

**BIG THORNE PROJECT**  
**SIR APPENDIX B**

Old Growth Reserve Modification Process

May, 2014

I have reviewed this report and found that the process used to propose and determine the modification of the small Old Growth Reserves (OGRs) during the environmental analysis for the Big Thorne Project followed Forest Plan direction and was consistent with previous analyses done for modification of small OGRs. All modified OGRs were analyzed using Forest Plan criteria. All modified OGRs including those in the decision on the Big Thorne Project provide a comparable achievement of the goals and objectives of the Old-growth Habitat LUD as designed by the Forest Plan OGRs.

*/s/ Forrest Cole*

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Forrest Cole  
Forest Supervisor, Tongass National Forest

*May 23, 2014*

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Date

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## **Appendix B Old Growth Reserve Modification Process**

### **Purpose of this Report**

This report documents the review by members of the Big Thorne Project Supplemental Information Report (SIR) Interdisciplinary Team (IDT) of the process and results of modifications to small Old-growth Reserves (OGRs) for the Big Thorne Project Final Environmental Impact Statement (FEIS, Big Thorne Project record #736\_2244) and Record of Decision (ROD, Big Thorne Project record #736\_2248). This review was conducted in response to the Appeal Deciding Officer's letter for the Big Thorne Project (09/30/2013).

### **Summary**

The original locations for the small Old-growth Reserves (OGRs) within the Big Thorne Project area were identified during the 1997 decision for the Forest Plan revision. These OGRs received varying levels of analysis; therefore, the direction for the 1997 Forest Plan was to thoroughly analyze small OGRs during project-level analyses (1997 Forest Plan ROD, p. 33). Several modifications were made under this direction for the small OGRs within the Big Thorne Project area, specifically in value comparison units (VCUs) 581, 582, 583 (Luck Lake Timber Sales ROD<sup>1</sup>, 2000, Big Thorne Project record #736\_0079), and 5972 (Control Lake Timber Sales ROD, 1998, Big Thorne Project record #736\_0078).

During analysis for the 2008 Tongass Forest Plan Amendment, all small OGRs were reexamined; some were modified as part of that decision. Because of this intensive review, few modifications were anticipated during project-level analyses except for a few specific VCUs or under circumstances outlined in the Forest Plan, Appendix K. Therefore, no modifications to small Old-growth Reserves were proposed during initial development of the proposed action and the unit pool for the Big Thorne Project in 2010.

However, in 2011, the Tongass Exemption to the 2001 Roadless Rule<sup>2</sup> prohibiting timber harvest within inventoried roadless areas (IRAs), regardless of Forest Plan land use designations (LUDs), was overturned by the courts. An estimated 3,000 acres of proposed timber harvest units in the Big Thorne Project area fell within IRAs. Comments from interested stakeholders prompted the Responsible Official to direct the IDT to evaluate the potential to maximize the potential harvest acreage outside the IRAs by relocating the roaded portions of the OGRs to a development LUD and replacing these acres with acres inside the IRA.

The criteria in the Forest Plan, Appendix K and Forest Plan Amendment FEIS, Appendix D (p. D-7 and D-8, Big Thorne Project record #736\_0002 and #736\_0003) were used to evaluate these modifications. In June 2011, an interagency review team (2011 IRT) of wildlife biologists from State of Alaska Department of Fish and Game (ADFG), U.S. Forest Service (USFS), and U.S. Fish and Wildlife Service

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<sup>1</sup> At the time of the Luck Lake Timber Sales analysis, VCUs did not use the current four-digit numerical nomenclature. VCUs 581, 582, and 583 correspond to VCUs 5810, 5820, and 5830 in the Big Thorne Project analysis and documents.

<sup>2</sup> The Tongass Exemption was vacated and the application of the 2001 Roadless Rule was reinstated for the Tongass National Forest on March 4, 2011 due to the decision on litigation [OVK et al. v. USDA, et al. (1:09-cv-00023 JWS. )].

