



October 3, 2017

Naval Facilities Engineering Command Northwest  
Attention: NWTT Supplemental EIS/OEIS Project Manager  
3730 North Charles Porter Ave., Building 385  
Oak Harbor, WA 98278-3500

Dear Sirs and Madams:

Thank you for the opportunity to comment on the scoping for a Supplementary EIS on Northwest Training and Testing. We understand that the SEIS will include the two Olympic A & B MOAs, and that the SEIS will re-analyze the potential effects from Navy aircraft activities, including noise. We commend the Navy for the extension of the comment period, and for the public process. Following are our comments.

**1. Requesting extension:** For the following reasons, we are requesting an extension of the comment period beyond the current deadline of Oct. 6th. First, the public's access to information and opportunity to comment on the October 2015 Final EIS for Northwest Training and Testing, for which this will add supplemental activity, was inappropriately limited by three factors:

- a. The Navy allowed only a 30-day "Review Period," not a public comment period, and provided no addresses or web sites where the public could send comments;
- b. ESA Section 7 consultations with NOAA and the Fish and Wildlife Service were incomplete and unavailable until after this 30-day review period closed, giving the public no opportunity to read them and comment on decisions made in these documents that pertained to the proposed action;
- c. The consultation with the State of Washington on historic and cultural sites was incomplete and unavailable until after the 30-day review period closed, giving the public and affected Tribes inadequate or no opportunity for input under the National Historic Preservation Act.

Therefore, the Navy inappropriately precluded public comment on a Final EIS for Northwest Training and Testing, in which substantive changes had been made

from the previous version and for which no required consultations were completed.

Second, the Navy is holding no public meetings for this new scoping process, as they have done for previous ones. This further limits the public's ability to understand and participate. As a result, comments on significant changes reflected in this SEIS as compared to previous actions in the October 2015 FEIS, which precluded public comment, are limited as well. Public meetings provide some limited opportunity to engage representatives and experts from the project and contribute to the public's understanding of the project. Without this important access to information, the public is not provided sufficient opportunity to ask questions, clarify the information, and share substantive and procedural public concerns.

Navy NEPA regulations as issued in OPNAVINST 5090.1B5 state:

Involve interested and affected agencies, governments, organizations and individuals early in the agency planning and decision making process when significant impacts are or may be expected to the quality of the human environment from implementation of proposed major Federal actions; and

Conduct and document environmental reviews and related decisions appropriately and efficiently.

**Therefore, we request the following:**

**a. that this initial SEIS public comment period be extended to the maximum allowable time under NEPA, in order to allow the public to realize the comment period is open and to better understand the full scope of the proposed action; and**

**b. that public meetings also be held with time for Q and A, and airing concerns.**

**c. We also request that the public be allowed to comment on each stage of the process as per NEPA, including on all subsequent EIS documents; and**

**d. that all required consultations with agencies be completed timely in order to facilitate public access to those documents prior to or early in the normal comment periods; and**

**e. that these comment periods allow enough reasonable time for interested parties to read, digest and prepare comments on the Navy's proposed action and supporting materials.**

**2. Growler impacts analysis must include all Growlers, not just a subset:** As we previously brought to your attention in our letter of February 23, 2017 commenting on the Draft Environmental Impact Statement for the addition of 36 EA-18G “Growler” aircraft to the fleet at Whidbey Island, that document analyzed less than 50% of the potential impact from the most recent additions to the Growler fleet, due to the fact that an extra 40 Growlers in the process of purchase and delivery were not included in the DEIS. We reiterate that it is illegal to irretrievably commit funding to a project before completion of the public NEPA process.

Further, impacts from the 82 Growlers already stationed at Whidbey were not included. Therefore, the DEIS’s analysis was severely deficient in omitting impacts from 122 out of 157 Growlers, both purchased and committed funding. As a result, cumulative impacts and other analyses were also inadequate throughout this SEIS. These impacts include not just aircraft noise but also air quality, water and soil contamination from increased use of supporting technologies such as firefighting foam, increased risk from aircraft crashes and fuel dumping, increased use of/pollution from aircraft-launched chaff, flares, sonobuoys and other expendable devices, contributions to climate change, direct and indirect effects on domestic animals and wildlife, including endangered species, community economic and health effects, interference with local emergency communications, and other impacts analyses as required in NEPA procedures. Therefore, we request that the SEIS address impacts from all Growler operations from Whidbey Island. We understand Growlers to number, currently or in the near future, between 157 and 160.

