

Big Thorne Project

Final Supplemental Information Report

Documentation of

Interagency/Interdisciplinary Review

August 2014

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Introduction

A. Scope of this Report

I prepared this Supplemental Information Report (SIR) to address the direction contained in the Regional Forester's September 30, 2013 administrative appeal decisions affirming the Forest Supervisor's decision on the Big Thorne Project (Big Thorne Project record (PR) #736_4018). This direction requires that I, Forrest Cole, Forest Supervisor and the Responsible Official for this project, prepare a Supplemental Information Report that responds to the following six items listed in that letter:

- 1) A review of the August 2013 Person Statement to determine whether the information and conclusions in that Statement are consistent with the information in the analyses completed for the Big Thorne Environmental Impact Statement (EIS);
- 2) A review of project design in light of this information, including Old-growth Reserve (OGR) modifications and legacy structure within units, to determine whether changes are needed to address identified wolf sustainability concerns;
- 3) A review of project design in light of this information to determine whether additional mitigation measures should be added, such as additional opportunities for road closures or seasonal management of roads to reduce habitat fragmentation and minimize disturbance to wolves and deer during critical times of the year;
- 4) A review of available regulatory processes used by State and Federal agencies to determine whether changes in hunting seasons, bag limits, and/or hunting and trapping methods should be pursued to help maintain sustainable wolf populations;
- 5) A closer review of public and other agency concerns expressed during the Big Thorne Project planning period or within the appeals in light of this information to assess whether the conclusions made in the Big Thorne EIS or Record of Decision (ROD) remain valid; and
- 6) A determination whether there are "significant new circumstances or information relevant to environmental concerns" that require the preparation of a Supplemental EIS for the Big Thorne Project.

These six items coincide with the listed sections of this report titled *Specific Areas of Investigation*. In short, I was directed to engage an Interagency Wolf Task Force (Task Force) of wildlife biologists to review the Person Statement, identified as the *Statement of David K. Person, Regarding the Big Thorne Project, Prince of Wales Island* (Statement) (PR# 736_3727). This Statement was submitted to the Forest Service as an attachment to two administrative appeals for the Big Thorne Project ROD. The Task Force review was to help me to determine if the information in the Statement constitutes significant new information, since the Statement was dated 8/15/2013, well after the date of the decision of the Big Thorne Project (6/28/2013). I have also included a brief review of the 90-day finding of the U.S. Fish and

Wildlife Service (USFWS) for the petition to list the Alexander Archipelago wolf under the Endangered Species Act (ESA), which was posted March 31, 2014, also well after the Big Thorne Project decision.

A draft of this SIR was posted on the Tongass National Forest public website and sent to the appellants as directed by the Appeal Deciding Officer (ADO) on May 23, 2014 for a 30-day review ending on June 23, 2014. I have read in detail the comments submitted by Audubon Alaska, Alaska Wilderness League et al, Cascadia Wildlands et al., the exhibit by Dr. David K. Person, and the comments of the U.S. Fish and Wildlife Service. In addition, over 170,000 comments from other members of the public and organizations were received. These individual comments, mostly form letters submitted through petitions, have been compiled and sorted through the Forest Service's Comment Analysis and Response Application (CARA) to identify any additional information not found in the appellants' letters.

These comments were reviewed and pertinent information to the Big Thorne SIR and the items listed in the ADO letter is addressed in the conclusion section of this document. Errata and additional clarification was added to the appendices as needed. Other comments received by the Forest Service that were not relevant to the direction for the preparation of this SIR were considered as appropriate to the project and the NEPA process.

During my review of the comment letters, my focus was on whether input from commenters resulted in significant new conclusions or information that would affect my decision on the Big Thorne Project and whether the commenters' additional input relevant to environmental concerns would require the preparation of a Supplemental EIS for the Big Thorne Project in accordance with FSH 1909.15, Section 18.

B. Reply to the Comments on the Draft Big Thorne SIR

After reviewing the information provided, it was apparent that there are multiple ways to analyze the effects of the Big Thorne Project on the environment. Although I find the currently available science, as outlined in the project record, supports a conclusion that the Big Thorne Project does not itself pose a long-term threat to the viability of Alexander Archipelago wolves, there are sufficient public concerns to adjust certain aspects of my decision on the Project. This conclusion is reached specifically because:

- timber harvest will have an impact on deer habitat, including high-value deer winter range, and that impact depends on the type of harvest;
- new roads will provide increased human access for hunting and trapping; and
- average deer and wolf abundance is likely to decrease as a result of the project, especially considering the cumulative effects of past, present and reasonably foreseeable future projects.

The effect of this project on wolf and deer populations was evaluated by the Interagency Wolf Task Force as well as in previous analyses for the 1997 and 2008 Tongass Land Management Plan EIS and the extensive Big Thorne Project Final Environmental Impact Statement and Record of Decision. Those analyses thoroughly examined the risk to sustainable wolf and deer populations for hunting and trapping and to maintain the viability of wolves, and the risk of extirpation of the Alexander Archipelago wolf population on POW. Different individuals have examined and expressed the outcome of risk analysis

differently. The types of risks to deer and wolves resulting from the Big Thorne Project and the possible outcomes remain similar to those expressed previously in the 1997 and 2008 Tongass Land and Resource Management Plan EISs. I have fully considered these different opinions and have carefully considered and relied upon the expert advice of Forest Service staff to help me reach these conclusions:

- All information and analysis indicates that human-caused mortality is the primary and most direct threat to wolves on POW. Habitat condition, particularly reductions in deer winter range, contributes to risk in an indirect way by affecting habitat connectivity and the quality of winter range for deer, the wolves' primary prey species. The threat to wolves posed by loss of 'deep snow' winter range is largely mediated through a series of events related to hunting and trapping and can be mitigated by careful harvest regulation, education, and enforcement. Similarly, the increase in local roads indirectly influences human-caused mortality by allowing for easier access; however, this can be partially mitigated through careful harvest regulation, education, and enforcement. Although some of these factors are outside the scope of the Big Thorne decision, my adjustments will help to reduce habitat impacts while additional regulatory, education, and enforcement efforts are pursued.
- According to Person and Russell, the vast majority of wolf mortality, around 87 percent on Prince of Wales Island during one period of study, is human caused, and over 50 percent of trapping occurs along the beaches using boat access. The single most-effective tool available to address concerns with wolf mortality while meeting Federal obligations for multiple use and State obligations for managing sustainable populations is clearly through management of human harvest including education, regulation, and enforcement. As with other harvested wildlife, management of the hunting and trapping season length and bag limits on POW will influence the status of wolves in the short term and provides a means to manage the population that more effectively meets multiple-use objectives. In fact, this is the only direct method to deal with this issue. The State of Alaska wildlife biologists, the Forest Service wildlife biologists, and I agree on this. It is my hope that the adjustments to the Big Thorne Project, which defer offering of units within certain OGRs, will contribute to the success of future regulatory changes in promoting the sustainability of wolf populations on Prince of Wales Island.

My evaluation of comments on the draft SIR was conducted with a keen attention to my obligations for multiple-use management and consideration of management approaches to meet a range of social, economic, and ecological needs effectively through resource management. What I found most striking during my review of input the Forest Service received on the draft SIR, however, was the absence of thorough input and recommendations on the direct cause and remedy of the decline in wolf population. The majority of wolves that die on Prince of Wales Island are a direct result of legal and illegal harvest by humans. As many as 50 percent of the wolves killed on Prince of Wales in 1 year were accessed by boat on the beach (Person et al. 1996). Based on this, I had to ask myself this question– “If I do not implement the Big Thorne Project, would this solve the issue of wolf mortality on Prince of Wales Island?” – and the answer was no. The Big Thorne Project creates incremental changes in habitat and road access. The decision on the project mitigates much of the near-term indirect risk to wolves associated with the Big Thorne Project, which in concert with the long-term habitat improvements to deer habitat accomplished through planned pre-commercial and commercial thinning (Hanley, et al. 2013), partial harvest of old-

growth stands, and the closure of roads, serves as an important contribution to the overall ecological balance of the project. However, if the desire is to immediately improve the status of the wolf population on the Island, then the remedy is to reduce harvest of wolves through regulatory and enforcement activities. Our adjustments to the Big Thorne sale offering will currently maintain certain OGRs and thereby mitigate effects. However, the scale of the wolf viability issues on POW go beyond this project or the Tongass National Forest Land Management Plan. These two actions have an immediate and accountable direct effect on the population rather than the indirect effects from timber harvest and road construction.

