



**File Code:** 1570  
**Date:** July 23, 2015

Mr. Buck Lindekugel  
Southeast Alaska Conservation Council  
224 Gold Street  
Juneau, AK 99801

Dear Mr. Lindekugel:

This letter is in response to the objections filed on the Final Environmental Impact Statement (EIS) and Draft Record of Decision (ROD) for the Navy Timber Sale (Navy project). The Draft ROD was released by the Tongass Forest Supervisor, who is the Responsible Official for the project. In accordance with 36 CFR 218.3(a), I am the Reviewing Officer for the objections that were filed.

I received the following objections on the Navy project:

No. 15-10-00-0006 A218 - filed by Greenpeace and Cascadia Wildlands; and  
No. 15-10-00-0007 A218 - filed by the Southeast Alaska Conservation Council (SEACC)  
and the Wrangell Resource Council.

I have conducted a review of the objections and the Navy Draft ROD, EIS, and project record in accordance with the pre-decisional, administrative review procedures at 36 CFR 218, Subparts A and B. This is my consolidated response to both of the objections that were received.

### **Background**

The Navy project is located on Etolin Island on the Wrangell Ranger District of the Tongass National Forest. The purpose of the Navy project, as described in the Final EIS, is to respond to the goals and objectives of the Tongass Forest Plan and to help move the project area towards the desired future conditions described in that Plan. Applicable goals and objectives include:

- Provide a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska;
- Support a wide range of natural resource employment opportunities within Southeast Alaska's communities;
- Manage the timber resource for production of sawtimber and other timber products from suitable forest lands made available for timber harvest, on an even-flow, sustained yield basis and in an economically efficient manner; and
- Seek to provide an economic timber supply sufficient to meet the annual market demand for Tongass National Forest timber and the market demand for the planning cycle.



[Navy EIS, p. 1-4]. The Tongass Forest Supervisor has indicated that he intends to select Alternative F from the Navy EIS [Draft ROD, p. R-1]. Specifically, the proposed decision:

- Authorizes the harvest of about 13.1 million board feet (MMBF) of timber from about 1,252 acres of National Forest System (NFS) land;
- Authorizes the construction of about .6 mile of new NFS road, the reconstruction of about .8 mile of NFS road, and the construction of about 2.7 miles of temporary road.

The Tongass considered five other alternatives in the Final EIS for the Navy project, including a no-action alternative and four other action alternatives [see, for example, EIS, p. 2-9].

The Navy project has been on the Tongass Schedule of Proposed Actions since January 2006, and a Notice of Intent to prepare an EIS was published in the Federal Register that same month (January 23, 2006). The Draft EIS was released to the public in November 2007, and the Forest Supervisor signed a ROD in March 2009. The 2009 ROD was appealed and subsequently remanded in July 2009. The 2015 Draft ROD replaces the 2009 ROD, and was released to the public for a 45-day objection period pursuant to the Forest Service predecisional administrative review regulations at 36 CFR 218, Subparts A and B. As discussed above, two objections were received on the project.

While none of the objectors requested a formal meeting as provided for at 36 CFR 218.11(a), Earl Stewart, the new Forest Supervisor for the Tongass National Forest, contacted the objectors to discuss their objections. The calls were used mainly as a meet and greet opportunity, due to the shared recognition that no solutions were readily available to remedy their objections. The Forest Supervisor did tell me that the calls offered him a highly appreciated opportunity to dialogue on historical issues and future opportunities across the Tongass National Forest, and that he truly valued and appreciated the time offered by the objectors and the open, candid discussions.

### **Response to Issues**

The pre-decisional, administrative review regulations state that I must provide a written response to objections that sets forth the reasons for my response; however, this response need not be a point by point response [36 CFR 218.11(b)]. The Responsible Official, Earl Stewart, and I have thoroughly reviewed the Navy project in light of the issues presented in the objections. While my response may not cover all of the issues raised by the objectors, I have considered and reviewed all of the issues and suggested remedies for the objections received on the project. After review of the objections, I am directing the Forest to update some of the documentation in the project record, as discussed below in my response to the key issues raised in the objections, and make any warranted adjustments to the decision in the Final ROD for the Navy project or in an appendix to that decision.

The Forest Supervisor should follow the procedures set forth in FSH 1909.15, Section 18.1 in his review and consideration of the information in the addendum and its effect on his decision.

## Greenpeace and Cascadia Wildlands (No. 15-10-00-0006 A218)

### **Issue 1. Whether the Forest Service should have prepared a supplemental environmental impact statement (SEIS) to evaluate changes in the Wrangell economy.**

Objectors assert that there have been several changes to the Wrangell economy that warrant a SEIS, including changes in mill infrastructure, increased stump to mill costs, a decrease in the number of potential jobs created by the project, the Forest Service transition towards second-growth timber management, and substantial growth in Wrangell's fishing, seafood processing, maritime, and recreation and tourism industries.

#### Discussion

Objectors overstate the need for a community-specific, economic analysis that explores all aspects of the Wrangell economy. Analyzing the longitudinal variability of Wrangell's economy, including the performance of specific economic sectors, is outside the scope of a project-level analysis. Both the Forest Service and the City and Borough of Wrangell endeavor to support local economic diversification that accommodates tourism, seafood, timber, and other economic sectors, which are often mutually-beneficial through the sharing of infrastructure, workforce, and other resources.

The Navy project is a timber sale project, and timber supply and economics was identified as a significant issue for the project [EIS, p. 1-13]. The effects of the project on timber supply and economics are discussed in the EIS [pp. 3-7 to 3-18], with additional documentation in the record. Objectors don't appear to challenge the analysis that was originally completed for the project, they just assert that the Forest Service should have prepared a SEIS to address new information.

The Council on Environmental Quality's (CEQ) regulations implementing the National Environmental Policy Act (NEPA) state that agencies shall prepare supplements to either draft or final EISs if "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts" [40 CFR 1502.9(c)(1)(ii)]. As indicated in the Draft ROD for the Navy project, the Forest Supervisor was aware of new and/or updated information related to the project, and directed an interdisciplinary team (IDT) to review and analyze this information [Draft ROD, p. A3-1]. The results of this analysis are documented in the addendums and updates to the resource reports in the Navy project record, and they are summarized in Appendix 3 to the Draft ROD.

With regard to timber supply and economics, the IDT did consider new and/or updated information related to this issue, including changes to Southeast Alaska's mill infrastructure and the Navy financial efficiency analysis appraisal point destination [pp. A3-13 to A3-14], as well as changes in timber volume estimates and harvest acres, the use of the FASTR model (verses the NEATR program used in the Navy EIS) as a financial efficiency analysis tool to compare alternatives, changes in projected employment under each of the Navy alternatives, and changes in Forest Service costs and potential payments to the State of Alaska [Id., pp. A3-14 to A3-19].

The IDT also considered the ongoing transition to young-growth forest harvest [Id., p. A3-5]. Based on the IDT review of this information and the updated analysis in the project record and Appendix 3, the Forest Supervisor concluded:

There are no changes, new information, or circumstances that may result in significant environmental impacts in a manner not previously evaluated or considered. The new information or changed circumstances are within the scope and range of effects considered in the original analysis.

[Id., p. A3-2].

With regard to changes in the Southeast Alaska mill infrastructure and the potential destination for the Navy timber, the Forest Service does not determine the destination for any specific project when offering timber for sale. Timber sale contracts are offered through a competitive bid process that allows purchasers and investors an opportunity to develop least cost markets, which could be through export allowances or through local value-added processing and manufacturing. The Forest Service does include a destination in the financial efficiency analysis it completes for any given timber sale project in an effort to estimate the economic conditions of the project and provide a relative comparison among alternatives. As stated in the Draft ROD, the financial efficiency analysis was recalculated to the Viking Lumber mill in Klawock on Prince of Wales Island as the Silver Bay mill on Wrangell Island was dismantled in 2010 and the Pacific Log and Lumber Company mill in Ketchikan was closed in 2011. As a result, the round-trip tow distance increased, increasing the estimated stump-to-mill costs for all alternatives [Draft ROD, p. A3-14].

With regard to the transition to young-growth timber harvest, although there is currently no young-growth timber mature enough for harvest in the Navy project area, the proposed decision contributes to a timber supply needed to maintain the timber industry during the transition. Notably, a reliable supply of economically-viable timber is critical to maintaining the expertise and infrastructure of the existing timber industry. Transitioning to a young-growth timber program is dependent on many factors, including timber markets, industry evolution, future supply uncertainty, and litigation. The oldest and most marketable young growth is located in areas that are difficult to access, classified as not suitable for harvest, or in isolated pockets. In short, there is not an economical supply of young growth in Southeast Alaska to meet current demand given current realities. In order to successfully transition to young-growth harvest, the Forest Service has recommended at least three years of old-growth “bridge timber” under contract for each mill while the industry transitions. The Navy project will contribute towards that goal.

In my opinion, the analysis in the Navy EIS and project record remains valid, and the Forest Supervisor has adequately considered new and/or changed information related to the timber supply and economic issues for the project.

