impacts to migratory birds. [ID#139]	<p>The radio wave frequency signals used by Navy transmitters will pose no hazard to wildlife, as animals would need to be in close proximity to signal antennas (closer than 32 feet), directly in line with the transmission, and remain there for an extended period (greater than 20 minutes) to be exposed to any measurable level energy. Considering the locations used for transmitter equipment, the duration of signals, the frequency band, and signal level output, there is no potential for exposure to wildlife or people. Specifically, the sites proposed to be used for the mobile transmitters are in clearings and open areas on existing logging roads. Signals use low power output (between 100-300 watts) and are intermittent, with transmissions being turned on and off. Other electromagnetic signal equipment in these same areas use similar frequencies bands, but use signals of much greater strength with continuous outputs operating 24 hours a day, 365 days a year. This includes numerous cell phone towers, radio antennas and radar sites. There are no documented effects from these much more significant signal sources on wildlife or birds. Additionally, Navy systems will be monitored while in use, and will have additional precautionary procedures in place, requiring signal shut down if people or wildlife persist in the immediate area of the equipment. As presented in Chapter 3.2 (Biological Resources) of the Navy EW-EA, migratory birds in flight would be moving through the area utilizing directed flight. With this behavior, the length of time a migratory bird would be exposed to the directional signal from the transmitter would last seconds, if not milliseconds, as the flying bird passes through the signal area. Migratory birds roosting at night would not be exposed to any potential signals as the transmitters are only to be operated during daylight hours.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#167]	The Forest Service should deny the Navy Permit. Because birds and other flying species will fly through the radiation path while other canopy and nocturnal species could experience longer exposure. [ID#134]	<p>Flying through the radio wave signals used by Navy transmitters will pose no hazard to birds or any wildlife, as animals would need to be in close proximity to signal antennas (closer than 32 feet), directly in line with the transmission, and remain there for an extended period (greater than 20 minutes) to be exposed to any measurable level energy. Considering the locations used for transmitter equipment, the duration of signals, the frequency band, and signal level output, there is no potential for exposure to wildlife or people.</p> <p>As presented in Chapter 3.2 (Biological Resources) of the Navy EW-EA, migratory birds in flight would be moving through the area utilizing directed flight. With this behavior, the length of time a migratory bird would be exposed to the electromagnetic signal from the transmitter would last seconds, if not milliseconds, as the flying bird enters, and then just as quickly passes through the signal width. Migratory birds roosting at night would not be exposed to electromagnetic signals, as the transmitters are only operated during daylight hours. Since the signal is directional and focused, birds in flight would move through the electromagnetic signal quickly, once again keeping them from continuous or long-duration exposure (especially since non-soaring birds have relatively quick airspeeds).</p> <p>The Navy selected locations for the mobile transmitters (e.g., along open ridgelines, hill tops, and cliff faces) to optimize signal transmission in the direction of the training aircraft. The directional antennas of the mobile signal transmitters will point up and away from tree lines or tree canopies, thus minimizing the potential to canopy species, or birds that are utilizing the canopy for resting.</p> <p>Other electromagnetic signal equipment in these same areas use similar frequencies bands, but use signals of much greater strength with continuous outputs operating 24 hours a day, 365 days a year. This includes numerous cell phone towers, radio antennas and radar sites. There are no documented effects from these much more significant signal sources on wildlife or birds. Additionally, Navy systems will be monitored while in use (other signal sources do not), and will have additional precautionary procedures in place, requiring signal shut down if people or wildlife persist in the immediate area of the equipment.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#168]	The Forest Service should reassess the feasibility of proposed precautions to shut down emitters when humans and animals are present and provide a detailed plan. [ID#32]	<p>Other electromagnetic signal equipment in these same areas use similar frequencies bands, but use signals of much greater strength with continuous outputs operating 24 hours a day, 365 days a year. This includes numerous cell phone towers, radio antennas and radar sites. Despite there being no shut down procedures in place for these other signal transmissions; there are no documented effects from these much more significant signal sources on wildlife or people.