The scope of impacts needs clarification for the public to comment because of conflicting statements. For example: the news release on the issuance of the permit for electronic warfare on national forest roads said, “Approval of this special use permit would not increase the number of training flights by more than 10 percent, or one additional flight per day, from what the Navy is currently conducting.” Yet according to the Growler DEIS, electronic warfare operations are to increase by 72 percent, while the overall number of flights from Whidbey are to increase 47 percent, to 130,000; 79,000 of these will be Growler flights. If the main purpose of a Growler is electronic warfare, and the purpose of training in the MOAs is for aircrews to learn to conduct electronic support and electronic warfare, then is it possible to nearly double the number of Growlers at Whidbey in a few years (from 82 to 157) and increase electronic warfare training by only one flight, or ten percent? The NWTT DEIS also showed a significant rise in aerial combat maneuvers to 550 hours, which is a 244% increase. These figures conflict with recent statements about incremental increases.

**Therefore, we request the Navy clarify this discrepancy and adjust the impacts analyses accordingly, and extend the comment period to include**

**updated information and an adequate time to analyze the data and comment.**

Because the Growler DEIS analysis confined itself to Growler impacts located a short distance from Naval Air Station Whidbey Island's runways, and because large numbers of other aircraft are being/have been moved to Naval Air Station Whidbey Island and will be operating in NWTT and over the MOAs, we also ask that the SEIS analyze impacts from all aircraft operations related to electronic warfare and to aircraft activities in the Northwest Training and Testing Range.

**Therefore, a cumulative accounting of impacts is required to inform the public, especially potentially impacted communities who will be affected by noise and air pollutants, as well as documenting impacts to wildlife and habitat in these same areas. This analysis should include not only the MOAs but also the impacted portions of Washington's mountains and coastline over which Growlers fly, including Tribal lands.**

**Because these aircraft overfly residential communities while enroute to the MOAs, and because many complaints about noise have come from these communities, we further ask that the analysis also include those overflight areas and not limit itself to the MOAs, which are largely located over a national park and a national forest.**

By considering only impacts to seasonally inhabited public lands and omitting densely populated year-round communities and Tribal lands, and by omitting analysis of impacts to lands and waters where Usual and Accustomed harvests are gathered, an analysis of noise impacts would not only reflect a skewed picture but would violate NEPA §1508.25 if it failed to consider the wider area of functionally related impacts caused by naval flight operations.

**3. Noise impact analysis methodology needs updating:** We appreciate and commend the Navy's decision to conduct an analysis of noise and other impacts from aircraft operations over the Olympic Peninsula. However, we are concerned about the inadequacy of some aspects of methodology that the Navy has been using in its noise impacts analyses. For example, use of the annual Day-Night Noise Level (DNL) to establish projected noise levels does not take into account the signature low frequency noise made by Growlers. If the SEIS analysis averages peak noise events over 365 days, including averaging in quiet periods, to get the 65-dB (decibel) average level, then it would incorporate scientifically invalid, outdated, and misleading DNL threshold data for high noise annoyance and would not be credible. Failure to upgrade outdated methodology violates NEPA §1508.23, which says that effects must be meaningfully evaluated. Additionally, by failing to offer the public a reasonable alternative that would reduce noise levels, the Navy violates NEPA §1506.1.