Few places on the Tongass have fully implemented the amount of timber harvest originally anticipated in the 1979, 1997, 2003, and 2008 Forest Plan decisions. The Big Thorne Project area is one of those places where timber harvest would occur close to full implementation. In other words, most of the productive old-growth forest would be harvested within the constraints of standards and guidelines, buffers and maintenance of old-growth reserves and other non-development LUDs. The Big Thorne FEIS acknowledges that 26,090 acres of the productive old-growth forest within the project area has been harvested with access from the extensive road system.

The intent of the conservation strategy is to ensure that very large, large, medium, and small areas of productive old growth, known as Old Growth Reserves (OGRs) along with a matrix of other protections such as beach buffers, riparian areas, and forested lands where commercial timber harvest is not allowed remain intact to provide sufficient habitat to ensure viable populations of a wide variety of species across the Tongass National Forest. While it is inappropriate to attempt to evaluate population viability at the scale of an individual project, we acknowledge the impact this project may have on the wolf and deer populations that occupy the project area.

The implementation of the 2001 Roadless Rule and the level of support for that Rule from many conservation groups have helped focus the Tongass toward harvesting timber in areas with previous timber harvest and as such are already roaded. Not entering areas requiring new road systems will retain intact watersheds, but may increase the cumulative effects in the roaded areas. With the conservation strategy intact, the transition to move away from old-growth harvest to young-growth harvest in motion, including 2,299 acres of commercial thinning of young-growth forest in the Big Thorne Project, and the mitigation provided in the Big Thorne Project, I believe important habitat is maintained at the scale of POW to sustain deer and wolf populations and provide for sustainable use of those resources.

Furthermore, since there are indications that the wolf or the deer population may be at risk of not providing for long-term hunting and trapping activities, I am committed to work with the State of Alaska to manage this through the regulatory processes, such as the development of season and harvest limit proposals and road access management as stated in the ROD (p. 30). As an indication of the potential for appropriate management adjustments, at a temporal scale that is responsive to the status of wolves and deer, the State of Alaska, USFWS and USFS representatives met with the public on Prince of Wales. A reduction in the wolf harvest cap which is currently 60 wolves per hunting and trapping season is being considered. By placing an emphasis on prudent harvest management, a combination of State and Federal agencies can effectively manage the risk to wolf and deer populations while meeting obligations for multiple use and sustainable populations.

The issues to address now are how to manage wolf harvest, road densities and deer habitat (to maintain a prey base), which are recognized in the 2008 Forest Plan Standards and Guidelines. After the Logjam FEIS and ROD was released to the public, the State of Alaska, USFWS, and the Forest Service met to determine if a Wolf Habitat Management Plan should be developed and implemented as directed by the Forest Plan (Forest Plan, p. 4-95). The outcome of that work (PR #736_3173) was that more information was needed on the population of wolves on Prince of Wales before a plan could be created. An administrative study designed to lay the groundwork for that understanding is currently in progress to address the critical need for a sampling design that extends beyond the roaded base to estimate wolf abundance at the scale of POW and surrounding islands.

In addition to carefully considering comments related to environmental effects on wolves and deer, I also carefully considered comments regarding the OGR modifications to the Forest Plan small OGRs and Legacy Standard and Guideline. First, I would like to respond to the claim that the OGRs modifications are outside Forest Plan direction. The Forest Plan, Appendix K allows the line officer to consider modifications if there was an “other project that was not considered in the Forest Plan”. While the dismissal of the Tongass exemption of the 2001 Roadless Rule is not actually a project, it affected 40 percent of the Big Thorne Project area. In addition, I received comments during the scoping process to consider redesigning the OGRs into the roadless areas to expand the amount of the roaded area where timber harvest could occur. To comply with NEPA, two of the four action alternatives were developed with modifications to the Forest Plan small OGRs. For Alternative 3, the roaded portions of the OGRs were reconfigured to be within the roadless areas as much as possible. For Alternative 4, the 2011 Interagency Resource team (IRT) biologically preferred locations were incorporated as required by the Forest Plan, Appendix K.

The OGR modifications received comments during the public review period on the Big Thorne Draft EIS. I considered these comments, as well as comments received on the DSIR, and balanced them with other considerations when making my decision. I have concluded that units within VCU 5800, 5810, and 5850, located within existing OGRs, will be deferred from initial sale offerings. My decision to defer offering these units responds to comments received and will maintain habitat while enforcement and regulatory efforts are pursued and assessed for their effectiveness. The OGRs designs selected for the Big Thorne ROD, plus this adjustment to the Alternative 3 designs, fall within the range of the effects displayed in the Big Thorne Final EIS.

Many comments submitted on the Draft SIR suggested that OGR modifications did not meet the purpose of sustaining populations of deer and wolves. The intent of the Conservation Strategy is for the old-growth reserve system to provide habitat for a suite of old-growth associated or old-growth dependent species. Small OGRs, along with the matrix part of the Strategy, are designed to help provide landscape connectivity between the large and the medium old-growth reserves and, as such, provide an important habitat component for wolves and deer. Many of the comments also expressed concern over the change in acreage of low-elevation productive old growth between the current OGRs and the proposed modified OGRs. Although small OGRs were designed to be a minimum size and provide a minimum amount of productive old-growth forest, they were not defined to contain a specified amount of low-elevation old-growth forest. All of the modifications to the OGRs are based on information from the Forest Plan and the 2008 Forest Plan Amendment FEIS.

My review of the comments from Cascadia, et al. concerning the implementation of Legacy Forest Structure Standard and Guideline (Legacy S&G) gives me an opportunity to clear up some apparent misconceptions. First, the Legacy S&G was not modified with the Big Thorne Project. The use of monikers “Legacy ‘A’ and Legacy ‘D’” was a project tool to help track the amount of legacy. All the specified legacy areas have old-growth stand characteristics as required by the Forest Plan (Forest Plan p. 4-90). This confusion can be attributed to the use of the word “unsuitable” on page 7 of Appendix C which was intended to communicate that an area was forested land unsuitable for commercial harvest as defined by the Forest Plan Appendix A and NFMA, and not that these acres did not contain productive old-growth forest. The diagram in the Big Thorne FEIS (p. 3-411) displays how this was determined for the project. There was also a comment concerning the use of areas deferred for other resource concerns as legacy. The Forest Plan is very clear that “structure left within the units for other resources counts ... providing it meets the old-growth characteristics” and therefore can be used to meet the Legacy Standard.

I assisted in the development of the Legacy S&G during the 2008 Forest Plan Amendment process and recognize the controversy and the varying opinions expressed at that time. However, as stated in the decision for the 2008 Amendment, the Legacy S&G was designed to provide a more-comprehensive approach of retaining old-growth structural components in areas of timber harvest rather than the single-species approach of the 1997 Plan to address the habitat needs of goshawk and marten. However, the components of legacy structure retention requirements are based on the habitat needs of goshawk and marten by providing “some of the largest, oldest live trees, decadent or leaning trees, and hard snags occurring in the unit” (2008 Forest Plan Amendment ROD, pp. 23 and 25) which will provide habitat for these species. I also considered comments on the Draft SIR suggesting that I failed to adequately consider the spatial arrangement of legacy elements. Again, this was considered at the time of the development of the standard. Based on the key findings of a long-term project in the Pacific Northwest, the placement of the retention was found to be less important than the amount of retention (2008 Forest Plan Amendment FEIS, p. D-38).