</p> <p>The USFS believes that the Navy's additional safety measure in their proposed shut down plan, as discussed in the Navy EW-EA, is both feasible and detailed and does not require a reassessment. As discussed in the Navy EW-EA, the mobile signal transmitters will have a two-person crew who will remain in the parked vehicles on which the transmitter is located for the duration of the training event. One person will operate the transmitter, and the other will observe the surrounding area for any people or animals that may come within 101 ft. of the transmitter. Please note that the transmitter antenna is mounted 14 ft. above the ground and directed toward the receiving aircraft.</p> <p>If an animal or person is sighted within the exclusion zone of 101 feet, a shutdown can be initiated within a matter of seconds. Once a shutdown is initiated, the signal source is stopped within milliseconds of the power switch being secured, with no residual transmission of energy.</p> <p>The 101 ft. exclusion zone that the Navy has adopted incorporates an ultra-cautious standoff distance for people and animals to ensure that there is no chance of any living creature being placed in a hazardous condition or interfering with the operation of the transmitter. Industry and occupational safety and health standards for the mobile signal transmitters dictate a maximum permissible exposure distance of 32 ft. from the transmission source, if directly within the signal path of the antenna. The Navy has extended this 32 ft. MPE distance out to 101 ft. as an extra protective zone. Established exclusion zones are based on maximum power output levels for the signal equipment, and it is expected that actual usage for transmissions will be well below the maximum settings. Nevertheless, the Navy will apply the 101 ft. exclusion zone in all directions from the antenna and will secure the source of the signal if people or animals loiter within this zone. Because training sites were selected to optimize signal transmission in the direction of the training aircraft (e.g., along ridgelines, hill tops, and cliff faces), the directional antennas of the mobile signal transmitters will be pointed away from areas of public accessibility, thus minimizing the potential for anyone to be directly in the path of the signal.</p> <p>Additionally, mobile transmitters will direct signal s upward toward participating aircraft at high altitudes and will not point toward the ground. A vehicle or person temporarily moving through the 101 ft. zone will not require immediate shut down of the signal, but if a person loiters within this area and does not move on, a shutdown will occur. It is not expected that animals will linger within the exclusion zone because of the human activity, but the same shutdown procedures will be applied to animals should they loiter in the exclusion zone.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#169]	The Forest Service should implement public recommendations for mitigation to protect wildlife from skyward-aimed emitters. [ID#136]	<p>The radio wave frequency signals used by Navy transmitters will pose no hazard to wildlife, as animals would need to be in close proximity to signal antennas (closer than 32 feet), directly in line with the transmission, and remain there for an extended period (greater than 20 minutes) to be exposed to any measurable level energy. Considering the locations used for transmitter equipment, the duration of signals, the frequency band, and signal level output, there is no potential for exposure to wildlife or people. Navy signal equipment use low power output (between 100-300 watts) and are intermittent, with transmissions being turned on and off. Other electromagnetic signal equipment in these same areas use similar frequencies bands, but use signals of much greater strength with continuous outputs operating 24 hours a day, 365 days a year. This includes numerous cell phone towers, radio antennas and radar sites. There are no documented effects from these much more significant signal sources on wildlife or birds. Additionally, Navy systems will be monitored while in use, and will have additional precautionary procedures in place, requiring signal shut down if people or wildlife persist in the immediate area of the equipment.</p> <p>The Forest Service finds no additional mitigation warranted. The Navy EW-EA evaluated potential impacts of the transmitter's electromagnetic signals on all ESA-listed and non-federally listed species, as well as vegetation, that could be in the study area (see EA, Chapter 3.2, Biological Resources; Chapter 7, References; and Appendix A, List of Species Potentially Found in the Study Area). The Navy reviewed numerous references, including studies on how electromagnetic fields can impact certain species. This analysis indicated that the activity will not have a significant effect on people, animals, or the environment. Any impacts from electromagnetic transmissions are expected to be minimal, shortterm, and recoverable based on reasons stated in the analysis of the EW-EA (Chapter 3.2, Biological Resources).</p> <p>The mobile signal transmitters will have a two-person crew who will remain at the transmitter site for the duration of the training event. One person will operate the transmitter, and the other will observe the surrounding area for any people or animals that may come within 101 ft. of the transmitter. If an animal or person is sighted and determined to be remaining within the exclusion zone of 101 ft., a shutdown can be initiated within a matter of seconds. Once a shutdown is initiated, the signal source is stopped within milliseconds of the power switch being secured, with no residual transmission of energy. Please note that the transmitter is mounted 14 feet above the ground and directed toward the receiving aircraft.</p> <p>It should be noted that these frequencies are within the radio wave part of the electromagnetic spectrum and are similar to frequencies used in existing public equipment, such as cordless phones, Wi-Fi, and Bluetooth devices. As these systems are completely similar to existing Forest Service, private, and commercial systems, the Forest Service has evaluated that there are no impacts to wildlife from skyward-aimed transmitters; thus, additional mitigation measures to protect wildlife are not warranted or required.</p>