The Growler DEIS used an outdated noise simulation model. A DOD commissioned study found that the model is not appropriate for Growler engines. To quote it, aircraft noise levels represented in the DEIS analysis are, “generated by a computer model and not actual noise measurements at Ault Field or OLF Coupeville.” The modeling was done using software called NOISEMAP. It was developed in the 1970s. Version 7.2, used in the Growler DEIS, was used for studies completed 12 years ago. A Department of Defense Strategic Environmental Research and Development Program determined that new software was needed “...to provide legally defensible noise assessments of current and future aircraft operations.” The final report found that NOISEMAP’s linear acoustics were inadequate for modeling the acoustic environments in the vicinity of higher thrust engines used in the Growler, stating, “Moreover, the segmented flight path modeling approach typical of integrated noise models do not properly account for the complex operational and noise characteristics of the new aircraft.”

In 2010 a new noise model, the Advanced Acoustic Model (AAM), was developed under DOD contract to address these shortcomings. But the Navy’s continued use of the outdated NOISEMAP has rendered current noise analyses scientifically inaccurate, invalid, and potentially legally indefensible with respect to the requirements of the National Environmental Policy Act (NEPA). NOISEMAP data analysis does not meet required “Best Available Science” standard under NEPA. Even if NOISEMAP modeling was scientifically sound for these newer jets, the quality of data used as inputs into the model would still be questionable. It is unclear what kind of empirical noise data were used as a basis for noise simulation. The only mention found in the 1400 page Growler DEIS was that the computer model draws from “a library of actual noise measurements” with no details provided. Without data transparency, it is impossible to assess if the empirical noise data used in noise simulation is scientifically defensible.

The Naval Research Advisory Committee (NRAC) issued a report on jet noise and found that “...the Air Force maintains the only known acoustic database for tactical aircraft.” NRAC’s findings highlighted the Navy’s lack of empirical jet noise data measurements, lack of consistent measurement methodology and standards, and lack of a jet noise database and its proper maintenance. NRAC’s insightful assessments and sensible recommendations have been made known to the Navy since April 2009. If the Navy has not yet acted on the NRAC’s recommendations, it must start now by taking proper Growler noise measurements in various terrains reflecting the Olympic Peninsula’s varying topography, as a key input for preparing a scientifically and legally defensible analysis. Nearby communities, including San Juan County, have taken actual noise measurements and have shared their data with the Navy. Unfortunately, these data do not appear to have been used in the Growler DEIS. We hope they will be used in the new analysis.

**We request that the Navy do the following:**

- a. update noise methodology to incorporate the most accurate technology as recommended by DOD and NRAC;**
- b. stop use of annual DNL to arrive at unrealistic average noise levels under 65 dB, for purposes of avoiding consequences of exceeding community noise standards;**
- c. measure and analyze the particular low frequency noise that is a signature of Growlers;**
- d. take actual noise measurements of Growlers from the varied terrains and topographies found on the Olympic Peninsula, rather than using recordings of unknown origin from a USAF library;**

**4. Military training route maps needed:** Each Military Training Route has two widely separated tracks, one for departure and the other for arrival, as shown in the Growler DEIS on page 3-8; therefore, each route is actually two routes, generating noise exposures in completely separate areas for inbound and outbound flights. The twelve Military Training Routes in and out of Naval Air Station Whidbey Island are really 24 separate flight tracks that directly affect communities and wildlands over which they fly. A Navy “Key Point” on page 3-7 admits, “Aircraft can be several miles to the left or right of the flight track depicted on maps.” This means that noise exposures depicted in Figure 3.1-3 on page 3-8 will be far less predictable and therefore potentially greater in scope than the flight tracks depicted on the two Whidbey-area maps available to the public.

In addition, military flights to and from carriers operating in the NWTT have potential impacts, yet are not addressed or analyzed. The Growler DEIS maps showed flight tracks only within approximately 10 miles of NASWI; tracks over outlying areas remain unknown. A public request to the Navy in December 2016 for a map showing these other routes and flight tracks was not answered.

Since guidance from the Aircraft Environmental Support office states: “aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL. Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.” Such liberal limits can create potentially catastrophic impacts to communities and wildlands.

**Therefore, we request that the analysis make available all flight track maps that affect the Olympic Peninsula and Strait of Juan de Fuca.**

According to the Navy’s calculations for areas directly under flight tracks and within a mile of them, sound exposure levels can reach 116 and 77 decibels,

respectively, with Growlers using an 84.5% engine power setting. This does not take into account afterburners or multiple aircraft, both of which significantly increase the noise exposure (and also occur frequently).