**Issue 2. Whether the Forest Service should have prepared a SEIS to consider the effects of the Anita Bay log transfer facility (LTF) on the Anita Bay fishery, and whether the project is consistent with Forest Plan standards and guidelines and the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Act.**

Objectors assert that recent changes in commercial fisheries use of Anita Bay by the Southern Southeast Regional Aquaculture Association (SSRAA) render the previous analysis and EFH consultation process inadequate, and they assert that the Forest Service should prepare a SEIS to consider the new information and ensure that the project is consistent with the Magnuson-Stevens Act EFH requirements and Tongass Forest Plan standards and guidelines relating to the siting of LTFs.

Discussion

Appendix G to the Tongass Forest Plan provide guidelines for the siting, construction and operation, and monitoring and reporting requirements for LTFs, and these guidelines were developed to provide clarification of the numerous permitting requirements and stipulations that govern the construction and operation of LTFs. Objectors assert that the Navy project is not consistent with Guideline S1 – Proximity to Rearing and Spawning Areas, which states, in part, that “[s]iting of log transfer and log raft storage facilities... in areas known to be important for fish spawning or rearing is normally prohibited” [Forest Plan, p. G-2]. It is important to note that the siting guidelines discussed in Appendix G pertain to new LTF locations. The operation guidelines and monitoring and reporting requirements do apply to subsequent use of existing LTFs, such as the use of the Anita Bay LTFs for the Navy project. These two LTFs have been permitted in the past, but the operator will need to apply for permits to use them for the transfer of Navy timber, and the permitting process will include any operating restrictions and monitoring requirements deemed necessary by the State and Federal permitting agencies.

The Tongass Forest Plan sets forth a bark accumulation threshold, as discussed in Appendix G to the Plan [Forest Plan, p. G-7]. Dive surveys conducted at both LTF sites in 2000 indicated that bark accumulation was below that threshold. As only minor activity has occurred at the sites in the years since 2000 and any future permits for the use of these LTFs will include monitoring and reporting stipulations to ensure continued compliance with the threshold, there is no reason to expect adverse effects to marine life in Anita Bay [Project Record (PR) #572\_1012]. Furthermore, Anita Bay is approximately 3,000 acres in size. The smaller bay on the south side of Anita Bay is where the LTFs are located, and this area is approximately 64 acres in size (or just 2 percent of the total area of Anita Bay).

SSRAA has been releasing salmon smolt for the development of a terminal fishery in Anita Bay since 2001, including release of smolt from net pens in Anita Bay (see <http://ssraa.org/historic-smolt-release/>). According to the SSRAA website, this ongoing smolt release will include the transfer of chum salmon smolt produced at Burnett Inlet to Anita Bay net pens in 2015. SSRAA submitted scoping comments on the Navy project in January 2006, and these comments did not express any concerns about effects of the project on their operations with the net pens or the terminal fishery at Anita Bay. Their comments were brief:

Any activity that would disturb the Burnett Lake watershed would be of concern to us. It does not appear from the information provided that the proposed action will have any negative effects on the watershed or the operation of [the] hatchery located in Burnett Inlet.

[PR #572\_0075]. SSRAA has remained on the mailing list throughout the planning process for the Navy project, and at no time have they expressed concerns with any conflict in Anita Bay or other parts of the project area. The Wrangell Ranger District communicates with SSRAA on a regular basis on permit issues at the Burnett Inlet fish hatchery, which is directly related to the salmon releases in Anita Bay and the associated terminal fishery. SSRAA has never expressed any concerns that the LTFs in the Bay or logging operations are incompatible with their operations. In fact, after the Forest Service received this objection and reviewed the issue, the Wrangell District Ranger contacted John Burke, General Manager of SSRAA, to discuss the issue regarding potential conflict of Navy project activities with their operations in Anita Bay. Mr. Burke indicated that SSRAA has no concerns as long as both parties comply with their respective permit requirements and rules of navigation [PR #572\_1591].

The Forest Service completed the EFH consultation requirements for the Navy project in 2009 in accordance with the Memorandum of Understanding between the U.S. Fish and Wildlife Service (USFWS) and the Forest Service. As the proposed decision does not include any increased effects over those considered and disclosed in the 2009 EIS, which the Forest Service used to consult with USFWS, there is no need for additional EFH consultation.

In my opinion, the portion of Anita Bay that may be affected by the LTF use is a small fraction of the total area of Anita Bay, and future use of the LTFs will be contingent on continued compliance with bark accumulation thresholds and any other operation and monitoring requirements deemed necessary by the permitting agencies. While it is clear that SSRAA has increased the number of salmon smolt released in the Bay over the years and the fishery harvests have also increased, this does not mean that the effects of the Navy project on the marine environment or the fishery will be greater than those projected in 2009. The best way to judge the potential effects of the project on SSRAA's operations and the cost recovery fishery in Anita Bay is through consultation with and input from the SSRAA managers. The scoping comments the Forest Service received from SSRAA and recent discussions with SSRAA personnel clearly indicate that they believe the two different uses of Anita Bay are compatible. Therefore, I believe that the analysis conducted for the 2009 EIS is still valid, and there is no reason to expect the effects on SSRAA operations or the fishery in Anita Bay will be greater than those considered and disclosed in the 2009 EIS. Therefore, there is no need to prepare a SEIS for the project.

### **Issue 3. Whether the Draft ROD for the Navy project is based on reasonable market demand scenarios.**

Objectors assert that the Draft ROD relies on arbitrary demand scenarios, as presented in Appendix A, and that the Forest Service's timber volume goal relies on outdated demand studies that have proven to be inaccurate.

## Discussion

Objectors challenge the forest-wide market demand analyses completed for the 2008 Tongass Forest Plan, which are outside the scope of the Navy project-level analysis. The forest-wide demand analyses are based on the best available science, and have been extensively peer reviewed. The Forest Service is aware of opposing views, and has comprehensively responded in Brackley and Haynes (2008) and in Appendix G [all pages] and Appendix H [pp. H-26 to H-36] of the Forest Plan EIS.

As stated by Morse (2000), seeking to meet market demand for timber under current conditions requires significant professional judgment. Furthermore, underestimating timber demand has much more significant and negative consequences than overestimating timber demand. When the Forest Service underestimates timber demand, sawmills could potentially close due to lack of timber supply and local economies are negatively impacted. In contrast, if the Forest Service overestimates timber demand and prepares more timber than is needed, the excess timber will not be sold and no environmental effects will occur. Tongass timber demand has always been volatile and can differ from actual harvest on a year-to-year basis.

As stated above, estimates of annual timber demand are based on the best available information and on a careful review of current conditions. The Pacific Northwest Research Station's estimate of long-term demand and the Morse methodology's estimate of annual demand avoid the problem of supply being a limiting factor in determining actual demand. In other words, if there is insufficient volume ready for sale, the timber demand target cannot be met.

During 2011, the "limited lumber" scenario was used due to the sharp downturn in forest product markets. However, the projection has returned to the "expanded lumber" scenario due to the export policy, strong international markets, and a rebound in domestic markets. For 2014, the timber volume goal was 142 MMBF. This number does not represent actual timber purchases during any given year. Rather, it reflects the estimated volume of timber that the Forest Service needs to offer to replace expected harvest and to maintain two to three years of timber supply under contract, which provides stability for the industry and also the opportunity for the industry to respond to market conditions.

Finally, the actual quantity of timber offered in any given year reflects a combination of additional factors, including budget appropriations, completing the NEPA process, the practice of offering small sales for small operators rather than all the volume cleared under a NEPA decision, statutory requirements that Alaska Region timber sales appraise positive, and volume impacted by litigation. Due to all the aforementioned factors, the amount of timber that is offered and sold may be less than expected timber purchases as predicted in annual demand calculations. Objections and litigation may also lead to the re-evaluation of timber sale projects, which may cause additional project delays and thereby also contribute to not fully meeting annual timber offer goals.

See also my response to Issue 1 of the SEACC and Wrangell Resource Council objection, below, for further information on the Tongass National Forest market demand analyses and how the Navy timber sale fits into the demand estimates based on those analyses.

**Issues 4 through 8. Whether the Forest Service adequately considered the potential effects of the Navy project on the Queen Charlotte goshawk and disclosed uncertainties and risks associated with the project.**

Objectors assert that the Forest Service failed to take a hard look at the potential effects of the Navy project on the goshawk, and failed to consider relevant scientific information regarding the Forest Plan conservation strategy and its ability to provide for viable populations of the goshawk. They further assert that the scale used for the analysis of the project's effects on goshawk habitat features was inappropriate, and that the Forest Service inadequately analyzed the potential cumulative effects on the goshawk. Finally, objectors assert that the Navy project is not consistent with Forest Plan standards and guidelines for sensitive species, and that the Forest Service failed to consider and include adequate mitigation and alternative nest management measures in the Draft ROD.

Discussion

To the extent that the objectors challenge the Tongass Forest Plan conservation strategy and the standards and guidelines related to sensitive species (including the goshawk), these issues are outside the scope of a project-level EIS. The Tongass Forest Plan conservation strategy and the wildlife standards and guidelines were developed using the best available information, and were reviewed extensively by other agencies, including the Alaska Department of Fish and Game (ADF&G) and the USFWS. In regard to differing scientific opinion, the 2008 Forest Plan EIS [Volume 1, p. 3-261] states:

The evaluation of viability includes consideration of...current scientific thinking on population viability and conservation biology, as found in the general literature and that compiled during the recent Tongass Conservation Strategy meeting (2006).