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#171]	The Forest Service should require a new aviation noise assessment to accurately predict impacts to endangered species, including the Northern Spotted Owl. [ID#111]	<p>EW training and EW Range enhancements were analyzed in the Navy's NWTRC EIS/OEIS, completed in 2010. When more information became available on mobile and fixed signal transmitters for the EW Range, the Navy prepared the EW Range EA to analyze the placement and operation of those transmitters. The potential impacts of aviation noise were assessed in the 2010 NWTRC EIS/OEIS. The number of aircraft overflights is not anticipated to increase significantly as a result of land-based enhancements; however, EW training requirements are being assessed in the ongoing Northwest Training and Testing EIS/OEIS. Please note that noise from the proposed action was analyzed in the Navy EW-EA (Chapter 3.3, Noise) and was determined not to have any potential significant impact. Additionally, please see Chapter 3.2 (Biological Resources) of the Navy EW-EA for the analysis and effects determinations on endangered species, including the Northern Spotted Owl.</p> <p>Navy training flights were reassessed and reanalyzed in the Navy's Northwest Training and Testing Final EIS (October 2015) and includes an airspace noise analysis for the Olympic Military Operations Areas (Appendix J). Information on the Northwest Training and Testing EIS can be found at www.NW.TTEIS.com. The generators selected to power the mobile emitters have specifications that meet National Park Service sound level requirements (60 dBA at 50 ft.) for National Park use, though they will not be utilized within the National Park. Additionally the generators will be encased in steel and have mufflers on the exhaust, both of which offer an increased level of sound attenuation and are being utilized to create a corresponding drop in noise levels to approximately 42 dBA at 50 ft. These provisions achieve a noise reduction level far below most unmuffled portable generators or generators used in private recreational vehicles.</p>
Concern [Seq#172]	The Forest Service should deny the Navy Permit because the Organic Act does not authorize military training as a permissible use [ID#172]	The USFS Organic Administration Act of 1897 provides that: "No national forest shall be established, except to improve and protect the forest within the boundaries, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States." The Navy EW-EA's proposed action does not restrict or affect the Forest Service in implementing its mission of stewardship of the nation's national forests. The Navy EW-EA analyzed impacts to other resources such as public health and safety, biological resources, noise, air quality, and visual resources. The analysis shows that there will be no significant impact to these resources. Finally, the Proposed Action of the Navy EW-EA is in compliance with the Master Agreement Concerning The Use of National Forest System Lands for Military Activity, Signed by the Secretary of Defense (22 September 1988) and the Secretary of Agriculture (30 September 1988).
Concern [Seq#174]	The Forest Service should not use the letter by Engels et al., in Nature, to claim that migratory bird navigation would be affected by EM radiation. [ID#193]	The Navy EW-EA does not include reference to the letter published by Engels et al. in 2014 Nature.

Concern Sequence #	Summarized Comment/Concern	Forest Service Response
Concern [Seq#174]	The Forest Service should analyze project impacts to wildlife movement, nesting, breeding, and foraging behavior. [ID#135]	The Navy EW-EA evaluated potential impacts of the transmitter's signals on all ESA-listed species, and other non-federally listed animals, as well as vegetation that could be used as habitat in the study area (see the Navy EW-EA, Chapter 3.2, Biological Resources; Chapter 7, References; and Appendix A, List of Species Potentially Found in the Study Area). The Navy reviewed numerous references including studies on how electromagnetic fields can impact certain species. This analysis demonstrated the activity will not have a significant effect on people, animals, or the environment. The Navy has decades of experience building and operating signal equipment, with no adverse effects to people, animals, or the environment. By way of example, a fixed transmitter facility (with properties similar to that proposed for use in the Navy EW-EA) located on Navy property on NAS Whidbey Island has been in place for 32 years without any documented adverse effects to people, wildlife, or the environment.