I do agree that the contributions of the Legacy S&G have not been well documented; units with legacy retained have not been harvested and monitored at this time, hence evaluation is not possible. However, this is part of the Tongass Monitoring and Evaluation Plan (Forest Plan, p.6-8) and will occur as the units are harvested. If another method becomes readily apparent, the standard may be modified.

C. Conclusion of the Review of the Comments on Draft SIR

My decision on the project considered and weighed important social and environmental issues along with resource management obligations in order to choose an action that sustains both communities and fish and wildlife populations. I have chosen to strike a balance between the compelling social needs of communities on POW and a commitment to sustainable multiple-use management as described in the Tongass Land and Resource Management Plan. I acknowledge that timber harvest could negatively affect wolf populations in the future if severe winters occur and inadequate winter range exists to support deer in the Big Thorne Project area. Wolves are an important part of the ecosystem that supports hunters and subsistence users; they contribute to the wild nature of the Tongass National Forest. Therefore, I am taking steps to ensure the persistence of wolves within the ecoregion associated with the Big Thorne project. My evaluation of the extent of risk posed to wolves by the project suggests that, even in the face of severe winters, the risk on POW posed to wolf viability is not high. Timber harvest benefits people by

supporting jobs, by providing wood supply to multiple mills on POW, and by providing some long-term stability to the current industry while we transition to harvesting young growth. My limited adjustment deferring the offering of certain units promotes this balance.

D. Location and Description of the Project Decision

The Big Thorne Project is located on Prince of Wales Island (POW) in Southeast Alaska near the towns of Thorne Bay and Coffman Cove on the Thorne Bay Ranger District of Tongass National Forest, approximately 40 miles northwest of the City of Ketchikan. The project area covers approximately 232,000 acres.

The decision selects a modified version of Alternative 3 from the Big Thorne Final Environmental Impact Statement (FEIS). This decision represents careful consideration of multiple resources and the final project reflects a series of modifications in response to concern regarding multiple resources managed in the Big Thorne project area.

Of the 6,186 acres of old growth harvested by ground-based and helicopter methods, 842 acres are reserved for small sales, and 5,344 acres are available for large and/or small sales. Silviculture prescriptions include 3,763 acres harvested using even-aged (clearcut) management, and 2,424 acres harvested using uneven-aged management (partial harvest) with 50-75 percent retention. An additional 2,299 acres of young growth will be commercially thinned using ground-based yarding methods. This timber is needed to ensure a smooth transition from the harvest of old-growth timber to young-growth timber to provide industry in Alaska the opportunity to develop new markets, learn new skills, and acquire new equipment (Secretary of Agriculture. Memorandum 1044-009, July 2013). It will also help to provide a timber for the old-growth micro-sale program and the small sale program that requires old-growth quality timber that is necessary for niche markets. Many of these operators are on Prince of Wales Island and this timber is easily accessible to them. Road construction includes 46 miles of new roads, and 36.6 miles of reconstruction on existing system roads. Of the 46 miles of new roads, 10 miles are system roads, and 36 miles are temporary roads. All temporary roads will be closed prior to contract termination. Approximately 15 miles of new and existing system roads will be gated with seasonal closure into the Honker Divide OGR during wolf hunting and trapping season, and another 15 miles of new and existing system road will remain open for 1 to 5 years past contract termination to allow for firewood gathering and other subsistence uses and then closed. Additional road closures within the project area will occur according to the Access Travel Management Plan for Prince of Wales Island as funding allows.

Modified OGRs were included in the decision for VCUs 5790, 5800, 5810, 5820, 5830, 5850 and 5950. All changes meet the comparable achievement requirements of the Forest Plan as described in Appendix 3 of the ROD and Appendix B of this document.

- 5790 allows a 5-acre harvest unit while retaining the westernmost block of POG.
- 5800 maintains the wildlife migration corridor.
- 5810 maintains elevational travel corridors.
- 5830 drops all old-growth units, maintaining low-elevation/high-volume POG.

- 5850 drops all old-growth units except one, maintaining low-elevation/high-volume POG.
- 5950 includes old-growth units agreed upon by the 2011 IRT.

The net change of POG for all OGR modifications is an additional 645 acres within the OGR LUD. OGRs in VCUs 5840, 5860, 5960 and 5972 are not modified.

This project will reduce POG at all elevations by less than 1 percent from existing condition for the North Central Prince of Wales biogeographic province with 563,008 acres of POG remaining; of this 245,086 acres is high-volume POG. Cumulatively, there is a 49 percent reduction from the original (1954) condition POG for the North Central Prince of Wales biogeographic province.

Uneven-aged management with 50-75 percent retention is prescribed in order to maintain structural diversity in the stands to provide connectivity and other wildlife habitat features. Legacy forest structure is incorporated into even-aged harvest units greater than 20 acres in VCUs 5790, 5810, 5830, 5840, 5850, 5860, and 5972.

I also considered several other factors related to mitigations prior to reaching a final decision. Projects that maintain or improve wildlife habitat, including deer habitat that have already been accomplished in the North Prince of Wales Biogeographic Province in the past 40 years include:

- 75,000 acres of pre-commercial thinning that resulted in increased deer forage quality;
- 522 miles of road closures which reduces the risk of hunting and trapping mortality to deer and wolves by reducing human access;
- With the transition from old-growth harvest to the harvest of young growth forest, approximately 75,000 acres of suitable POG may not be harvested compared to that planned by the 1997 and 2008 Forest Plan FEIS analysis;
- Maintenance of the Conservation Strategy will be accomplished should the Sealaska and Alaska Mental Health Trust land transfers occur.

Projects and mitigation within the Big Thorne Record of Decision that maintain or improve wildlife habitat, including wolf and deer, include:

- Road closures as per the POW Access and Travel Management Plan;
- Road storage and seasonal road closures that access the large Honker Divide OGR;
- Road storage and seasonal closure of all new National Forest system roads;
- Permanent closure of all temporary roads;
- Pre-commercial thinning of 11,543 acres of young-growth timber units that will result in increased deer forage quality;
- Commercial thinning of 2,299 acres of young-growth timber units that will result in increased deer forage quality;
- Uneven aged management for 2,424 acres of old-growth timber units with 50-75 percent retention will maintain structural diversity in the stand, to maintain connectivity and other wildlife habitat features; and,

- Avoiding old-growth timber harvest on 45,200 acres of inventoried roadless areas in the project area.

Background of the Project

A. History of the NEPA Project, Appeals, and Litigation

The Big Thorne Project was initiated in 2010 with online publication in the Schedule of Proposed Actions. A Notice of Intent was filed in the Federal Register in February 2011 and scoping information was sent to over 400 individuals, organizations, tribes, and agencies. The Draft Environmental Impact Statement (EIS) was distributed in October 2012 for a 45-day public review. The Record of Decision was signed June 28, 2013 and distributed with the Final EIS (Big Thorne PR#736_2244 and #736_2248). The following appeals were filed under 36 CFR 215:

- No. 13-10-00-0002, filed by Dick Artley (dismissed pursuant to 36 CFR 215.16(a)(6)) (Big Thorne PR#736_3700);
- No. 13-10-00-0003, filed by Rebecca Knight (Big Thorne PR #736_3701);
- No. 13-10-00-0004, filed by Larry Edwards on behalf of several conservation organizations (Big Thorne PR#736_3707);
- No. 13-10-00-0005, filed by Buck Lindekugel on behalf of Southeast Alaska Conservation Council (SEACC) (Big Thorne PR#736_3735);
- No. 13-10-00-0006, filed by Tom Waldo on behalf of several conservation organizations (Big Thorne PR#736_3738);
- No. 13-10-00-0007, filed by Austin Williams on behalf of Trout Unlimited (Big Thorne PR#736_3760); and
- No. 13-10-00-0008, filed by Jim Adams on behalf of Audubon Alaska (Big Thorne PR#736_3775).