Opinions of scientists regarding goshawk protection measures may vary. As stated in the Navy EIS [Appendix B, p. 177], "[t]here are varied opinions on the size of goshawk nest buffers depending on geographic location." However, as the 2008 Forest Plan ROD [p. 23] concluded:

The potential effects to goshawks described in the Final EIS for the 2008 Forest Plan Amendment are fully consistent with the November 2007 status finding by the USFWS. I also believe that the amended Forest Plan provides as much protection for goshawks as was provided by the 1997 Plan. That Plan was estimated to provide a high likelihood of maintaining viable populations of goshawks, even before the goshawk foraging standard and guideline was added to further reduce risk.

The Navy EIS discusses the potential effects of the project on goshawks [pp. 3-187 to 3-189], based on the analysis that was completed in the Biological Assessment/Biological Evaluation (BA/BE) for the project [PR #572\_0620, updated at PR #572\_1133]. The EIS summarizes the analysis mainly in terms of nesting and foraging habitats (Productive Old Growth (POG) and high POG habitat) at the Wildlife Analysis Area (WAA) scale (WAA #1901), because these two habitats were thought to be the most important to goshawks (nesting habitat in large trees and foraging habitat because most prey for goshawks are old-growth associated species). The EIS analyzes the potential effects on these habitats under both short term and long term scenarios

because of the unknown effects of partial harvest on goshawk habitats. The Response to Comments [Appendix B to the EIS] and the BA/BE acknowledge that the harvest associated with the Navy action alternatives could affect goshawks through the removal of habitat they currently use and could use in the future, and that it could increase competition, increase predation, reduce life expectancy, and reduce nesting success on managed lands [Navy EIS, p. B-51; see also PR #572\_0620, p. 14]. The BA/BE also briefly discusses how fragmentation beyond the project area could affect goshawks at the landscape scale [Id.]. However, these documents also clarify that habitat on non-managed lands (project area Old Growth Reserves (OGRs) and other non-development lands) would not be reduced and was expected to provide enough habitat for a viable goshawk population on Etolin Island, and that “consistency with [the Forest Plan] will achieve the Forest Service viability requirement” [Id.]. Of the action alternatives considered in the Navy EIS, Alternative F, the proposed Selected Alternative, has the least effect on high-probability goshawk nesting habitat [EIS, pp. 3-188 to 3-189].

In accordance with the 2008 Forest Plan [standard and guideline WILD4.II.A.I.f on p. 4-100 of the Plan], goshawk surveys were conducted in the Navy project area in 2004 through 2007 [PR #572\_0894]. A total of 801.6 hours were spent conducting goshawk surveys. During these surveys, a new nest was located and historic nests were revisited. As stated in the BA/BE, appropriate nest buffers will be applied, including maintaining a buffer area of not less than 100 acres of POG forest (if it exists) with no commercial timber harvest permitted in the buffer, and timing restrictions on any activities within 600 feet that may result in nest abandonment will also be required [PR #572\_0620, p. 14]. As stated in the Draft ROD, these buffers include a 230-acre buffer surrounding a group of three goshawk nests in the Anita Bay pinch point area; this is for the protection of a historic nest site. All three of the nests are in close proximity to each other, with approximately 90 yards separating the northernmost nest from the southernmost nest. The 230-acre nest buffer, as designed, meets Forest Plan direction and has been determined to adequately protect nesting habitat. The only time harvest in a buffer would occur would be in a buffer around a “probable nest,” and only if 2 years of monitoring indicates no evidence that goshawks are present or actually nesting. The project record includes a map of the Anita Bay nest area, which is then overlaid on a size density layer that displays POG. This map indicates that a substantial area of the nest buffer is comprised of high POG habitat [PR #572\_1559].

Additional goshawk surveys in the project area were initiated in the 2015 season and monitoring of historic nests (identified during earlier surveys) is also ongoing, although there is currently no documentation in the project record related to these efforts.

With regard to whether the Forest considered the effects of the Navy project on the goshawk at an appropriate scale, I believe the analysis of the direct, indirect, and cumulative effects of the Navy project on the goshawk were appropriately considered at the WAA scale. This scale is appropriate for the consideration of project-specific (and cumulative) effects on goshawks within the project area. However, the Navy EIS also tiers to the viability assessment and other analyses that were conducted for the goshawk for the Tongass Forest Plan Revision (1997) and Amendment (2008). These analyses fully considered the levels of past and likely future timber harvest and associated development on both NFS and non-NFS lands across the Forest, and concluded that full implementation of the Forest Plan (in 100+ years) is expected to maintain habitat that supports viable and well-distributed populations of goshawks and other wildlife species.

With regard to whether the Forest Service considered relevant scientific information in its analysis of the effects of the Navy project on goshawks, the Navy project record contains numerous different scientific articles about goshawk habitat requirements, population abundance and status, etc., that were used in the analyses completed for the project [see, for example, PR #576\_1576, PR #572\_1146, PR #572\_1145, PR #572\_1303, PR # 572\_1577, and PR #572\_1148]. Some of the references cited by the objectors were included in the analysis provided by the USFWS in their response to the court on a significant portion of the range, and evaluation of distinct population segments, of the Queen Charlotte goshawk (*Accipiter gentilis laingi*) [Federal Register (FR) Vol. 72, No. 216 at 63123 to 63140]. This document was considered and referenced in the development of the 2012 BA/BE for the Navy project; therefore, I believe the science behind these references has been considered. Objectors are correct, however, in stating that the Navy analyses did not consider two of the articles they believe should have been considered – Sonsthagan 2012 and Smith 2013. Both of these studies/articles came out after the Navy EIS and 2009 ROD and the subsequent analyses (including the 2012 update to the BA/BE) that were completed after the 2009 ROD was reversed.

Based on the analyses completed for the BA/BE and the Navy EIS, along with the information obtained during the goshawk nest surveys, review of extensive science relating to the goshawk, and the appropriate application of Forest Plan standards and guidelines, the BA/BE concluded that the Navy project “may impact individuals but is not likely to cause a trend to federal listing or a loss of viability” [PR #572\_0620; see also 2012 update at PR #572\_1133].

While there is nothing in the record to suggest that the effects of the project on the goshawk may exceed those anticipated in the BA/BE and EIS for the Navy project, I do have concerns about the age of the goshawk surveys documented in the project record, the date of the most recent BA/BE for the project, and the fact that some recent literature on goshawks (including the Sonsthagan and Smith literature cited by objectors) was evidently not considered by the Forest in preparing the Draft ROD for the project. Therefore, I believe that the Forest should prepare an addendum to the BA/BE for the Navy project that includes the following items:

- 1) Documentation and review of the updated survey and nest monitoring information obtained during the 2015 season, as referenced above. If additional nests are identified as a result of these efforts or during project implementation, appropriate Forest Plan standards and guidelines will be applied and any timber sale contract implementing the project will be modified through appropriate provisions, if warranted.
- 2) A review of the relevance of the new literature cited by the objectors (Sonsthagan 2012 and Smith 2013). The scale and magnitude of the project, the diversity of harvest prescriptions and retention levels, and the established goshawk nest buffers, which contribute to habitat connectivity, should help discount many of the concerns expressed by the objectors, and this can and should be included in the updated analysis.
- 3) Revised maps of the Etolin Island WAAs, current harvest units, POG, and designated nest buffers should be developed for the project record and referenced in the BA/BE. This information is already in the project record, but is not necessarily displayed in a comprehensive manner.
- 4) An update to the cumulative effects analysis for goshawks, based on all of the above information.

This addendum should be completed before the Final ROD for the project is signed.

**Issue 9. Whether the Draft ROD for the Navy project adequately identifies and implements the minimum road system.**

Discussion

Forest Service regulations at 36 CFR 212.5(b)(1) require the responsible official on each National Forest to identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands. The minimum system is the road system determined to be needed to meet resource and other management objectives adopted in the relevant forest plan, to meet applicable statutory and regulatory requirements, to reflect long-term funding expectations, and to ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance. The regulations at 36 CFR 212.5(b)(2) require the responsible official to review the road system and identify the roads on lands under Forest Service jurisdiction that are no longer needed to meet forest resource management objectives and that, therefore, should be decommissioned or considered for other uses, such as for trails. The 2007 Wrangell Ranger District Access and Travel Management Plan (Wrangell ATMP) identified the minimum road system and the roads no longer needed to meet resource management objectives in accordance with these regulations.

The Draft Navy ROD states that “the proposed road system is ‘the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of [NFS] lands’ (36 CFR 212.5)”, and “the FEIS and ROD were prepared to be consistent with the Tongass Forest-Level Road Analysis (January 2003), the Wrangell Ranger District Road Analysis (2006), and the Wrangell Ranger District Access Travel Management Plan (2007)” [Draft ROD, p. 21].