## Appendix B

(USFWS) met to: 1) attempt to relocate the small OGRs entirely within IRAs, and 2) determine the biologically preferred OGRs as required by the Forest Plan, Appendix K. The 2011 IRT found that it was not possible in all cases to move an OGR entirely within the IRA boundaries due to either the location of the IRA or lack of IRA acres within a specific VCU. The 2011 IRT concluded that “In most cases, Roadless area [IRA] options failed to provide comparable achievement of Old-growth Habitat LUD goals and objectives” (see Big Thorne Project record #736\_2191). The 2011 IRT also briefly analyzed the proposed OGR modifications for Alternative 3.

During the Tongass Checkpoint Process (TNF-Supplement FSH 1909. 15-2009-1, Section 12. 3), the Responsible Official for the Big Thorne Project, Forest Supervisor, decided that detailed analyses of modifications to the small OGRs was warranted; but modifications to the large OGRs would not be conducted (Big Thorne Project record #736\_0037; Big Thorne Project Draft Environmental Impact Statement [DEIS] pp. 2-3, 2-14, Big Thorne Project record #736\_0063). The proposed OGR modifications that maximized acres available for timber harvest within the roaded areas of the OGRs were included as part of Big Thorne Project Alternative 3. The biologically- preferred OGRs, as determined by the 2011 IRT, were included in Alternative 4 (DEIS p. 2-6).

During the environmental analysis phase of the Big Thorne Project DEIS, these modifications were analyzed according to the direction in the Forest Plan, Appendix K, and used the Forest Plan criteria to compare the existing OGRs (Big Thorne Project record #736\_0419) and alternative locations. A summary of this analysis was included in the Big Thorne Project DEIS (p. 3-43 through 3-92), which was released for the 45-day public comment in October 2012. All comments concerning the OGR modifications were reviewed and the Forest Service response was included in the Big Thorne Project Final Environmental Impact Statement (FEIS) (Appendix B, p. B-165 through B-168).

In April 2013, the Responsible Official reviewed the public comments, environmental analysis, and findings of the 2011 IRT for modifications to OGR designs analyzed in Alternative 3 while considering the decision for the Big Thorne Project. Further input from the IRT was sought on these modifications. On June 28, 2013, the Responsible Official signed the Big Thorne Project Record of Decision, selecting Alternative 3 with modifications, including modifications to 7 of the 11 small OGRs in the Big Thorne Project area (Big Thorne Project ROD, Appendix 3). However, only one modified OGR as designed for Alternative 3 was included in the Selected Alternative (see Table 1, p. 10 of this document); the other six were changed between the FEIS and the ROD. The changes to the small OGRs between the FEIS and the ROD incorporated recommendations from the 2011 IRT and also from the Big Thorne Project IDT to meet the criteria from the Forest Plan as explained below. In the ROD, four OGRs are not modified from the Forest Plan OGR design.

### **Modification of Small OGRs at the Project Level under the 1997 Direction**

Initially, there was no intent to designate small OGRs as LUDs under the 1997 Forest Plan revision. However, due to comments received on the Forest Plan Revised Supplemental DEIS (1996), locations of small OGRs were mapped by local Forest Service personnel but not completely analyzed (1997 Forest Plan, p. 3-82); analysis of these small OGRs was expected to occur at the project level. Environmental analyses for timber harvest projects under the 1997 Forest Plan Revision routinely proposed modifications to small OGRs. Though all Forest Plan criteria were considered, many of the modifications

were completed to achieve the minimum acre requirements for total size or number of productive old-growth (POG) acres.

Under the 1997 Forest Plan, all reviews of existing and proposed small OGRs included a review of criteria in Appendix K. These criteria included consideration of distribution across the Forest in relation to other OGRs, comparison of shape, acres of early seral (young-growth forest) habitat, and miles of road. Criteria specific to small OGRs included requirements such as total size and acres of POG. Other criteria included consideration of: important deer winter range, known or suspected goshawk and marbled murrelet nesting habitat, largest remaining blocks of contiguous old-growth habitat within a watershed, and rare features such as under-represented forest plant associations or stands with the highest volume timber (large-tree POG). Additionally, the amount of suitable and available timber potentially affected was included in the analysis.