The Regional Forester affirmed the Forest Supervisor's decision with direction to prepare this SIR.

B. History of Project Implementation

As requested in the letter, the changes to the design of the timber harvest units and road locations made during on-the-ground implementation of the *Big Thorne Stewardship Integrated Resource Timber Contract* (2013 IRTC) were used in the review instead of the planned designs and locations for those units and roads. The 2013 IRTC was offered August 17, 2013, though it was not awarded due to instructions in the Regional Forester's decision.

This first timber harvest contract offered from the Big Thorne Project decision included 144 units on 4,043 acres, as well as 21 miles of new and temporary road construction and reconstruction, approved by the decision. The *Big Thorne Stewardship Contract Change Analysis* (PR#736_2921) disclosed any differences between the units and roads as planned in the ROD and as offered in the contract and any differences in the effects. Through this process, it was determined that the 2013 IRTC does not represent a substantial change in the Selected Alternative relevant to environmental concerns. Other timber harvest

offerings approved in the ROD, including the harvest of young-growth units, are planned to be scheduled at a later date and will go through this same process.

The 2013 IRTC, as offered, included three mandatory projects: wildlife habitat improvement on 1,652 acres with pre-commercial thinning; renovation of the Balls Lake Trail and boardwalk; and renovation of the Boy Scout Trail, and two optional projects: wildlife habitat improvement on 2,711 acres with pre-commercial thinning of young growth; and Luck Creek Restoration, providing logs, root wads, and young-growth trees for future in-stream placement, as stewardship components to improve ecological conditions within the project area. Future stewardship contracts may include other restoration and enhancement projects.

This contract is currently being reviewed and planned to be offered in 2014.

Methods of Review

The procedures set forth in FSH 1909.15, Section 18.1 were used in completing this review, consideration of this information, and determining whether there are “significant new circumstances or information relevant to” or having bearing on the Big Thorne Project decision.

I requested the involvement of experts from both the U.S. Fish and Wildlife Service and the State of Alaska Department of Fish and Game (ADFG) in December, 2013 to assist in the review of the Statement. Their task was to evaluate whether the information in the Statement was considered in the analysis for the *Big Thorne Project Final Environmental Impact Statement* and if the conclusions stated would require more analysis for other aspects of the project. This review is documented in Appendix A of this document, the *Interagency Wolf Task Force Report*.

To facilitate and further support this review, two other reviews by members of the Big Thorne Project Interdisciplinary Team (IDT) occurred simultaneously. The first review involved a close look at the process of the small OGR modifications and whether Forest Plan direction was followed. This report also includes more information on the small OGRs modified in the decision from Appendix 3 of the Big Thorne Project ROD. The second review involved the Legacy Forest Structure Standard and Guideline (“legacy”) from the Forest Plan and how it was applied in required value comparison units (VCUs) for the Big Thorne Project. The report describes all considerations in the process of applying legacy as well as a unit-by-unit review of individual applications. For the reviews completed to comply with the Regional Forester’s direction, the harvest unit designs used for analysis reflect the on-the-ground configurations, where available, as displayed in the Change Analysis rather than the planned unit design from the Record of Decision. This involves 144 units out of the 261 planned units for preparation of the 2013 IRTC offering.

Specific Areas of Investigation

Item 1. A review of the August 2013 Person Statement to determine whether the information and conclusions in that Statement are consistent with the information in the analyses completed for the Big Thorne EIS

Since the Statement was submitted after the decision for the Big Thorne Project (June 28, 2013), the Regional Forester directed that I ensure there is no new significant information in the Statement that would require preparation of a Supplemental Environmental Impact Statement. To facilitate this review, as directed by the Regional Forester, I contacted the U.S. Fish and Wildlife Service and the State of Alaska Department of Fish and Game to assist the Forest Service with review of the Statement. This group was designated as the Interagency Wolf Force Task Force (Task Force). The Task Force consisted of the following representatives: Greg Hayward, Regional Wildlife Ecologist, and Brian Logan, Forest Wildlife Biologist, for U.S. Forest Service; Steve Brockmann, Deputy Field Supervisor, and Socheata Lor, Field Supervisor, for U.S. Fish and Wildlife Service; and Douglas Vincent-Lang, Director, and Kimberly Titus, Chief Wildlife Scientist, for Alaska Department of Fish and Game. This group met on February 5, 2014 to establish baselines of the review process and again on March 5 and 6, 2014 followed by phone and email correspondence to complete the review of the Statement.

The Task Force evaluated the extent to which the Statement represented information, analysis, and conclusions substantially new or different from the Forest Service analysis for the Big Thorne Project. Table A, included in Appendix A, the *Interagency Wolf Task Force Report*, developed during the second meeting, describes the substantial overlap of the important elements examined in both the Statement and the Big Thorne Project Final EIS, ROD, and project record. I conclude from this analysis that the majority of the points presented in the Statement are not new information and have been considered fully in the Big Thorne Project analysis. However, the Task Force identified six points from the Statement that were examined differently in the Statement than in the analysis for the Big Thorne Project and thus, warranted further consideration. These are discussed in Attachment 1 of the *Interagency Wolf Task Force Report*. Finally, the Task Force identified five broad conclusions listed at the end of Table A of the *Interagency Wolf Task Force Report*; these are the focus of the majority of the Task Force Report.

Evaluation of Potential New Information

Although six points (*Interagency Wolf Task Force Report, Attachment 1*) were identified during the Task Force review as possibly constituting new information or information presented in a different way, I conclude from the *Interagency Wolf Task Force Report* that these six points do not constitute new information, or, if considered possible new information, additional analysis is not needed to address the effects of the Big Thorne Project. Briefly, these six points include:

1. incremental reduction in deer habitat capability resulting in a larger effect on the predator-prey system owing to nonlinear dynamics
2. unsustainable take of wolves by hunters and trappers attempting to boost deer populations
3. far-ranging indirect effects as hunters transfer hunting efforts from areas depleted of deer to other less-depleted areas
4. legal and illegal take of wolves increasing as hunters perceive competition from wolves for declining numbers of deer
5. extensive harvest of high volume old growth and deer winter habitat particularly on northern POW

6. logging and roading on 25-40 percent of a pack's home range creating a population sink

Point one. The complex interactions that may include nonlinear dynamics that characterize predator-prey-habitat interactions have been known and considered in the FEIS represented by the use of reputable peer-reviewed references, such as Person and Russell (2008), Person (2001), Person et al. (1996), and Person and Boyer (1997). These references document the local science available at the time of the Big Thorne Project analysis of hunter/predator/prey dynamics, hunters' motivations, and possible future changes in hunting patterns. The analyses for the Big Thorne Project and the Forest Plan also demonstrate consideration of cumulative loss of deer winter habitat and the consequences for deer mortality following harsh winters.

Points two, three, and four were considered new information by some members of the Task Force; however, all members concluded that the Big Thorne analysis contained a thorough evaluation of wolf mortality focused on hunting and trapping of wolves, including illegal take, as well as a thorough evaluation of deer habitat and potential consequences for deer abundance, and considered deer harvest by humans. However, what factors motivate hunters and trappers to harvest deer or wolves is not directly related to the Big Thorne decision, but could be a factor considered by State and Federal managers as they modify regulation and enforcement actions to manage hunting and trapping effectively. I have no basis to conclude that State and Federal agencies will not fulfill their responsibilities under the State constitution and State and Federal laws for setting and enforcing appropriate regulations, and conducting information and education programs to manage wolf harvest to achieve sustainable and viable populations. The rapid, coordinated response of State and Federal agencies in closing wolf harvest in Game Management Unit #2 on March 19, 2014 is an example of this enforcement designed to close wolf harvest based on a pre-determined cap.

Point five outlines a different system for classifying forest structure and is not considered new information. Similar analysis examining the cumulative extent of large-tree, productive old-growth forest harvest was completed for the Big Thorne Project (FEIS p. 3-104). The Big Thorne analysis employed the vegetation classification system consistent with the system used for the Forest Plan analysis (2008 Forest Plan Amendment FEIS, Volume I, pp. 3-142 through 3-153). This analysis disclosed the cumulative disproportionate harvest of high-volume timber on the Tongass National Forest.