Based on my review of the Navy EIS, Draft ROD, and project record, I believe that the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands was appropriately identified in the 2007 Wrangell ATMP per the regulations at 36 CFR 212.5. The Responsible Official has affirmed that the road management decisions in the Navy ROD are consistent with the Wrangell ATMP road system determination. There is no requirement in regulation or policy that requires updates to the minimum road system determination or sets timelines for implementing projects identified in ATMPs. Projects that implement the minimum road system are undertaken as opportunities become available, such as the road work proposed as part of the Navy project.

**Issue 10. Whether the red culverts in the project area comply with the Clean Water Act.**

Discussion

The Clean Water Act (CWA) of 1972, as amended in 1977 [Public Law 95-217] and 1987 [Public Law 100-4], is designed to protect and improve the quality of water resources and maintain their beneficial uses. Section 404 of the Act regulates the discharge of dredged and fill material into waters of the United States, including wetlands. The discharge of dredged or fill material resulting from the construction of forest roads is exempt from the Section 404 permitting requirements, provided that they are constructed and maintained in accordance with

baseline provisions [at 33 CFR 323.4(a)] to assure that the flow and circulation patterns and the chemical and biological characteristics of the waters are not impaired [Section 404(f)(a)(E) of the CWA]. Federal regulations at 33 CFR 323.3(b) state that “[t]he design, construction and maintenance of the road crossing shall not disrupt the migration or other movement of those species of aquatic life inhabiting the water body.” Tongass Forest Plan standards and guidelines direct land managers to maintain, restore, or improve, where feasible, stream conditions that support the migration or other movement of aquatic organisms inhabiting a waterbody. Where streams must be crossed by roads, stream crossings will be designated and designed to current standards by qualified professionals [Forest Plan, pp. 4-11 and 4-12]. A U.S. Army Corps of Engineers Section 404 permit is required for road construction or maintenance if any applicable best management practices (BMPs) are not met.

The Navy EIS and project record clearly disclose the overall framework of the CWA, the National Nonpoint Source Policy, the Forest Service Nonpoint Strategy, the USDA Nonpoint Source Water Quality Policy, and the BMPs developed and implemented by the Forest Service to achieve Alaska Water Quality Standards. The CWA will be followed at all times during project implementation, and there are multiple references to the steps that will be taken to ensure CWA compliance.

The Draft ROD discusses the CWA in detail, and acknowledges that forest roads qualify for the silvicultural exemption “if they are constructed and maintained in accordance with Baseline Provisions to assure that flow and circulation patterns and chemical and biological characteristics of the waters are not impaired...” [Draft ROD, p. R-20]. The Forest Service will obtain all necessary CWA permits before project implementation.

Forest-wide BMP implementation monitoring has consistently reported a high level of compliance [the annual Tongass National Monitoring Reports are available on the web at <http://www.fs.usda.gov/main/tongass/landmanagement/planning>]. BMP implementation monitoring will continue to occur annually on a representative basis across the forest as part of Forest Plan monitoring, and is likely to occur in the Navy project area. BMP monitoring is a “required” activity to evaluate the effectiveness of measures implemented and to determine if they need to be revised. Monitoring also provides useful information for developing improved or additional treatments in the future.

Culverts that do not meet current aquatic organism passage standards are classified as “red culverts” or “red pipes.” The Forest Service Handbook [FSH 2090] provides the criteria for establishing the likelihood of fish passage. These criteria are intentionally conservative as much as possible to guarantee fish passage.

Fish passage was a concern expressed by multiple State agencies in their comments on the Navy Draft EIS. The Alaska Department of Environmental Conservation (ADEC) noted that Pump Creek has five crossings identified as not meeting fish passage guidelines. This creek was credited with having the most anadromous fish habitat (8.1 miles) in the project area and being one of the top fish producing streams on Etolin Island [Navy EIS, Appendix B, p. 12]. ADF&G also noted that there are culverts in the project area that do not meet the fish passage protocol [Navy EIS, Appendix B, p. 18].

The Navy EIS identified ten culverts in the project area that currently do not meet existing fish passage protocol [Table 3-40, EIS, p. 3-153]. The EIS also displayed the amount of stream habitat affected [Id.]. A number of these culverts may allow passage at some flows, as there are fish populations above all of the culverts identified [EIS, p. 3-152]. Four of these ten culverts are in Pump Creek, the only Class I stream in the project area with identified fish passage concerns. The EIS indicated that one of these four culverts would be addressed as part of the Navy project, stating “[a]t this time the Forest Service plans to replace one culvert in Pump Creek during implementation of the Navy Timber Sale” [Appendix B, p. B-27]. In addition, the EIS indicated that Road 6544 was scheduled to be put into storage under implementation of the Wrangell Ranger District ATMP. This would remove a second passage blockage located in the Upper Big Bend frontal watershed and restore 1,345 feet of Class II habitat [Appendix B, p. 27].

The Draft ROD and the addendum for the Watershed Resource Report [PR #572\_0404] clarify and update the Navy EIS. They identify work that has been completed since 2009, including road reconditioning work that addressed some sediment issues and road storage, closure, and storm proofing work completed through implementation of the Wrangell Ranger District ATMP. They also provide clarification on the potential effects of the Navy project, and update/correct some information in the EIS. For example, the Draft ROD acknowledges that there are eleven (not ten as stated in the EIS) culverts that do not meet current aquatic organism passage standards [Draft ROD, Appendix ROD-3, p. A3-28]. In addition, the Draft ROD provides corrected information for Table 3-40 in the EIS, as the column “Feet of Fish Habitat Affected” had displayed units in meters instead of feet. The corrections to Table 3-40 also include new information from recently completed stream edits [Id., p A3-30].

The Draft ROD also includes some updated responses to comments relating to red culverts. As discussed above, the EIS had indicated that “the Forest Service plans to replace one red culvert in the Pump Creek watershed during implementation of the Navy Timber Sale” [EIS, Appendix B, p. B-27]. The Draft ROD indicates this statement is in error [Draft ROD, Appendix ROD-3, p. A3-45]. No red culverts will be replaced as part of the Navy timber sale. Rather, these culverts will be replaced through other funding mechanisms.

The red culverts in the project area and fish passage concerns identified by the public and other agencies were disclosed in the Navy EIS and project record. CWA goals are to improve all waterbodies until they provide full support for all beneficial uses. Addressing culverts that have fish passage concerns will move the Forest one step closer toward achieving this goal, and the Navy EIS, Draft ROD, and additional information indicate that these culverts will be appropriately considered during implementation of the Wrangell Ranger District ATMP. The Navy EIS identifies and discusses the red culverts in the project area, and the analysis is consistent with NEPA.

I do recommend that the red culverts associated with Class 1 streams in the Pump Creek Watershed be prioritized when implementing the Wrangell ATMP, and will share that recommendation with the Tongass Forest Supervisor and the Wrangell District Ranger. This work is part of the ongoing effort to prioritize and fix fish passage concerns across the Tongass National Forest, and is not directly tied to the Navy project. While I am directing the Forest

Supervisor to update some of the wildlife information associated with the Navy project prior to signing the Final ROD for the project and moving forward with implementation, my recommendation relating to the Pump Creek Watershed does not affect the Forest Supervisor's Final ROD or implementation of the project.

**Issue 11. Whether the Forest Service adequately considered transportation and watershed issues in the Navy EIS and Draft ROD.**

Objectors assert that the road condition information in the Navy EIS is inadequate, poor quality, and outdated, and that the fact that there is a maintenance backlog and deferred maintenance means that the road condition is likely worse than considered in the EIS. Objectors also assert that the potential effects of the Navy project on project area watersheds were not adequately considered, and that the Forest Service erroneously relies on BMPs without regard to their limited effectiveness.

Discussion

The regulations implementing NEPA at 40 CFR 1502.16 state that “information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.”

Objectors assert that the Forest Service's road condition information is “remarkably limited and flawed.” I disagree. As discussed in the Navy EIS [p. 3-145], a road condition survey (RCS) was conducted throughout the project area. This information is supplemented by information in the Wrangell Ranger District ATMP, field reconnaissance, the Tongass Roads and Stream Crossing Project, and updated information obtained since the 2009 EIS (based on road maintenance that has occurred during ongoing implementation of the Wrangell ATMP) [see, for example, Watershed and Fisheries Resource Report and Addendum, PR #572\_0406 and PR #572\_0404; see also EIS, Appendix B, p. B-171 and Appendix 3 to the ROD, pp. A3-29 to A3-30].

Many comments on the Navy Draft EIS expressed concerns regarding roads. The Forest Service responded to these comments in the Final EIS and in the Draft ROD. Many of the comments submitted for the Draft EIS have been addressed by selecting Alternative F, which includes fewer roads and harvest units than those in the preferred alternative identified in the Draft EIS. The road and unit cards presented in the Navy Draft ROD provide site-specific information and identify mitigation measures to limit or avoid watershed effects.

RCSs were not intended to be completed annually. The Tongass RCS was completed in cooperation with ADF&G and ADEC [FEIS, p. B-171]. The applicability of and summary of the Tongass RCS in relation to the watershed analysis completed for the Navy project is described in the EIS Response to Comments [Appendix B, p. B-171].