Three options for analyzing the small OGRs within the project area usually were considered, although some projects included a fourth option for one or more small OGRs:

1. Forest Plan OGR – described in the Tongass Land and Resource Management Plan
2. Interagency OGR – developed by the U.S. Forest Service, U.S. Fish and Wildlife Service, and State of Alaska Department of Fish and Game
3. Minimum Standards and Guidelines – developed by the IDT to meet but not exceed Forest Plan requirements
4. Additional IDT design – developed by the IDT to respond to a significant issue identified through the scoping process

Proposed OGR modifications started with the OGR mapped in the 1997 Forest Plan; typically this was included in the no-action alternative and sometimes an action alternative such as the proposed action. The proposed OGR designs were analyzed in two different ways depending on the project. A proposed OGR might be aligned with the alternative developed to address a similar issue, (e. g. the biologically-preferred OGR would be part of the alternative developed to respond to a wildlife issue) or the proposed OGRs were analyzed separately and could be included with any alternative. An explanation was included in the public review document that any OGR could be selected with another alternative for the decision. The mapped 1997 Forest Plan small OGRs and the modifications to the small OGRs were evaluated using the 1997 Forest Plan Appendix K criteria and any alternative locations.

Under the 1997 Forest Plan, a non-significant amendment to the Forest Plan was completed for any OGR modification and included in the decision for the project. Cumulative changes to the OGR system were tracked as part of the Tongass monitoring program (Annual Monitoring & Evaluation Report, Biodiversity Question 1). Modifications to OGRs approved as amendments to the 1997 Forest Plan were reevaluated during the Tongass-wide analysis of small OGRs as part of the analysis for the 2008 Forest Plan Amendment.

### **Review of the 1997 Forest Plan OGRs for the 2008 Forest Plan Amendment**

In 2006, all the value comparison units (VCUs) on the Tongass National Forest that contained a small OGR were reviewed by an interagency team (IRT) for the 2008 Forest Plan Amendment. This review included the VCUs with proposed modified OGRs in the Big Thorne Project area. The 2006 review

## Appendix B

included consideration of past reviews of the small OGR modifications from decisions on project-level analysis. The interagency team developed a proposed interagency OGR (IOGR), which was the biologically preferred design. The Forest Service then discussed the IOGR and either adopted it or modified it. If modified by the Forest Service, the IRT would analyze the Forest Service proposed OGR and provide comments. The OGRs selected were incorporated into the decision for 2008 Forest Plan Amendment included as part of the decision.

In the Big Thorne Project area, the decision for the 2008 Forest Plan Amendment modified the OGRs for VCUs 5800, 5810 (south OGR), 5820, 5830, 5840, 5850 and 5950. No modifications were made for the OGRs in VCUs 5790, 5810 (north OGR), 5860, 5960 and 5972 from the 1997 Forest Plan, as amended.

The Forest Plan OGRs in VCUs 5790, 5800, 5810 (north OGR), 5820, 5840 and 5860 are also the IOGRs for these VCUs. The OGRs in VCUs 5960 and 5972 were not the IOGRs for these VCUs but were the Forest Plan OGRs. The OGRs in VCUs 5810 (south OGR), 5830, 5850 and 5950 are different from both 1997 Forest Plan, as amended, and the recommended IOGRs; some of these OGRs were only slightly modified to follow recognizable features on the ground.

### Process for the Big Thorne Project Old Growth Reserves Modification

The 2008 Forest Plan allows the Responsible Official for projects to modify the size and location of OGRs under certain circumstances, including projects or other changes not considered in the Forest Plan (Forest Plan Appendix K, p. K-2). The decision that vacated the Tongass Exemption for the 2001 Roadless Rule, a change not considered by the Forest Plan, affected roughly one-third of the Big Thorne Project area; the Responsible Official determined this warranted consideration of OGR modifications at the project level.