Point six presents information in a different way than the Big Thorne Project analysis. While the analysis for Big Thorne evaluated and disclosed the consequences of forest management, including road building and timber harvest on wolf mortality, which indicated a strong positive relationship between increasing development and increasing wolf mortality, it did not specifically highlight particular levels of development such as the 40 percent and 25 percent of wolf pack range logged and roaded as noted in the Statement. Additionally, the FEIS or ROD did not link these to the potential for a population sink. However, as stated above, the Big Thorne Project analysis contained a thorough evaluation of wolf mortality focused on hunting and trapping of wolves. It also recognized the risks related to roads and timber harvest to deer and wolves and fully considered the consequences of continued loss of habitat and road density. Some members of the Task Force pointed out that the pattern of mortality outlined by the Statement, which associated it with 40 percent and 25 percent development levels, does not represent an ecological threshold where mortality changes abruptly, nor is there local evidence of a true population sink. For these reasons, I find the Statement does not represent significant new information relevant to

the understanding of the influence of timber harvest and road access on wolf mortality, which was otherwise thoroughly examined in the Big Thorne analysis.

In conclusion, although some of the points outlined in the Statement were considered new information by some members of the Task Force, I have fully considered this information in light of the analysis documented in the Big Thorne FEIS, ROD, and project record. This new information is specific to human-caused wolf mortality directly tied to legal and illegal wolf harvest, which is most appropriately and effectively addressed through State and Federal regulatory mechanisms and law enforcement. As stated in the decision for the Big Thorne Project (p. 30), I will continue to work with ADFG and USFWS as part of a technical working group to fill information gaps and evaluate potential conservation measures identified by the group that initially met in October 2011.

Evaluation of Conclusions Made in Statement

In addition to considering the six points addressed above, the Task Force also identified five major conclusions reached in the Statement that differed from the conclusions regarding wolf populations reached in the Big Thorne analysis. The Task Force considered these five conclusions to determine the scientific efficacy of the conclusions in light of current understanding of the ecology and management of Prince of Wales and associated islands.

The Task Force reviewed and discussed the science behind these conclusions, and those discussions are documented in the *Interagency Wolf Task Force Report*. Although there was not complete agreement among Task Force members regarding each conclusion - differences were in degree rather than representing polar opposites - I fully considered the viewpoint for each conclusion prior to reaching my own conclusions.

Perspectives within the Task Force varied regarding the strength of the assumptions that form the foundation for the five major conclusions reached in the Statement. Some Task Force members stated neither science nor any other information supported the contention of a likely collapse of the predator/prey system or the loss of wolf viability as a result. This view contends that the evidence fails to suggest a substantial risk of island-wide predator/prey collapse or loss of sustainable populations of deer and wolves in the context of active regulation of deer and wolf harvest.

Other members maintained that the Big Thorne Project, when combined with the cumulative effects of past and foreseeable timber harvest and associated road building, increases the likelihood of low wolf populations occurring on Prince of Wales and associated islands. This view considers the interactions among deer habitat, snow, roads, deer populations, wolves, and humans as complex, and it is unknown whether a substantial risk of island-wide predator/prey collapse or loss of sustainable populations of deer and wolves will result. These members emphasize that some uncertainty remains and that there is some risk that the scenario presented in the Statement could occur if the responsible management and enforcement agencies do not maintain adequate deer winter habitat and restrict wolf harvest, both legal and illegal, to a sustainable level. Additionally, while the Tongass Old-growth Habitat Conservation Strategy (Conservation Strategy) was designed to provide a high probability of maintaining viable and well-distributed populations of wildlife, including wolves and deer, the members find a need exists for information related to its effectiveness in maintaining sustainable populations.

The views presented in the Task Force Report differ in degree, and the nature of differences in perspective demands my consideration. In a communication dated 28 March 2014, the USFWS indicated that, because of their ongoing status review (90-day finding for the petition to list the Alexander Archipelago wolf under the Endangered Species Act), they would be “unable to determine the validity of his [Dr. Person’s] statement that the Big Thorne Timber Sale project, in combination with existing and foreseeable cumulative impacts, may jeopardize viability of wolves on Prince of Wales Island”. However, Task Force members did evaluate the Statement and provide perspectives. Based on my understanding of the Task Force Report, none of the perspectives presented by the Task Force members agrees with the ultimate conclusions of the Statement (e.g. “wolves are already facing the possibility of extinction on Prince of Wales Island” or “the Big Thorne timber sale, if implemented, represents the final straw that will break the back of a sustainable wolf-deer predator-prey ecological community on Prince of Wales Island”). Rather, the views presented by the Task Force represent differences in perspective regarding the strength of the evidence and an evaluation of risk.

Conclusions based on the review from Interagency Wolf Task Force

After considering the extensive evaluation by the Task Force, including the noted differences in perspectives regarding the conclusions contained in the Statement, I make two specific conclusions:

- First, I conclude that the issues raised in the Statement and assessed by the Task Force do not represent significant new circumstances or information relative to the cumulative effects on wolves including habitat effects and wolf harvest. The Task Force report conclusion suggests the issue is not a matter of scientific evidence - supporting or not supporting the decision in the Big Thorne Project. Rather, they present alternative perspectives regarding the risk to wolves resulting from changes in roads and deer habitat as a consequence of the Big Thorne Project. The more-substantial issues raised in the Statement are not directly related to the activities approved through my decision in the Big Thorne Project, but relate to hunter and trapper motivation, legal and illegal harvest, and the regulatory framework that guides those activities. Even if the Big Thorne Project is not implemented, I find that the main concerns contained in the Statement will not be addressed. As a result, I concur with Task Force members who outlined a need to develop more-objective-based approaches to estimate population characteristics of deer and wolves and will support continued interagency collaboration to that end.
- Second, I conclude that the Task Force’s assessment raises considerable doubt regarding the final conclusions reached in the Statement that the project will result in “the ecological collapse of the predator prey system,” “wolves are already facing the possibility of extinction on Prince of Wales Island,” or that “the Big Thorne timber sale, if implemented, represents the final straw that will break the back of a sustainable wolf-deer predator-prey ecological community on Prince of Wales Island.” Although the Task Force acknowledges that the Big Thorne Project increases the likelihood of low wolf populations occurring on Prince of Wales and associated islands, all members concur that there are complex interactions among deer habitat, snow, roads, deer population abundance, wolves, and humans. No one on the Task Force definitively agreed with the final conclusions in the Statement, but the USFWS members specifically did not rule out that the viability of wolves on Prince of Wales Island will be jeopardized by the implementation of the Big Thorne Project. Additionally, some members of the Task Force stated that the conservation

fabric developed in the 1997 and 2008 Forest Plans is still intact and a sound regulatory framework is in place to modify harvest of deer and wolves. The Big Thorne Project analysis thoroughly evaluated the threats to wolves and understanding of the risk represented by the Big Thorne Project was considered, based on that analysis. I find that the evaluation by the Task Force reinforces my earlier evaluation of risk and the need to balance all interests and values used in making the decision for the Big Thorne Project, and I find that my decision remains unchanged. Therefore, I do not agree with the conclusion in the Statement that “the Big Thorne timber sale, if implemented, represents the final straw that will break the back of a sustainable wolf-deer predator-prey ecological community on Prince of Wales Island.” I also agree that actions that can reduce the level of risk should be implemented, which is why I incorporated mitigation, including access management, into the Big Thorne Project ROD. I also will continue to work with the State of Alaska and the Federal Subsistence Board to develop and consider necessary changes in wolf harvest regulations and increased enforcement effort.

Item 2. A review of project design in light of this information, including OGR [Old Growth Reserve] modifications and legacy [forest] structure within units, to determine whether changes are needed to address identified wolf sustainability concerns.