**Therefore, we request that the analysis take afterburners and multiple aircraft operating together into account.**

For every 3 dB sound pressure over 85 dB, the permissible exposure time is cut in half before damage to hearing will occur. The CDC and NIOSH permissible exposure time for 115 dB before damage occurs is 28.1 seconds. The Navy will far exceed that exposure time limit for people in affected areas, and their hearing will be damaged because their ears will not have time to recover from the strain and fatigue of repeated exposures to high noise levels. Hearing, especially in children, will be damaged, and non-auditory health impacts, which are already being felt on Whidbey Island, are likely to increase throughout the region, not just under the MOAs. For example, in children, chronic aircraft noise exposure impairs reading comprehension and long-term memory and may be associated with raised blood pressure. The Navy has repeatedly dismissed or diminished the severity of aircraft noise health effects documented by citizens and medical officials.

**Therefore, we ask that the analysis provide scientific, peer-reviewed, up-to-date citations to support the Navy's claims.**

**5. Effects on domestic animals and wildlife, including threatened and endangered species, must be more broadly considered in the SEIS:** We will discuss impacts from both naval air and at-sea operations.

The Growler DEIS concluded that there will be no significant or population-level impacts to threatened or endangered species or other wildlife, yet it failed to analyze effects outside the immediate vicinity of Whidbey runways. The DEIS acknowledged in section A.3.12, "The relationships between potential auditory/physiological effects and species interactions with their environments are not well understood. Mancini et al. (1988), assert that "the consequences that physiological effects may have on behavioral patterns are vital to understanding the long-term effects of noise on wildlife. Questions regarding the effects (if any) on predator-prey interactions, reproductive success, and intra-inter specific behavior patterns remain." The Navy's presumption that federally-listed species such as the marbled murrelet are habituated to the high noise levels caused by Growler takeoffs and landings, and thus will not be significantly impacted by the addition of 36 Growlers (not to mention the additional 40 and the existing 82) ignored a series of significant problems:

a. The DEIS considered only chronic noise in areas near the runways, and failed to consider intermittent noise disturbance events in areas where murrelets may not be habituated; for example, these birds range from

coastal marine waters, where they forage for food, to forested areas up to 50 miles inland. To consider only one occupied foraging area near the runways out of many throughout Puget Sound and the Strait of Juan de Fuca, (Raphael et al. 2015) and to not consider effects of flight operations on the terrestrial mature forest habitat that these birds return to each night, rendered the analysis grossly incomplete. We ask that the Navy consider impacts by air operations to threatened and endangered species throughout the entire area of operations.

b. A 2009 study concluded that the probability of nest site usage was greater with increasing distance from roads that produced man-made noise. The implication is that the alteration of habitat by noise renders it less usable.

c. It ignored nearly three decades of more recent research, and thus does not use the Best Available Science.

d. It failed to acknowledge the segmentation resulting in omission of the cumulative impacts of up to 160 Growlers, which are being analyzed separately in smaller batches. Adverse impacts from an increase this large would be significant if they were evaluated together.

e. The cumulative impacts from an increase to 130,000 flights that includes 79,000 Grouler flights, including more low-altitude flying, have not been considered. This many flights also could easily impact large numbers of migratory birds along the coast each spring and fall.

f. The Navy and the State of Washington are conducting activities that impact marbled murrelets, yet impacts from these activities have been treated separately in 3 EISs, as if the other activities don't exist or figure into the broader impacts picture.

g. Because of the Navy's failure to provide the FWS with information it needed, the FWS had to make assumptions. For example, the BiOp said: "For scenarios pertaining to marbled murrelets, we also had to make assumptions about where and when the Navy would conduct the proposed activities. For example, hypothetically, if the Navy stated that a given activity would occur year round at distances greater than three nm [nautical miles] from shore in the W-237 area, we would need to form assumptions about how much of the activity would be done during the summer and how much during the winter, as well as how much of the activity would be carried out between three and 12 nm [nautical miles] from shore, and how much of the activity would be carried out less than 50 nm from shore." In other words, the FWS was not given enough information about when and where the bulk of Navy training and testing activities would be occurring in the seasonal presence or absence of listed

species at different times of the year, to be specific rather than generic about impacts to these species.