#### Review of the 2008 Forest Plan Direction

Some large and medium OGRs are designated to more restrictive LUDs such as Wilderness (e. g. , Karta River Wilderness Area adjacent to the south edge of the Big Thorne Project area); Forest Plan direction for those LUDs supersedes direction for OGR management<sup>3</sup>.

For the remaining large and medium OGRs and all small OGRs, the goals and objectives for the Old-growth Habitat LUD is in the Management Prescription (Forest Plan, Chapter 3, p. 3-57 and 3-62), and includes the LUD-specific guidelines. Further Forest Plan direction for modification of small OGRs is found in Appendix K with a reference to design criteria and assumptions in the Forest Plan FEIS, Appendix D (pp. D-7 and D-8).

#### Forest Plan, Chapter 3, Old-growth Habitat LUD Management Prescription

Management Prescriptions for Old-growth Habitat (Forest Plan p. 3-62, WILD1 B. 2) say that “Reserve location, composition, and size may otherwise also be adjusted. Modified OGRs must provide comparable achievement of the Old-growth Habitat LUD goals and objectives. Determination as to comparability must consider the criteria listed in Appendix K. ” Determination of comparable achievement of Old-growth Habitat LUD goals and objectives for a modification to an OGR relies on quantitative as well as qualitative factors such as connectivity, size, and shape of the reserve, as well as

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<sup>3</sup> Some non-development LUDs do not function as OGRs and are not considered as part of the old-growth habitat reserve strategy, such as the ice fields east of Juneau.

the basic assumptions behind the existing reserve location. The only units of measure listed in the criteria are minimum requirements for the total size and the amount of productive old-growth (POG). This was intentional because conditions and management needs vary across the Tongass National Forest.

### **Forest Plan, Appendix K**

Modifications of small OGRs require interagency project-level review to ensure that OGRs meet Forest Plan criteria. This review is conducted by a team of biologists from U.S. Fish and Wildlife Service, State of Alaska Department of Fish and Game, and U.S. Forest Service. The modified OGRs are then analyzed based on criteria in Appendix K, and the results documented (Forest Plan, p. K-2, Project-level review).

Appendix K of the Forest Plan includes requirements for overall OGR size (total acres) and productive old growth (POG) acres and discusses how this may be achieved. Appendix K includes direction to review “Appendix D of the Final EIS”, which refers to the 2008 Forest Plan Amendment FEIS. Appendix D, pp. D-7 and D-8 includes the criteria that were previously in Appendix K of the 1997 Forest Plan.

## **Big Thorne Project Draft EIS**

### **Development of Alternatives**

No modifications to any of the small Old-growth Reserves were proposed during early development of the proposed action and unit pool for the Big Thorne Project; small OGRs had been intensively reviewed during the analysis of the 2008 Forest Plan Amendment, and few modifications were anticipated during project-level analyses. However, in 2011, the Tongass Exemption to the 2001 Roadless Rule which prohibited timber harvest within IRAs, regardless of LUDs, was overturned by the courts. Comments from interested stakeholders prompted the responsible official to direct the IDT to evaluate the potential to maximize the suitable and available forested acres. This process involved reallocating the roaded portions of the OGRs from the Old-growth Habitat LUD to a development LUD, and modifying the OGR by allocating acres of development LUD from within the IRAs to Old-growth Habitat LUD.

The IDT designed modifications to the OGRs based on criteria in the Forest Plan, Appendix K and Forest Plan Amendment, Appendix D (p. D-7 and D-8). The IDT focused on redesigning OGRs to maximize acres available for timber harvest by reallocating the portions of the OGRs that have existing roads to development LUDs and re-designating portions of development LUDs now within the IRAs as parts of the OGRs. Alternative 3 was the alternative designed to maximize timber harvest so the modification of OGRs was included in that alternative.