During the review of the appeals on Big Thorne, the Appeal Reviewing Officer (ARO) highlighted two concerns in her document (September 30, 2013) relating to the issues of the modification of old-growth reserves and retention of legacy forest structure. The first concern is whether the OGR modifications comply with NEPA and Appendix K of the Tongass Forest Plan and whether the Big Thorne Project complies with Forest Plan Standards and Guidelines and the National Forest Management Act regarding deer, wolves, and hunters. The concern focuses on modifications to the small OGRs, especially those in VCUs 5800, 5810, and 5850 and whether “comparable achievement” is provided for wildlife habitat values and habitat connectivity. The ARO asked whether there was a possibility of greater effects to deer habitat, both winter habitat and elevational connectivity, between summer and winter range than was identified during the Big Thorne Project analysis based on information included in the Statement.

The second concern is whether the Forest Plan Legacy Standards and Guidelines are adequate, and whether they were appropriately applied to the Big Thorne Project, recognizing that the Legacy Standards and Guidelines are not meant to provide full habitat capability for connectivity, foraging, and nesting. Rather, they supplement old-growth forest structure on a harvest unit basis in those VCUs (roughly equivalent to watersheds) that are considered at higher risk of not having sufficient residual old-growth trees and snags for wildlife species due to previous harvest.

In the following paragraphs, I address old-growth reserves and legacy structure as highlighted by these issues.

Old Growth Reserves

A report (see *Big Thorne Project SIR Appendix B - Old Growth Reserve Modification Process Report*) was prepared to provide a review of the process of the modifications to the small OGRs, how the process was used during the Big Thorne Project analysis, and how the modifications relate to the Conservation

Strategy. The report describes each step throughout the environmental analysis for the Big Thorne Project and the public and interagency involvement. This report in particular reviewed the final design and composition of the small OGRs in the three VCUs that were not totally supported by the other agencies. This report explains how these modifications do comply with the comparable achievement requirement of the Forest Plan (p. 3-62, Forest Plan Appendix K, and the 2008 Forest Plan Amendment FEIS Appendix D. The comparable achievement relates to meeting the goals and objectives of the Old-growth Habitat land use designation (LUD). These goals and objectives are focused on providing long-term old-growth forest habitat and associated resources for viable populations, maintaining biodiversity, and supporting sustainable human subsistence and recreational uses. Also included is the management of young-growth forest to promote old-growth characteristics and to limit roads in these areas.

I conclude that the process outlined in the Forest Plan (using the Forest Plan criteria to evaluate whether the Old-growth Habitat LUD goals and objectives are met) was followed and was based on the concepts used in the development of the Conservation Strategy and in previous reviews for small OGRs. In accordance with the Forest Plan, I incorporated the interagency recommendations while balancing other resource considerations to meet Forest-wide multiple use goals and objectives. As a result of multiple resource considerations, not all of the recommendations of the interagency team were incorporated (PR #736_2191). I concluded that the use of older young growth (greater than 50 years old) and old-growth stands that were partially harvested maintain enough snow interception, would achieve comparable elevational connectivity for deer in these areas, and is consistent with the direction in the Forest Plan (p. 4-91). Therefore, based on these considerations, the fact that the Big Thorne decision resulted in a net increase of acreage of Old-growth Habitat LUD within the entire project area, and the OGR modifications in the ROD provided comparable achievement of the Old-growth Habitat LUD goals and objectives, I found that no further modifications to these small OGRs are needed.

Part of this conclusion is based on the Forest Plan decision that emphasizes that the Conservation Strategy (like any conservation strategy) involves some degree of risk due to scientific, social, and environmental uncertainty when dealing with multiple-resource management. Therefore, the aim of the strategy was not to attempt to provide a “no risk” conservation design but instead to represent a balance of wildlife conservation measures that were developed from the best available scientific information and reflected an acceptable level of risk for continued species viability, based on conservative assumptions (Forest Plan Amendment ROD, p. 16). Following this concept, I used the same approach when making the decision to modify some of the small OGRs for the Big Thorne Project.

Furthermore, I reviewed the additional evaluation of the OGR modifications conducted by the Big Thorne IDT (SIR, Appendix B), and given the findings from the Task Force regarding new information and my evaluation of the Task Force’s conclusion, I conclude that the Statement provides no new information motivating further analysis or further modification of OGRs.

Legacy Forest Structure Standard and Guideline

The second report (see *Appendix C- Big Thorne Project Legacy Forest Structure Standard and Guideline Report*) documents the requested review of the application of the Forest Plan Legacy Forest Structure Standard and Guideline. This review was focused on whether the areas of legacy were applied consistently with the Forest Plan. This report augments the information in the Big Thorne Project FEIS

(p. 3-421 and ROD, Appendix 1, pp. 5-6) and the *Big Thorne Project Harvest Prescription Addendum* (PR #736_2192). This report includes a detailed description of how the number of required legacy acres was computed and how it was allocated to meet the intent of the Forest Plan to help provide the functions of the matrix component of the Conservation Strategy for a wide range of old-growth associated species, including goshawk and marten. Maps for the units currently prepared for implementation in the 2013 IRTC that required legacy were done using aerial photo imagery to display the planned and implemented legacy in relation with the vegetation of the surrounding area and are included as part of Appendix C. A map of the project area using an orthophoto base (which shows whether the land is forested and whether the forest has been previously harvested) has also been prepared for the project record (PR #736_4228) to show where the retention of legacy will help maintain a mosaic of old-growth habitat interspersed with non-forest and existing young-growth forest. This map also shows which lands are allocated to the Old-growth Habitat LUD and which lands are within the inventoried roadless areas, where timber harvest was not proposed in accordance with the direction in place during the Big Thorne Project alternative development. This map will be used throughout the implementation of the decision. This orthophoto map and the unit maps in Appendix C of this report show the proximity and connections of the legacy areas to other old-growth forest.

As a result of this review, I decided that three units that were previously laid out on the ground should be redesigned in regards to the legacy standard. The planned design in the Big Thorne Project ROD will be used for Unit 52 and Unit 132. These designs were less than 20 acres, and therefore, no legacy is required. The legacy retained in Unit 195 will be repositioned to be adjacent to the clearcut portion of the unit instead of adjacent to the partial-harvest portion. The rest of the units that have been laid out in the field for the 2013 IRTC will be implemented as displayed in the 2013 Change Analysis and the legacy maps in Appendix C of this document.

I conclude that the legacy both as determined during planning and the changes done during implementation for the Big Thorne Stewardship IRTC (as documented in the Change Analysis, August 2, 2013, PR #736_2921 and PR #736_2911) followed the Forest Plan direction for amount and placement of legacy. Table ROD-9 (Big Thorne Project ROD, p. 37) shows that the effects for the Selected Alternative result in a 6 percent reduction of current productive old-growth forest acres for the project area and a 1 percent reduction of productive old growth for the North-Central Prince of Wales Biogeographic Province, and 38 percent and 49 percent reductions respectively from the historic (1954) condition. With the modification of the three units discussed, the current on-the-ground implementation of the units in the 2013 IRTC can be implemented as designed, since the process to identify legacy and the intent of the legacy as defined by the Forest Plan was attained. Units offered for contract at a later date will follow the process outlined in the Legacy report and the ROD. Discussion that has occurred during this review process will be used as a guide when retaining legacy for units in future timber harvest contracts.

Furthermore, I reviewed the additional evaluation of the Legacy Standard and Guideline conducted by the Big Thorne IDT (SIR, Appendix C). Given the findings from the Task Force regarding new information and my evaluation of the Task Force's conclusion, along with the evaluation of legacy described here, I conclude that the Statement provides no new information motivating the need for further analysis or modification of legacy.

Item 3. A review of project design in light of this information to determine whether additional mitigation measures should be added, such as additional opportunities for road closures or seasonal management of roads to reduce habitat fragmentation and minimize disturbance to wolves and deer during critical times of the year.