Multiple comments on the Draft EIS reflected items relating to the watershed analysis that needed to be clarified [EIS, Appendix B, pp. 26 through 32]. For example, ADF&G suggested that the EIS provide information regarding the number of stream crossings by alternative [Id., p. 15]. In response, Table 3-40 [EIS, p. 3-40] was added to the EIS. As another example, ADEC identified several units where the unit cards did not address issues associated with steep slopes [EIS, Appendix B, pp. B-11 through B-14]. The road and unit cards included in the Navy

Draft ROD provide site-specific information for each road and harvest unit, and identify mitigation measures to limit or avoid watershed effects. Units with slopes greater than 72 percent are required to be visited by appropriate, qualified personnel before being harvested to determine the best course of action to limit resource concerns.

The site-specific application of BMPs, with a monitoring and feedback mechanism, is the approved strategy for controlling nonpoint source pollution as defined by Alaska's Nonpoint Source Pollution Control Strategy (May 2015). In 1997, the State of Alaska approved the BMPs in the Forest Service's Soil and Water Conservation Handbook [FSH Handbook 2509.22, R10 Supplement, October 1996] as consistent with the Alaska Forest Resources and Practices Regulations. Tongass National Forest staff annually conduct a field review of BMP implementation. Projects are selected randomly for monitoring, and the monitoring results are summarized in a Tongass Annual Monitoring and Evaluation Report. This report provides information about how well the management direction of the Forest is being carried out, and measures the accomplishment of anticipated outputs, activities, and effects. The application of Forest Plan standards and guidelines, BMPs, and project-specific mitigation measures are all intended to limit the extent, severity, and duration of potential effects.

Implementation of BMPs, as described in the unit and road cards, is expected to maintain water quality within standards established under the CWA and minimize impacts to project area watersheds and fish habitat.

The Navy EIS, Draft ROD, and the original and supplemental watershed resource reports provide an appropriate level of site-specific analysis and adequately respond to comments on the Draft EIS. Road and unit cards presented in the Draft ROD outline many site-specific mitigation measures designed to reduce risks associated with the proposed timber harvest. I find no reason to believe that activities proposed in the Navy Draft ROD will violate water quality standards for turbidity or sediment.

**Issue 12. Whether the Forest Service adequately considered the effects of fragmentation and the ability to maintain connectivity between old growth reserves, particularly in the Anita Bay pinch point area.**

Discussion

The analysis for the Navy project began in 2006, and included a review of all the small OGRs in the project area in the design of the alternatives for the Navy Draft EIS, released in November 2007. However, the overall Forest Plan conservation strategy was also reviewed in 2006 as part of the analysis for the 2008 Forest Plan EIS. This review included the appraisal of the small OGRs, which are meant to provide connectivity between the large and medium OGRs. During this review for value comparison unit (VCU) 4640, the interagency wildlife biologists (Forest Service, ADF&G, USFWS) identified the Anita Bay area as the biologically preferred OGR (as noted by the objectors), but acknowledged that the area encompasses the mainline road from the Anita Bay LTF and the LTF itself. The interagency biologists' review mentioned high-volume timber along the road; however, field reconnaissance later indicated that the POG in the

Anita Bay area is broken up by stands of scrub timber and muskeg [EIS, p. 3-30]. Even though the timber is not of commercial value, the trees provide enough cover for animals moving through the area, except in times of deep snows when the amount of snow interception might be less than in the higher-volume stands, hindering some species such as deer [PR #572\_0573].

During the forest-wide review of the small OGRs and after looking at the low quality of the timber in the Anita Bay area, the Forest Supervisor decided not to adopt the interagency team's recommendation and relocated VCU 4640's OGR to its present location on the north side of Anita Bay to facilitate the use of the road system and in hopes of making an economic offer in the area, since the most economical units are those closest to the LTF. This is consistent with the Forest Plan's criteria to minimize roads and young-growth harvest within OGRs. The Forest Supervisor's decision to relocate VCU 4640's OGR to the north side of Anita Bay was made as part of the 2008 decision on the Tongass Forest Plan. Therefore, while Alternative E in the Draft EIS had included the OGR originally recommended by the interagency wildlife biologists [see Figure 2-6, Navy Draft EIS, PR # 572\_1411], the Final EIS noted that the small OGRs, including the OGR in VCU 4640, had already been established as part of the 2008 Forest Plan decision and the locations no longer differed between the alternatives [EIS, p. 2-2].

The analysis for the Navy EIS [pp. 3-19 to 3-33] included an analysis of connectivity and fragmentation, and this analysis was reassessed and updated in the Draft ROD [Appendix 3, pp. 3-20 and 3-21]. To mitigate the effects of harvest in the Anita Bay area, parts of Unit 70 were dropped and a silviculture prescription for green tree retention of 15 percent, 50 percent or 70 percent was retained for Units 67, 70, and 72 through 75 [see Navy Draft ROD, p. R-7; see also Draft ROD, Appendix 1, pp. A1-29, A1-31, A1-33 to A1-39].

In my opinion, the harvest prescriptions identified in the Draft ROD for the units in the Anita Bay pinch point area are consistent with Forest Plan direction. When reviewed with the goshawk nest buffers discussed above in response to Issues 4-8, I believe the nest buffers and the partial harvest prescriptions help provide quality habitat connectivity in the Anita Bay area. This will be validated in the addendum to the BA/BE that will be prepared in response to this objection.

**Issue 13. Whether the Forest Service adequately analyzed and considered the cumulative effects of the project on Etolin Island wolves, and whether the project is consistent with Forest Plan standards and guidelines for wolves.**

Objectors assert that the Navy EIS and the subsequent Wildlife Addendum fail to adequately consider and disclose the potential effects of the project on Etolin Island wolves, and fail to include a full and fair discussion of all reasonably raised issues. They believe that the findings in the Draft ROD are therefore not supported, and that the project is likely to cause serious direct, indirect, and cumulative effects on wolf viability and sustainability and on subsistence hunters that the Forest Service and the public have not been able to meaningfully evaluate.

Discussion

Objectors assert that the Navy EIS violates the National Forest Management Act (NFMA), NEPA, and the Tongass Forest Plan by failing to take a hard look at cumulative effects on the Etolin Island wolf population. As a statement supporting this assertion, they allege that the

Forest Service analysis is based on outdated information, including the 2010 ADF&G Elk Harvest Report, the 2011 Deer Harvest Report, the 2011 Deer Model Direction, and Person and Logan's 2012 Report on their study of Prince of Wales Island wolves. They further assert that the Forest Service should have disclosed that objectors have challenged the 2011 Deer Model Direction in litigation, and that more recent information was available and should have been used, including the 2012 and 2014 Elk Harvest Reports as well as the 2013 Deer Harvest Report. They also assert that the Forest Service has made no recent attempts to contact ADF&G.

After review of the objections received on the Navy project, the Forest Service reviewed the 2012 and 2014 Elk Management Reports cited by objectors [PR# 572\_1565 and PR #572\_1566]. These documents include elk harvest data, which is not directly related to the habitat capability analyses conducted for the Navy project. However, these documents do indicate that wolves are a predator on elk. Both reports state that "bears, brown and black, as well as wolves occur on Etolin Island. The amount of predation on elk is unknown, but work conducted by ADF&G staff in the field indicates that wolves are a major predator" [p. 7 of both documents]. Both the Navy EIS [p. 3-176] and the Draft ROD [p. A3-33] discuss the role of elk as prey for wolves on Etolin Island. In one recent email from ADF&G [PR #572\_1578], R. Lowell states "although I have never seen wolves in the process of pursuing or taking down elk, evidence does indicate that they do prey on elk." This e-mail includes photos of apparent wolf-killed elk.

The Forest also reviewed the most recent Deer Management Report (2013) cited by objectors, which indicates that severe winter and wolf kill were the major factors contributing to deer decline in Game Management Unit (GMU) 3 [PR #572\_1567]. It indicates a continued decline in deer harvest numbers, a trend since 2005. The exceptions were in 2009 and 2010, when the deer harvest increased. This report [p. 51] also includes information on proceedings to implement an intensive management program to manage wolf populations. This is also discussed in the most recent (2012) ADF&G Wolf Management Report [PR #572\_1568]. In 2010, the Board of Game urged ADF&G to consider actions necessary to increase the GMU 3 deer harvest, and ADF&G is currently evaluating the feasibility of hiring trappers to reduce wolf numbers in an area that includes Mitkof, Woewodski Islands, and Lindenberg Peninsula on Kupreanof Island. However, the areas proposed for intensive management do not include Etolin Island.

Recent Forest Service communication with ADF&G (R. Lowell) led to updates to the wolf harvest data on Etolin Island [PR #572\_0889]. This information was incorporated into the Draft ROD [Appendix 3]. Other recent communication with ADF&G (R. Lowell) provided no new information regarding elk and wolves.

With regard to Person and Logan's 2012 paper [PR #572\_0765], I do not agree that it was misunderstood or misapplied here. While the data may not have been directly relevant to Etolin Island, it is the best available science.