h. Table 4 in the BiOp reveals that FWS had to make such assumptions for torpedo testing, underwater unmanned vessel testing events, and gunnery, bombing, and missile exercises (both surface to air and air to surface) plus maritime patrol aircraft exercises. The total number of Navy operational “events” that FWS had to make assumptions about exceeded 450.

**Therefore, we request that the Navy:**

- a. consider intermittent as well as chronic noise in its analysis;**
- b. consider at-sea as well as over-land impacts to species from noise;**
- c. stop segmenting impacts, and analyze them holistically and cumulatively;**
- d. analyze impacts to non-listed species such as migrating birds;**
- e. cover noise impacts from all 157-160 Growlers and other naval aircraft operating in the affected area;**
- f. consider its own impacts within a suite of activities that includes habitat loss and disturbance;**
- g. provide consulting agencies with more accurate and detailed information where possible, to allow assessment of potential impacts to be based on real information and not assumptions and guesswork.**

NEPA and its public process provides a basis on which to anticipate, avoid and mitigate threats to the environment. It has been established time after time that a false prediction that a human activity will *not* result in significant environmental harm will typically be more harmful than a false prediction that it *will* result in significant environmental harm. Integral to this is the use of Best Available Science. While the standard “Best Available Science” is a moving target in time, the Navy has continued to use a 28 year-old literature review (Manci et al. 1988), widely quoted in numerous DOD documents, to support their claim that enough questions remain about effects of jet noise on wildlife to warrant doing nothing about it. Besides promoting a baseless claim, the Navy failed to disclose that this same literature review discussed many studies that actually concluded the opposite: for example, one study concluded that wild ungulates appear to be much more sensitive to aircraft noise disturbance than domestic livestock, yet the

latter, while more adaptable to it, were still documented to have primary and secondary effects that included reduced milk production, increased glucose concentrations, decreased hemoglobin levels, increased heart rate, and reduction in thyroid activity. Further, a 1983 study suggested that 2 of 10 cows in late pregnancy aborted after showing rising estrogen and falling progesterone levels. These increased hormonal levels were reported as being linked to the aircraft overflights. A similar study reported abortions occurred in three out of five pregnant cattle after exposure to flyovers by six different aircraft (U.S. Air Force 1994b). Another study suggested that feedlot cattle stampede and injure themselves when exposed to low-level overflights (U.S. Air Force 1994b).

Studies of terrestrial mammals have shown that noise levels of 120 dBA can damage mammals' ears, and levels at 95 dBA can cause temporary loss of hearing. Sonar can affect animals 300 miles away. High-noise events (like a sea surface explosion or a low-altitude aircraft overflight) may cause birds to engage in escape or avoidance behaviors, such as flushing from perches or nests (Ellis, et al. 1991,) diving under the surface, or interruption of foraging and feeding. These activities impose an energy cost on the birds that, over the long term, may affect survival or population growth. In addition, the birds may spend less time engaged in necessary activities like feeding, preening, or caring for their young because they spend time in noise-avoidance activities, resulting in lower reproductive success and population fecundity.

Science is neither a product nor the outcome of planning deliberations. The Best Available Science directive references "scientific data," meaning an element or product of the scientific process or a synthesis of the most reliable knowledge at a point in time. While the 1988 literature review marked an appropriate point in time on which to base data-driven decisions, there has been much research since then, on physiological effects of noise on animals. The use of the most recent scientific data in the SEIS would help to mitigate the Growler DEIS's failure to use the Best Available Science. For example, the 2016 synthesis of two decades of research on effects of noise on wildlife concludes that while "taxonomic groups vary in auditory capabilities," the "...majority of studies documented effects from noise, including altered vocal behaviour to mitigate masking, reduced abundance in noisy habitats, changes in vigilance and foraging behaviour, and impacts on individual fitness and the structure of ecological communities." Also, "This literature survey shows that terrestrial wildlife responses begin at noise levels of approximately 40 dBA and 20% of papers documented impacts below 50 dBA."