Because the concerns about mortality of wolves due to roads, the amount and quality of deer habitat, and hunting and trapping pressures were raised prior to the decision for the Big Thorne Project, many mitigation measures were incorporated throughout the development of the project and through Forest Plan direction, as well as complying with applicable law. During this review, all aspects of mitigation were examined, including those mitigation measures that have already occurred with this decision or through past management practices. Updated information indicates that 75,000 acres of thinning of young-growth forest, which provides forage for deer, and 522 miles of road closure to reduce mortality risk to wolves and for other benefits, has already been accomplished.

Prior to the discussion of the Big Thorne Project decision, there was an interagency meeting on April 9, 2013 with representatives from USFWS and ADFG in attendance. The purpose of this meeting was to discuss options to mitigate some of the impacts to wolves that may result from the implementation of the decision on the Big Thorne Project. Three topics were discussed by the group: 1) road closures, 2) deer habitat enhancement, and 3) pre- and post-treatment monitoring of the thinning of already harvested timber stands. Due to the high road density within and surrounding the Big Thorne Project area, it was decided that there is little that can be accomplished to reduce risk of wolf mortality by closing a small number of roads. Road closures, short of entire road systems that are heavily used for public access, would not substantially reduce wolf harvest. However, it was agreed that closing spur roads that access the Honker Divide was the best and most useful road management action. At that time, the interagency group recommended that it would be better to focus on maintaining as much high-quality deer winter habitat as possible since deer are the primary prey of wolves. The interagency group recommended some specific young-growth forest thinning prescription recommendations to benefit deer.

I used the recommendations from this interagency meeting during the April 15, 2013 Big Thorne IDT meeting to discuss the proposed Selected Alternative for the decision (PR #736_2128). This resulted in the list of roads to be stored or seasonally gated as part of the decision on pages ROD-6, ROD-9, ROD-10, and ROD-30. Also, thinning of 2,299 acres of older young-growth forest to potentially enhance deer habitat has been included in the project (Big Thorne ROD p. 35). The use of uneven-aged management on 2,424 acres will retain 50 to 75 percent of the basal area in those units which will provide enough canopy for snow interception and to maintain deer winter habitat. In addition, 11,543 acres of young-growth forest less than 25 years old will be thinned, providing more forage for deer (*Thorne Bay Ranger District Precommercial Thinning 2013*, decision 8/2/2013). The Big Thorne Project avoided timber harvest in the three inventoried roadless areas within the project area, which maintains 45,200 additional acres of productive old growth at this time. Initially, 3,000 acres of this forest was considered for proposed harvest before the Federal district court vacated the Tongass Exemption of the Roadless Rule in 2011. Also, with the transition to young-growth harvest, there may be up to an additional 75,000 acres of productive old-growth forest remaining in the development LUDs that may not be harvested in the project area. I have also reviewed the possible land exchanges which are currently designed to minimize the effects to the OGRs. If these occur as currently proposed, the exchanges will not affect the functionality of the Conservation Strategy.

As mentioned in Item 2 above, the units that are proposed for harvest due to the modification of the small Old-growth Reserves were further reviewed with regards to possible mitigation measures. Based on this review and the direction in the Forest Plan, I have decided that no further changes to these Old-growth Reserves are needed since the modifications meet the goals and objectives of the Forest Plan (see Item 2) and the Conservation Strategy is still intact. Because of the mitigation measures assessed prior to the decision and included in the decision, concurrent projects such as thinning and road closures associated with the Prince of Wales Access Travel Management Plan and the results of this review, I have considered additional mitigation and determined that no further mitigation measures are necessary at this time. The opportunity for further mitigation measures, such as road closures and the enhancement for deer habitat, will continue to be discussed with the other agencies based in part on the results of the current wolf monitoring program (Big Thorne Project FEIS, B-160).

In addition to the review of OGRs described under item 2, I also invited the FWS to provide input regarding further mitigation measures for my consideration. This invitation occurred during the Interagency Wolf Task Force Meeting on 6 March 2014 and represented a broad invitation for mitigation ideas including, but extending beyond OGRs. During the weeks following that invitation, I understood the FWS was working on mitigation to discuss with me, but I was not contacted for a discussion nor did I receive written material outlining further mitigation measures for review prior to issuing the draft SIR.

In their 6/23/2014 comment letter comments on the draft SIR, the FWS specifically requested that “additional road management be implemented and incorporated into Travel Management regulations, to reduce risks to wolves, prior to implementation of the Big Thorne Project” and “recommended that forest stands classified as deep snow deer winter range and isolated elevational migration corridors be excluded from harvest,” as well as their recommendations for the small OGR modifications. These are comments that I received during the scoping period (PR#736_0058) prior to the development of alternatives and on the DEIS (PR#736_3156). I carefully considered all these comments at those times. If further road management measures are proposed, I will take those under consideration.

I reviewed all the mitigation measures already incorporated in the Big Thorne Project decision, including those already proposed through the April 2013 interagency meeting. Furthermore, along with considerations of those mitigation measures, I conclude that the Statement, given the findings from the Task Force regarding new information and my evaluation of those conclusions by that team, provides no new information indicating additional mitigation measures for the Big Thorne project design.

Item 4. A review of available regulatory processes used by State and Federal agencies to determine whether changes in hunting seasons, bag limits, and/or hunting and trapping methods should be pursued to help maintain sustainable wolf populations

The Regional Forester directed that a review of the regulatory processes, both those in place and those that could be engaged to help maintain sustainable wolf populations and any available information regarding illegal harvest of wolves, be examined.

The Task Force concluded that sufficient process is in place through the existing regulatory controls to manage deer and wolf populations effectively, but the review of new information for a Forest Service project-level analysis is not the most effective way to address coordinated, interagency changes.

Therefore, the Task Force suggested there is a need to consider regulatory changes, in a broader context, to address sustainable harvest of wolves in GMU 2 (Game Management Unit 2, Prince of Wales complex).

Any consideration of changes in harvest regulations needs to involve numerous stakeholders and go through the formal processes established for the Alaska Board of Game (BOG) and Federal Subsistence Board. Current Federal and State regulations state that the hunting and trapping seasons for wolf within GMU 2 may be closed when the combined Federal/State harvest quota of 60 wolves is reached. To enforce this regulation, a news release was issued on March 19, 2014 to give sufficient lead-time to avoid exceeding the harvest quota and then Federal and State agencies rapidly coordinated to close the season.

On April 4, 2014, ADFG held a meeting in Craig, Alaska on Prince of Wales Island to discuss the wolf issue in GMU 2 and solicit ideas from the local users on changes to wolf harvest regulations. At this meeting, Doug Larsen, ADFG Regional Supervisor, stated that the department was developing staff proposals for submission to the Alaska BOG and has since developed and submitted a proposal. To further this effort, I will continue to work with the other agencies on regulatory proposals to the Board of Game and the Federal Subsistence Board to address harvest regulations as they relate to sustainable mortality of wolves, as I stated in the Big Thorne Project ROD (page 30).

The Statement highlighted the potential behavior of wolf hunters and trappers in response to potential dramatic declines in deer after severe winter and suggested that targeted killing of wolves to reduce competition for deer may threaten wolf viability. This scenario relates to harvest regulation and enforcement by assuming that effective regulation is unlikely to occur in the face of ‘vigilante’ activities by humans killing wolves to improve deer abundance. Consideration or direct evaluation of the potential for the increase of people targeting wolf harvest (legal and illegal) to improve deer abundance or for other motivations was not part of the Big Thorne Project analysis because of the incomplete and speculative nature of the scenario, the spatial extent of the project, consideration of wolf mortality in the Forest Plan (to which the Big Thorne analysis tiered), and lack of objectively obtained supporting data. Formal analysis of the motives behind legal wildlife harvest is rarely an important part of land management effects analysis because of the varied and personal motivations of participants in a legal activity. The focus, instead, concentrates on harvest numbers in relation to objectives. Therefore, the Big Thorne evaluation tiers to the analysis for the 1997 and 2008 Forest Plan (see 1997 Forest Plan FEIS pp. 3-355 and 3-360, 2008 Forest Plan Amendment p.3-284 and 3-285 and Forest Plan p. 4-95), which asserts that State and Federal agencies will fulfill their responsibilities to provide and enforce appropriate regulations, and conduct information and education programs with respect to deer and wolf harvest.