There is not agreement on a consistent way to determine "unsustainable harvest" of wolves. If unsustainable harvest is considered as the harvest of over three wolves per year within the WAA, occurring for a total of five or more years (not necessarily consecutive years) during the

26-year reporting period, this data indicates that WAA 1901 has in fact experienced “unsustainable harvest” during the 26-year reporting period. One of those years, 2010, was a harvest of greater than or equal to seven wolves (or a “pack depletion” level of harvest) [Navy ROD, p. A3-36].

In WAA 1910, there have been eight years of unsustainable harvest. WAA 1910 has also experienced “pack depletion” levels of harvest three times in the reporting period. It should be noted that WAA 1910 is within the South Etolin wilderness, and that there are no roads in the WAA. The level of harvest in this WAA is occurring from the beach. Therefore, even though there have been occasions of both unsustainable harvest and pack depletion in this WAA, there are no roads to manage or close to try to reduce the harvest level. Based on the analysis completed for the Navy project, the Forest Service wildlife biologist’s professional opinion was that that “[n]either WAA 1901 or Etolin Island as a whole met or exceeded the parameters for chronic unsustainable harvest or pack depletion” [PR #572\_1135, pp. 9-10]. Regardless of the data on harvest levels in these two WAAs, ADF&G has not expressed any concerns with wolf mortality on Etolin Island [PR #572\_1578].

The Forest Service agrees that the extirpation of one, two, or three packs at any one time on Etolin would likely have different implications than if this occurred on Prince of Wales; however, the reported harvest data shows the risk of pack depletion occurring separately in WAAs 1901 and 1910, and that it is not occurring in the two different WAAs during the same year. This likely reduces the risk of even one pack actually being entirely extirpated from the island, let alone the three packs that potentially occur there. The reported harvest data indicates only one year, 2010, with the risk of pack depletion in WAA 1901 (the WAA that includes the project area). In WAA 1910, the years of risk of pack depletion occurred in 1994 and then not again until 2005 and 2013. The Forest Service has acknowledged that there is no reliable estimate of illegal take on Etolin Island, and that analyses of harvest data must take into account that they represent only a portion of human-caused mortality occurring in the population [PR #572\_0591].

In response to objectors’ assertions about the deer model direction, the shortcomings of the model have been described in detail in the 2008 Forest Plan EIS [pp. 3-231 and 3-232] and in Appendix B to that EIS. The Navy EIS acknowledged that there is controversy over the use of the deer model [EIS, p. 3-168]. Forest Plan direction is to “[u]se the most recent version of the interagency deer habitat capability model and field validation of local deer habitat conditions to assess deer habitat, unless alternate analysis tools are developed” [Forest Plan, p. 4-95]. The analysis of the effects of the Navy project on deer and wolves was conducted using the most recent version of the deer model and Forest Service direction related to that model (2011), and is therefore consistent with the Tongass Forest Plan.

In response to objectors’ assertions regarding road density in WAA 1901, the road density is expected to be below 0.7 mile per square mile (0.67 mile per square mile). At the scale of Etolin Island, the road density is only 0.41 mile per square mile. More importantly, there has been no determination that road access and associated human-caused mortality is a significant contributing factor to locally unsustainable wolf mortality, which is the triggering factor as outlined by the Forest Plan [p. 4-95].

Objectors assert that the Forest Service made an unreasonable assumption about use of isolated road systems, stating “the short water distance from Wrangell to Etolin Island should not have been dismissed by calling the Etolin road system isolated.” While the distance from Etolin Island to Wrangell is not far, the road system on Etolin Island is considered to be an isolated road system since it is not connected to a community and a boat is required to transport a vehicle to the road system. Because of this, there is a limited amount of reported harvest occurring from vehicles. The reported wolf harvest data [PR #572\_1568] backs up this assumption. The level of harvest for GMU 3 from the beach is on average 73 percent, with 18 percent from highway vehicles and only about 3 percent of the harvest on average from all off highway vehicles combined (the remaining 6 percent occurs from “other” and airplane access). The 2013 Deer Management Report includes methods of travel for the last 16 years (1996-2011), and also confirms that this is an isolated road system in GMU 3 [PR #572\_1567]. When the method of access for these years is averaged out, 45.5 percent of the deer harvest was by boat, 42.6 percent by highway vehicle, and only 6.7 percent by all off highway vehicles combined.

Objectors believe that the “biogeographic province-scale analysis was relied upon, but the province is unrepresentative of wolf mobility,” and that “none of the Navy project’s documentation attempts to demonstrate why this province is relevant to the ecology of Etolin Island wolves...”. It is true that deer were analyzed at the biogeographic province scale; however, this was not the only scale discussed and analyzed. Other scales were carried forward and analyzed as well, such as individual WAA (1901) and Etolin Island (combined WAAs 1901 and 1910).

WAA-scale analyses are most appropriate for deer; however, as wolf population dynamics operate at a much larger scale (such as the biogeographic province or larger), the effects of the project on deer density were also analyzed at the biogeographic province scale, consistent with Forest Plan direction.

With regard to whether the Forest Service should implement a Wolf Habitat Management Program, the objectors’ concerns about wolf mortality are noted. The Forest Plan provides direction to develop and implement a Wolf Habitat Management Program in conjunction with ADF&G where wolf mortality concerns have been identified [Forest Plan, p. 4-95]. However, as stated in ADF&G’s comments on the Navy DEIS:

Average wolf harvest has remained within sustainable levels. This is attributed to the relatively low accessibility of this area by nearby communities; however, there may be a concern for potential overharvest during the active portion of the timber sale.

According to the 2012 ADF&G Wolf Management Report, ADF&G is looking to implement an intensive management program for the wolves in GMU 3 [PR #572\_1568]. In 2010, the Board of Game urged ADF&G to consider actions necessary to increase GMU 3 deer harvest. ADF&G is currently evaluating the feasibility of hiring trappers (1 or 2) to reduce wolf numbers in an area that includes Mitkof, Woewodski Islands, and Lindenberg Peninsula on Kupreanof Island. The areas of proposed intensive management do not include Etolin Island. The only concerns mentioned in the 2012 Management Report for GMU 3 are about pelt quality and low deer numbers. As stated above (on page 17 of this response), ADF&G has not expressed any concerns with wolf mortality on Etolin Island [PR #572\_1578].

Objectors claim that 18 deer per square mile is the requirement for sustaining wolf populations, not 5 deer per square mile. The Forest Plan guidance relating to 18 deer per square mile is the number generally considered to be necessary for both wolves and human deer harvest, and not the number of deer needed to sustain wolf populations alone. The standard and guideline (Forest Plan, p. 4-95] reads:

Provide, where possible, sufficient deer habitat capability to first maintain sustainable wolf populations, and then to consider meeting estimated human deer harvest demands. This is generally considered to equate to the habitat capability to support 18 deer per square mile (using habitat capability model outputs) in biogeographic provinces where deer are the primary prey of wolves. Use the most recent version of the interagency deer habitat capability model and field validation of local deer habitat conditions to assess deer habitat, unless alternate analysis tools are developed. ). However, other factors (e.g., local knowledge of habitat conditions) are to be considered by the biologist, as well, rather than solely relying upon model outputs.

It is correct that "...the agency has never determined what level of habitat capability is necessary in the absence of human deer hunting." This references a statement from the *Proposed Strategy for Maintaining Well Distributed Viable Populations of Wildlife Associated with Old Growth Forests in Southeast Alaska* [PR #572\_1570, p. 33], which states:

Habitat capability necessary to provide for equilibrium of predators and prey should be maintained wherever possible. As a general rule, sufficient habitat capability for Sitka black tailed deer should be maintained to support at least 5 deer per mile<sup>2</sup> where deer are the primary prey for grey wolves (i.e., on most islands and the southern half of Cleveland Peninsula).

The document goes on to state that "[a]ssuming the deer: wolf ratio needed for equilibrium is 156:1, the minimum deer density needed to sustain wolves in GMU2 (1 wolf/32mi<sup>2</sup>) at equilibrium is 5 deer per mi<sup>2</sup>" [Id., p. 164]. Appendix 3 to the Draft Navy ROD points out that "[w]hile subsistence hunting could be affected sometime in the future, all WAAs in the Etolin biogeographic province are projected to remain above five deer/mi<sup>2</sup>, the level thought needed to sustain a viable wolf population."

Falling below 18 deer per square mile does not in itself imply viability concerns for wolves. The standard and guideline was designed to maintain equilibrium populations of wolves and deer, while also providing for a sustainable harvest of deer by humans [PR #572\_1373]. To maintain viable wolf populations under the Forest Plan, the Viable Populations Committee recommended that a deer density of at least five deer per square mile be maintained in areas where deer are their primary prey [PR #572\_1570, p. 33]. Wolves may persist on other prey, such as mountain goats, moose, salmon, beaver, and bear [PR #572\_1373, pp. 5 and 16], and according to the ADF&G 2012 and 2014 Elk Management Reports [PR #572\_1565 and PR #572\_1566], wolves on Etolin are preying on elk as well.