Even if one or more of the studies in the older 1988 Mancini literature review concluded that physiological/auditory effects were not well understood, the Navy should not base its analysis on the inaccurate claim that they are just as poorly understood 28 years later. A synthesis of two subsequent decades of scientific literature of noise effects on wildlife was published in 2016, before the Growler DEIS was released. If not availing itself of the more relevant individual studies

produced over the last 28 years, then the Navy must at least acknowledge that more recent research exists and has been evaluated. Citing the absence of evidence while failing to seek out or acknowledge the large volume of it that actually exists is a failure to meet NEPA standards, puts at unnecessary risk the residents and species in the impacted area, and is a violation of the public trust. It is also wrong and unethical to cherry-pick a single statement of doubt from an obsolete review in which not all of the studies it referenced reached that conclusion.

In a November 2015 letter to the Olympic Coast National Marine Sanctuary staff the Navy wrote, "There is no science to support Navy activities have been detrimental to any Sanctuary resources." It went on to caution Sanctuary staff about drawing conclusions of some areas being biodiversity "hot spots" and making "assumptions of importance," because such studies were "limited and focused" without "review of best available science." The Navy added that it was familiar with studies used by Sanctuary staff, because most were conducted under Navy funding. A US Navy study announced on August 30, 2017, found that whales dive deeper and longer than normal when exposed to sonar from submarines and helicopters. It said, "These changes in dives and surface intervals contributed to a longer interval between deep dives, a proxy for foraging disruption in this species. Most responses intensified with proximity and were more pronounced during mid-power than high-power MFAS use at comparable distances within approximately 50 km, despite the significantly lower source level of mid-power MFAS. However, distance-mediated responses to high-power MFAS, and increased deep dive intervals during mid-power MFAS, were evident up to approximately 100 km away." If the Navy wishes to caution agencies about the use of Best Available Science, then it is entirely appropriate for agencies and the public to question whether the Navy's use of a single isolated statement from a 28 year-old literature review, among other claims and practices, meets its own standards for Best Available Science.

Growler NEPA documents up to now have shown that the Navy has failed to use the Best Available Science.

**Therefore, we ask the Navy to correct its review and analysis procedures and use the Best Available Science in all future analyses and NEPA processes.**

The Fish and Wildlife Service's July 2016 Biological Opinion said, "The decline in murrelet populations from 2001 to 2013 is weakly correlated with the decline in nesting habitat, with the greatest declines in Washington, and the smallest declines in California, indicating that when nesting habitat decreases, murrelet abundance in adjacent marine waters may also decrease." The BiOp acknowledges that current estimates for reproductive success are well below the levels needed "...to maintain or increase the murrelet population" in all areas of the Pacific Northwest where the murrelet is found. The list of threats to its

survival and recovery includes habitat destruction and modification of the terrestrial environment from timber harvest and human development, but among other threats the BiOp does not list military jet noise or sonar. Yet while the highest conservation priority is reestablishment of abundant supply of high-quality nesting habitat, and while it acknowledges that murrelet populations in the areas where the Navy will most frequently be operating have “lost resistance to deleterious population-level effects and are at risk of continual declines,” it all but admits outright that the marbled murrelet population in these areas is headed toward eventual extirpation, because “activities which degrade the existing conditions of occupied nest habitat or reduce adult survivorship and/or nest success will be of greatest consequence to the species, reinforcing the current marbled murrelet population decline throughout the coterminous United States.” To have such omissions and conflicting statements in a document that allegedly supports the Navy’s proposed activities is cause for great concern as the biological consequences for the species are grave.