Analysis of road density was included for the Big Thorne Project (FEIS pp. 3-179 and 3-183, and ROD pp. 29, 30 and 38). In addition, the Big Thorne Project considered illegal harvest (FEIS p. 3-115 and FEIS, Appendix B, pp. B-157 to B-160) in that analysis. References used as part for the analysis included *Correlates of Mortality in an Exploited Wolf Population* (Person and Russell 2008, PR # 736_0300) and *A spatial analysis of wolf harvest and harvest risk on Prince of Wales and associated islands, Southeast Alaska* (Person and Logan 2012, PR #736_0299) for information on both legal and illegal wolf kills.

Given these factors and the scope of environmental analysis under NEPA, and considering the results of the Task Force, I do not see a need for changes to regulatory processes to occur directly relating to the

Big Thorne Project. However, I am committed to pursuing changes that may occur outside this project and will continue to work with law enforcement, the State of Alaska and the Federal Subsistence Board on these issues.

Item 5. A closer review of public and other agency concerns expressed during the Big Thorne project planning period or within the appeals in light of this information to assess whether the conclusions made in the Big Thorne EIS or ROD remain valid.

The Regional Forester directed that all public and other agency comments regarding the points brought up in the Statement be re-examined to see if all comments were adequately addressed and considered prior to the decision and whether new conclusions could be derived from the information in the Statement.

Public and other agency concerns were closely and extensively reviewed both prior to the decision for the Big Thorne Project and while responding to the appeals, and as a result of these reviews conducted to meet the direction of the ADO letter. Public comments were received during the scoping period, which influenced the design of the project's alternatives, and during the 45-day comment period on the Draft EIS. Appendix B of the Big Thorne Project Final EIS contains responses to all public comments received on the Draft EIS. The appeal issues were reviewed by the Regional Office and pertinent information on each issue with the relevant references to the Big Thorne FEIS and supporting project record documents is included in the Appeal Reviewing Officer's recommendation to the Appeal Deciding Officer (PR #736_4007). The agency and public concerns, particularly those received on the Draft EIS and the appeals, were incorporated in the review of the Statement (Items 1, 3, and 4 of this document), and the reviews of the OGR modifications and the use of the Legacy Standard and Guideline (Item 2 above). In addition, the project record was also reviewed to reexamine the many documents including meeting notes, emails and other correspondence. This confirmed the voluminous amount of information used to respond to all the public, interagency and internal concerns, both prior to and post decision.

The Task Force review of the Statement included an evaluation of the relevant information in the Big Thorne Project Final EIS and ROD and associated references to see which information was already considered. They examined the Statement to see if any new information was presented that should be analyzed in regard to the decision on the Big Thorne Project. For the reasons stated in Item 1 above, I find the Statement does not contain significant new information; public and agency concerns have been reviewed in light of the Statement, and the conclusions in the Big Thorne EIS and ROD remain valid.

Item 6. A determination whether there are "significant new circumstances or information relevant to environmental concerns" that require the preparation of a Supplemental EIS for the Big Thorne project.

As part of my consideration of new circumstances or information, I included a brief review of the 90-day finding of the U.S. Fish and Wildlife Service for the petition to list the Alexander Archipelago wolf under the Endangered Species Act (ESA), which was posted in the Federal Register on March 31, 2014 (PR #736_4207), well after the Regional Forester's decision. The USFWS's 90-day finding concludes that listing may be warranted pending a more-complete 12-month status review.

I focused my review on one factor specific to the Big Thorne Project included in the appendix to the finding, *Appendix: 90 Day Finding on petition to list the Alexander Archipelago wolf as an endangered or threatened species* (PR #736_4227). This appendix states that the Big Thorne Project ROD included several Old-growth Reserve modifications that were not supported by the USFWS during the interagency biologists' review. However, it is unclear from this appendix whether the USFWS felt that the interagency biologically preferred OGRs as designed and included in Alternative 4 of the Big Thorne Project, which was not selected for the decision, or the OGRs from the 2008 Forest Plan ROD should have been included in the decision for the Big Thorne Project. As part of this review, I closely examined whether the modifications of the OGRs included in the Big Thorne Project ROD provided "comparable achievement" (see Item 2). The other factors that USFWS raises in their 90-day finding refer to Forest Plan issues and were considered in the analysis for the Big Thorne Project analysis consistent with the Forest Plan. I acknowledge that not all of the recommendations for the modifications of the OGRs from the 2011 Interagency Review Team were incorporated. I have reviewed these modifications again using Forest Plan direction and strengthened my rationale for the small OGR modifications as described in the ROD, in *Appendix B, Big Thorne Project Old Growth Reserve Modification Process*. Prior to making my decision, I considered the recommendations from the 2011 Interagency Review Team (PR #736_2191) which included representatives from USFWS and ADFG, for modifications on the small OGRs in the Big Thorne Project area. This rationale is largely based on the Forest Plan direction on connectivity and whether it can be provided by older young-growth forest and partially harvested stands but also included local knowledge of the area and of wildlife use in similar habitats. Based on this review, I find that my original decision remains valid and all the modified OGRs in the decision on the Big Thorne Project provide a comparable achievement of the goals and objectives of the Old-growth Habitat LUD.

Another consideration is that the "substantial information" standard for a 90-day finding differs from the ESA's "best scientific and commercial data" standard that applies to a status review to determine whether a petitioned action is warranted. A 90-day finding does not constitute a status review under the ESA. In a 12-month finding, the USFWS will determine whether a petitioned action is warranted after a complete and thorough status review of the species. Because the ESA's standards for 90-day and 12-month findings are different, as described above, a substantial 90-day finding does not suggest that the 12-month finding will result in a warranted finding. The review from the Task Force identified several unknown or not well-documented factors in the Statement that will be evaluated further by the USFWS. Until the 12-month status review is completed by the USFWS, there is no basis to conclude the Big Thorne Project will jeopardize viability of wolves on Prince of Wales Island.

Conclusion of the SIR

Based on my careful review of the *Interagency Wolf Task Force Report* regarding the Statement of Dr. David Person, the review of the Big Thorne Project design, including the modification of the small OGRs and the implementation of the legacy forest structure, and the review of the USFWS 90-day finding on Alexander Archipelago wolves for ESA, I find that there are no significant new circumstances or information relevant to environmental concerns that require the preparation of a Supplemental EIS for the Big Thorne Project in accordance with the direction in FSH 1909.15, Section 18.



FORREST COLE

Forest Supervisor
Tongass National Forest

Date: 8.19.2014

References

The numbers preceding each reference is the corresponding Big Thorne Project record number.

#736_0058 - US Fish and Wildlife Service scoping comments

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#736_2128 – April 15, 2013 Supervisor’s Office and IDT Meeting Notes on Wildlife Concerns in Alternative 3

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#736_2911 – August 6, 2013 Big Thorne Change Analysis unit maps

#736_2921 – August 2013 Big Thorne Stewardship Contract Change Analysis Summary

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#736_3707 – August 16, 2013 Appeal on Big Thorne Project

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#736_4007 – September 27, 2013 Appeal Reviewing Officer’s Letter to Appeal Deciding Officer Regarding Appeals

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#736_4207 – March 31, 2014 90-Day Finding on a Petition to List the Alexander Archipelago Wolf as Threatened or Endangered, USFWS . 79 FR 17993-17995.

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Appendices

1. **Appendix A - Interagency Wolf Task Force Report**
2. **Appendix B - Big Thorne Project Old Growth Reserve Modification Process Report**
3. **Appendix C - Big Thorne Project Legacy Forest Structure Standard and Guideline Report**