I believe that the Navy EIS, Draft ROD, and project record indicate that the Responsible Official adequately considered the potential effects of the project on deer, wolves, and subsistence users. The Forest completed these analyses in compliance with current Forest Plan direction, and the effects have been clearly disclosed in the Navy EIS and Draft ROD.

Information on wolves in Southeast Alaska is regularly being updated. Therefore, it is appropriate to ensure that all current information is considered in relation to the Navy project and wolves on Etolin Island. Therefore, I am instructing the Forest Supervisor to review any new reports or other publications relative to wolves in Southeast Alaska for relevancy to the Navy project, and update any supporting documents if warranted prior to the Final ROD for the Navy project.

### **Conclusion**

As discussed above, I am instructing the Forest Supervisor to do the following prior to signing the Final ROD for the Navy project:

- 1) Prepare an addendum to the BA/BE for the Navy project that includes the following items:
  - a. Documentation and review of the updated survey and nest monitoring information obtained during the 2015 season. If additional nests are identified as a result of these efforts or during project implementation, appropriate Forest Plan standards and guidelines will be applied and any timber sale contract implementing the project will be modified through appropriate provisions, if warranted.
  - b. A review of the relevance of the new literature cited by the objectors (Sonsthagan 2012 and Smith 2013). The scale and magnitude of the project, the diversity of harvest prescriptions and retention levels, and the established goshawk nest buffers, which contribute to habitat connectivity, should help discount many of the concerns expressed by the objectors, and this can and should be included in the updated analysis.
  - c. Revised maps of the Etolin Island WAAs, current harvest units, POG, and designated nest buffers should be developed for the project record and referenced in the BA/BE.
  - d. An update to the cumulative effects analysis for goshawks, based on all of the above information.
- 2) Validate the habitat connectivity information in the Anita Bay pinch point area after review of the goshawk nest buffers and partial harvest prescriptions for the harvest units in this area.
- 3) Review any new reports or other publications relative to wolves in Southeast Alaska for relevancy to the Navy project, and update any supporting documents if warranted.

## SEACC and the Wrangell Resource Council (No. 15-10-00-0007 A218)

### **Issue 1. Whether the Forest Service’s justifications for scheduling the Navy project are reasonable and based on accurate information.**

Objectors assert that the Forest Service’s justifications for scheduling the Navy timber sale are arbitrary and violate NEPA because the timber sale is based on flawed market demand analyses which exaggerate the needed timber volume goal. Objectors also assert that the long-term demand projections detailed by Brackley et al. (2006) have proven to be consistently high, that the gap between projections and reality is large, and that it is arbitrary for the USFS to continue to ignore this gap. Objectors further assert that the Forest Service decision to revert from the “limited lumber” to “expanded lumber” scenario is arbitrary because “expanded lumber” nearly doubles the demand projection for 2014. Finally, objectors assert that the basis for changes in the Alaska Region limited export policy are unsubstantiated, and that the failure to evaluate any evidence that the 2012 modification, and the limited export policy itself, benefits local business by promotion in-region wood manufacturing violates NEPA.

#### Discussion

The scheduling of the Navy timber sale is not arbitrary, nor does it violate NEPA. The Tongass National Forest’s market demand analyses are forest-wide analyses, not project-specific. Furthermore, the forest-wide demand analyses supporting the Navy timber sale are based on the best available science and have been extensively peer reviewed.

The Forest Service is aware of opposing and conflicting views of the market demand analyses prepared for the Tongass Forest Plan, and has comprehensively responded in Brackley and Haynes [2008], and Appendix G and Appendix H of the Forest Plan. The planning cycle market demand analysis for the 2008 Forest Plan was presented in *Timber Products Output and Timber Harvests in Alaska: Projections 2015 – 2025* [Brackley et al., 2006] and was further elaborated in *Timber Products Output and Timber Harvests in Alaska: An Addendum* [Brackley and Haynes, 2008].

The interaction between the planning cycle demand and annual demand calculations is described in Appendix G of the 2008 Forest Plan. Annual demand estimates are based on best available information and an assessment of current conditions. The Morse methodology model strives to find the intersection of supply and demand. Of significant importance, the long-term demand estimate calculated by the Pacific Northwest Research Station and the annual demand estimate completed using the Morse methodology assume supply is not a limiting factor. That is, the estimated volume of timber needed to meet demand cannot be met if there is insufficient economic volume ready for sale.

As stated in the Morse methodology, “[s]eeking to meet market demand for timber under [current] conditions requires a great deal of professional judgement” [Morse, 2000]. Morse further cautioned that the impact of underestimating timber demand is much more serious than overestimating timber demand. Erroneously underestimating timber demand would limit timber supply, likely leading to sawmill closures and negatively impacting local and regional economies. In contrast, overestimating timber demand and preparing more timber than demand

requires would lead to unsuccessful timber sales (no sale) and no environmental impacts. The negative consequences of underestimating timber demand far outweigh the consequences of overestimating demand. Notably, Tongass National Forest annual timber demand has always been volatile and can differ from actual harvest on a year-to-year basis. The Morse methodology responds to that volatility with self-correcting mechanisms whereby future year offerings are reduced when actual harvest falls below demand projections. The Morse methodology similarly adjusts for changes to sawmill capacity resulting from openings and closures [PR #572\_1162, pp. 13 and 45].

Su Alexander, prior Alaska Regional Economist, has explained the balancing of several different calculations that are used when making changes to estimated annual demand [see Revised 2014 Annual Demand for Tongass Timber, PR #572\_0489]. The “expanded market scenario” for 2014 is based on a variety of factors:

- 1) The time span between timber sale purchase and timber harvest decreased. Timber sale purchasers were not holding inventory as long, which increases demand;
- 2) The volume under contract, another measure of inventory, decreased from 130 MMBF (2012) to 110 MMBF (2013). As inventory decreases, the demand calculation increases; and
- 3) Brackley et al. projected a 2012 to 2013 harvest increase, also increasing the demand estimate.

The outcomes of several calculations are balanced, and professional judgement applied, when making changes to the annual demand estimate. While overall estimated demand decreased (by just 1 MMBF), there were changed conditions from 2013 to 2014 which support the Forest Service position that the “expanded lumber” scenario is appropriate. These include the facts that timber sale purchasers were not holding inventory as long and the volume under contract decreased. In addition to regional observations, export policies, strong overseas markets, and recovering domestic markets are better aligned with a “medium-low” scenario, all of which support an “expanded lumber” estimate of 142 MMBF.

Of noteworthy importance, 142 MMBF is not intended to represent actual harvest. It reflects the volume of timber the Forest Service identifies as the goal to offer to replace the volume expected to be harvested while maintaining a two to three year timber supply under contract. Maintaining a two to three year timber supply under contract allows the industry to respond to market fluctuations. The actual volume of timber offered in any given year is impacted by other factors, including budget appropriations, NEPA process schedules, litigation delays, offering smaller sales to small operators, and the statutory requirement that all timber sales appraise positive.

Objectors erroneously link actual harvest with market demand on multiple occasions throughout their objection. If actual harvest were used as the basis for demand, there would be no opportunity for the market to rise with the economy and no opportunity for new operators to enter the industry, which is not consistent with the Forest Plan goal of supporting local and regional economies. Furthermore, as stated above, over-supplying the market is less damaging than under-supplying the market. If more timber is offered than purchased in a given year, the unsold volume is still available for purchasing off-the-shelf. In contrast, a significant shortfall in

the timber supply available for harvest would negatively impact the industry and local and regional economies. Finally, objectors fail to acknowledge the need to account for contingency in evaluating annual market demand for timber and setting annual timber offerings. In particular, the annual timber sale program needs to account for delays in timber sale preparation, administrative reviews, litigation, fiscal and budgetary constraints, and other unanticipated challenges.

Appendix A to the Navy EIS details the Forest Service rationale for considering the Navy timber sale. The volume reported in Appendix A, Volume Available for Sale, represents the volume that has already gone through the NEPA process, concluded the administrative review process, and is not further delayed by litigation. Appendix A discusses the Navy timber sale within the context of already available timber supply and also expected annual demand.

As discussed in Appendix A, the sizes of timber sale contracts are based on the needs of Tongass National Forest sawmills and in accordance with FSM 2409.18, Section 11.3. Small volume contracts are generally offered in situations where: 1) the project is designed to be specifically allocated to small operators; 2) an allocation of volume for small offers has made during the decision or during informal appeal/objection resolution meetings; and 3) the harvest is within Phase 2 lands as determined by the Forest Plan. Appendix A explains that the Navy timber sale is primarily designed for one larger contract, and considers volume that could potentially meet that need.

Objector disagrees with the regional export policy, which is also outside the scope of a project-level decision. The Alaska Region's limited export policy is a region-wide policy that applies to the forest-wide timber program. The policy should not be evaluated at the project level as the project (i.e., Navy timber sale) is only one project in an overall Tongass National Forest timber sale program. The limited export policy was previously analyzed, evaluated, and approved in 2007 in an effort to boost appraised values, provide economic timber sale opportunities, and provide additional processing options for timber sale purchasers. Notably, the export policy is designed to provide purchasers the option to export lower-grade materials to out-of-state markets. In the past (at the time of long-term contracts), lower-grade material was used to support pulp mills. Currently, with the closure of all pulp mills, there is little opportunity to utilize lower-grade material. By allowing export of low-grade material, timber can be appraised at a more positive rate, thereby reducing the amount of deficit sales.