**Therefore, we ask that the Navy consult with the Fish and Wildlife Service to correct biological data and analysis, and prevent future conflicting claims that could have the consequence of gravely impacting the species further. The results of the consultation should be made available to the public in the SEIS as required by NEPA.**

In a November 2015 letter to the Superintendent of the Olympic Coast National Marine Sanctuary, the Navy stated, “...permanent threshold shifts (Level A harassment) involve some tissue damage and a permanent reduction in hearing sensitivity and [Navy] agrees that these effects should be considered injurious to an individual marine mammal. However, the Navy’s position remains that Level B harassment takes should not be characterized as an injury to sanctuary resources as they do not constitute physical injury to the species.” The argument simply does not apply to marbled murrelets and northern spotted owls, in part because the unnamed surrogate species that were used to quantify the amount or extent of anticipated take do not appear to have been adequately analyzed, and because injuries and behavioral disturbances were being considered by the Navy in the context of the Marine Mammal Protection Act, not the Endangered Species Act under which these birds are protected. The ESA definition of harm does not allow for segmentation of impacts.

**Therefore, we ask that the Navy work with wildlife agencies using Best Available Science, to use the appropriate federal statute for assessing potential harm, and to establish the differences between Temporary and Permanent Threshold Shifts; and that when surrogate species are used to estimate harm to listed species that are in severe decline, that the agencies apply greater and more conservative margins of error in order to ensure they take appropriate mitigation steps to minimize those declines.**

With only 7500 marbled murrelets currently remaining in Washington, (a 44% decline since 2001,) a population viability analysis shows it is more likely than not that the state population will only be between a quarter to half of its current size after 50 years, between 2,077 and 2,182 birds. Given that the Navy observes guidance from the Aircraft Environmental Support Office, which directs Navy aircraft to fly “over sparsely populated areas, [where] aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure,” then the levels of noise both over land and in the ocean if this overly-liberal guidance is followed are likely to degrade or render more marbled murrelet nesting and foraging habitat uninhabitable, especially along the Washington coast where murrelet declines are most severe.

**Therefore, we ask that aircraft flyover guidance be revised to incorporate best available science and current population levels and impacts on threatened and endangered species, in order to reflect the extreme sensitivity of the species and habitat lands and waters where naval aircraft operations occur.**

The Strait of Juan de Fuca coastal areas have recently been identified as one of three regional “hotspots” with an exceptionally high murrelet abundance (the upper 20th percentile with low annual variation), nesting habitat abundance, and nesting habitat cohesion across the species listed range (Raphael et al. 2015). Compared with marine variables, nesting habitat attributes explained more of the variation in murrelet abundance, underscoring its greater importance to murrelet recovery. According to the Fish and Wildlife Service’s Recovery Plan, the risk of chance events wiping out the species is "exacerbated for the murrelet because populations that have negative long-term growth rates, as does the listed population of the murrelet ...have little or no capacity to overcome catastrophic population losses."

Given that impacts to this species from both the Navy and the State forest management activities are occurring but are being analyzed separately, there currently appears to be no way to reduce the risk of chance events and catastrophic population losses.

**Therefore, we request that the Navy coordinate and consult with the State of Washington to identify, analyze and reduce cumulative impacts to listed species, especially the marbled murrelet. The results of the consultation should be made available to the public in the SEIS as required by NEPA.**

The Olympic Forest Coalition and West Coast Action Alliance have raised the above concerns, as have other organizations and individuals. It is our sincere hope that the Navy will take to heart these concerns and implement corrective change so that cumulative negative impacts on the habitat of threatened and endangered species, on human health of vulnerable residents in impacted

communities, and economic impacts on area businesses will be proactively mitigated and this comment becomes the last time we must raise them. Thank you for the opportunity to comment.

Sincerely,



Connie Gallant  
President  
Olympic Forest Coalition



Karen Sullivan  
Co-Founder  
West Coast Action Alliance

CC's:

The Honorable Patty Murray, Senator for Washington

The Honorable Maria Cantwell, Senator for Washington

The Honorable Derek Kilmer, U.S. House of Representatives,

State of Washington

The Honorable Jay Inslee, Governor of the State of Washington

The Honorable Hilary Franz, Commissioner of Public Lands, State of Washington

The Honorable Elizabeth May, Member of Parliament, Saanich-Gulf Islands,  
British Columbia, Canada