The value of keeping sawmills open and businesses operating cannot be understated. Businesses in Southeast Alaska operate like any other – they balance the need to retain a workforce with cash flow needs. They will continue to employ Southeast Alaska residents as long as they are able to successfully remain in business. While whole log export may be perceived as negatively impacting local employment in lumber manufacturing, it does aid local employment by keeping small businesses viable. Export related shipping, stevedoring, and other services also create employment opportunities.

**Issue 2. Whether the Draft Navy ROD's conclusion that wolf populations will remain stable is reasonable.**Discussion

Objectors raise many of the same issues raised by Greenpeace and Cascadia Wildlands in the objection they filed on the Navy project. See my response to Issue 13 of that objection, above, for a response to those issues. As stated in that response, I believe that the Navy EIS, Draft ROD, and project record indicate that the Responsible Official adequately considered the potential effects of the project on deer and wolves. The Forest completed these analyses in compliance with current Forest Plan direction, and the effects have been clearly disclosed in the Navy EIS and Draft ROD.

The Forest acknowledged the USFWS 90-day finding on the 2011 petition to list the wolf [PR #572\_1138], and discussed this updated information in Appendix 3 of the Draft ROD [p. A3-44]. However, this finding does not invalidate the wolf or related deer analyses in the Navy EIS or the Wildlife and Subsistence Addendum report [PR #572\_1135]. The Forest's wildlife biologist incorporated the latest available wolf harvest information for Etolin Island, after communication with ADF&G [see PR #572\_1136 and PR # 572\_0889].

While the 2014 90-day finding is new information since 2009, concerns about wolf in Southeast Alaska are not new. The Biodiversity Legal Foundation petitioned to list the wolf in 1993, with the USFWS determining that listing was not warranted. After a subsequent lawsuit and court-ordered new review, the USFWS again determined, in 1997, that listing was not warranted.

In August 2011, Greenpeace and the Center for Biological Diversity petitioned to list the wolf in Southeast Alaska; the petition focused largely on the results of studies – primarily Dave Person's - on Prince of Wales Island and nearby islands including Kosciusko. (Etolin Island is mentioned only a handful of times and primarily within the larger context of islands in Southeast Alaska.) On March 31, 2014, the USFWS published a 90-day finding in the Federal Register that “the petition presents substantial scientific or commercial information indicating that listing the wolf may be warranted” [p. 1 of finding at PR #572\_1137], and requested information to consider for their 12-month status review. As the 90-day finding points out, “[b]ecause the [Endangered Species] Act's standards for 90-day and 12-month findings are different, as described above, a substantial 90-day finding does not mean that the 12-month finding will result in a warranted finding” [Id., p. 6].

As stated above in response to Issue 13 of the Greenpeace and Cascadia objection, information on wolves in Southeast Alaska is regularly being updated. Therefore, it is appropriate to ensure that all current information is considered in relation to the Navy project and wolves on Etolin Island. Therefore, prior to the Final ROD for the Navy project, I am instructing the Forest Supervisor to review any new reports or other publications relative to wolves in Southeast Alaska for relevancy to the Navy project, and update any supporting documents if warranted prior to the Final ROD for the project.

**Issue 3. Whether the Forest Service adequately considered the direct, indirect, and cumulative effects of the project on climate change.**Discussion

Objectors cite the Council on Environmental Quality's (CEQ's) *Revised Draft Guidance on Effects of Climate Change in NEPA Reviews* and assert that the Forest Service failed to take the hard look required by NEPA in making its conclusion that "the magnitude of this project is so small compared to the factors that contribute to climate change that foreseeable effects would be small if measurable at all for all alternatives." I disagree.

The Navy EIS tiered to the 2008 Tongass Forest Plan EIS, which includes discussions about the direct, indirect, and cumulative effects of forest management activities on the climate in the Climate and Air section [Forest Plan FEIS, pp. 3-11 through 3-20]. This section specifically includes a discussion about carbon sequestration.

The 2015 Draft Navy ROD [Appendix 3, p. A3-6] also cites CEQ's *Revised Draft Guidance on Effects of Climate Change in NEPA Reviews*, noting that:

In addressing [greenhouse gas] GHG emissions, agencies should be guided by the principle that the extent of the analysis should be commensurate with the quantity of the projected GHG emissions. When an agency determines that evaluating the effect of GHG emissions could not be useful to distinguish between the no-action and proposed alternatives and mitigation, the agency should document the rationale for that determination.

Appendix 3 of the ROD then goes on to explain how much above-ground carbon storage is estimated on the Tongass (not including carbon located below ground in non-forested wetlands, alpine, grass, shrub lands, roots, soil, litter, and other organic materials), and the very minor effect that the Navy project will have on the carbon resources of the forest and the overall global carbon storage. Based on the amount of carbon that is estimated to be stored on the Tongass and the minor effect the Navy project may have on that carbon storage, the Draft ROD concludes that "small, if even measurable, changes in carbon sequestration under any of the action alternatives, whether positive or negative, would not be a relevant factor for choosing among alternatives" [Id., p. A3-7]. This conclusion is consistent with the still existing policy identified in *Climate Change Considerations in Project Level NEPA Analysis (2009)* [PR #572\_1575]. The Direct and Indirect Effects Analysis section of that policy [p. 5] states:

It is not necessary to calculate GHG emissions for most projects; however, in situations where the responsible official finds the information useful for decisionmaking, such data and conclusions developed through quantitative analysis would normally only be used for comparing alternatives related to direct effects or addressing any applicable regulatory requirements related to GHG emissions. Without enough scientific understanding to draw conclusions about the significance of the quantitative results, qualitative discussions about the potential for greenhouse gases sequestered and emitted are more appropriate for disclosing climate change implications.

In regard to cumulative effects, the policy states:

As GHG emissions are integrated across the global atmosphere, it is not possible to determine the cumulative impact on global climate from emissions associated with any number of particular projects. Nor is it expected that such disclosure would provide a practical or meaningful effects analysis for project decisions.

A qualitative cumulative effects discussion could incorporate a summary of local, regional, or national climate change scientific assessments to recognize overall climate change effects expected as a result of all contributions to climate change. However, it will not be possible and it is not expected that the effects of a particular project or multiple projects can be specifically attributed to those effects.

[Id. at 6]. The information provided in Appendix 3 of the draft ROD includes relevant and current information about carbon sequestration and climate change, and places it in both a local (Tongass) and global context. The information also makes it clear that performing additional quantitative analysis would not provide better insight on climate change effects or more meaningful information relevant to choosing among the alternatives considered for the Navy project. In my opinion, the level of analysis of the direct, indirect, and cumulative effects on climate change conducted for the Navy project is adequate and consistent with draft CEQ guidance and Forest Service policy.

### **Conclusion**

As discussed above, I am instructing the Forest Supervisor to do the following prior to signing the Final ROD for the Navy project:

- 1) Prepare a supplement/addendum to the BA/BE for the Navy project that includes the following items:
  - a. Documentation and review of the updated survey and nest monitoring information obtained during the 2015 season. If additional nests are identified as a result of these efforts or during project implementation, appropriate Forest Plan standards and guidelines will be applied and any timber sale contract implementing the project will be modified through appropriate provisions, if warranted.
  - b. A review of the relevance of the new literature cited by the objectors (Sonsthagan 2012 and Smith 2013). The scale and magnitude of the project, the diversity of harvest prescriptions and retention levels, and the established goshawk nest buffers, which contribute to habitat connectivity, should help discount many of the concerns expressed by the objectors, and this can and should be included in the updated analysis.
  - c. Revised maps of the Etolin Island WAAs, current harvest units, POG, and designated nest buffers should be developed for the project record and referenced in the BA/BE.
  - d. An update to the cumulative effects analysis for goshawks, based on all of the above information.

- 2) Validate the habitat connectivity information in the Anita Bay pinch point area after review of the goshawk nest buffers and partial harvest prescriptions for the harvest units in this area.
- 3) Review any new reports or other publications relative to wolves in Southeast Alaska for relevancy to the Navy project, and update any supporting documents if warranted.

By copy of this letter, I am instructing the Forest Supervisor to complete the addendum to the BA/BE, update the identified information, and make any warranted adjustments to the decision in the Final ROD for the Navy project or in an appendix to that decision. The Forest Supervisor should follow the procedures set forth in FSH 1909.15, Section 18.1 in his review and consideration of the information in the addendum and its effect on his decision.

As soon as the Forest Supervisor has complied with my instructions and notified me, he may sign the Final ROD and notify the interested and affected public of his decision.

My review constitutes the final administrative determination of the Department of Agriculture with regard to the objections raised to the Navy project. No further review of my written response from any other Forest Service or USDA official is available [36 CFR 218.11(b)(2)].

Sincerely,



BETH G. PENDLETON  
Regional Forester

cc: Wrangell Resource Council, Earl Stewart, Bob Dalrymple, Pat Heuer, Katie Benning