Three possible “maximum harvest” alternatives were presented in June 2011 to the Responsible Official: Alternatives 3a, 3b, and 3c. Alternative 3a and Alternative 3b affected the design of small OGRs with varying amounts of harvest, and Alternative 3c affected the roaded areas of the Honker Divide Large OGR as well as the small OGRs. Since Alternatives 3a and 3b were very similar, only Alternative 3b was chosen to be analyzed in detail. This became Alternative 3 for the DEIS. Following discussion with the IDT, the Responsible Official decided that no modifications to the Honker Divide Large OGR would be made because this could trigger a significant Forest Plan amendment and a review of the Tongass Conservation Strategy (see Forest Plan Amendment FEIS, p. 3-220 and Appendix D, pp. D-6 to D-12). Therefore, Alternative 3c was categorized as an Alternative Considered but Eliminated from Detailed Study (DEIS p. 2-14).

## Appendix B

Pursuant to Forest Plan, Appendix K, the 2011 IRT met at the Thorne Bay District office on June 2 and 3, 2011 to review the existing small OGRs in the Big Thorne Project area. This review included only the small OGRs within the Big Thorne Project area, which included value comparison units (VCUs) 5790, 5800, 5810, 5820, 5830, 5840, 5850, 5860, 5950, 5960, and 5972. Other VCUs in the project area that contain portions of the Honker Divide Large OGR were not reviewed by the 2011 IRT. The 2011 IRT reviewed the small OGRs in the Big Thorne Project area to try to relocate the OGRs entirely within IRAs and to produce the interagency biologically preferred OGRs. This review used quantitative and qualitative information to develop consensus recommendations for biologically preferred and IRA options for small OGR locations across the project area. The 2011 IRT evaluated the largest old-growth blocks within the IRAs as alternatives to the Forest Plan OGRs to allow consideration of timber harvest in currently designated OGRs. In addition, they reviewed the biologically preferred OGRs that were developed during the Forest Plan Amendment analysis and the modifications of the OGRs developed by the Big Thorne IDT. The 2011 IRT reviewed the small OGRs where timber harvest was proposed in the Big Thorne Project area against the criteria listed in Appendix K including those assumptions in the Forest Plan FEIS, Appendix D. The 2011 IRT concluded that, "In most cases, Roadless area [IRA] options failed to provide comparable achievement of Old-growth Habitat LUD goals and objectives" (see Big Thorne Project record #736\_2191).

### Analysis of the Modifications to the OGRs

During the environmental analysis for the Big Thorne Project Draft EIS, both the IDT and the 2011 IRT analyzed these proposed modifications by comparing the modified OGRs both to the criteria in the Forest Plan, Appendix K and against each other to compare the alternatives.

The criteria from the Forest Plan Appendix K and 2008 Forest Plan Amendment FEIS, Appendix D were reviewed for the project based on scoping comments and knowledge of past concerns. The criteria used to analyze the modifications of the OGRs for the Big Thorne Project are:

- required total OGR acres and required POG acres to meet Appendix K,
- general shape (circular rather than linear to maximize interior habitat and minimize fragmentation effects),
- minimize roads (total road miles),
- minimize early seral habitat (acres),
- riparian/beach/estuary habitats (Class I stream miles),
- include largest remaining block of POG in VCU,
- rare or under-represented features (large-tree POG acres),
- deep snow deer and marten habitat (acres),
- goshawk and murrelet nesting habitat (acres),
- maintain connectivity and,
- low-elevation POG (acres).

No determination of comparable achievement was included in the DEIS to allow for public comments on the proposed modifications. A complete report of this analysis is located in the Big Thorne Wildlife and Subsistence Report (Big Thorne Project record #736\_0419). A summary of this analysis was included in the Big Thorne Project DEIS (DEIS p. 3-43 through 3-92).

### **Public review of the DEIS including the Modified OGRs**

In accordance with NEPA, the Notice of Availability for the Big Thorne Project DEIS was published in the Federal Register on October 26, 2012, which started the 45-day public comment period.

During the comment period on the Big Thorne DEIS, USFWS voiced concerns that not all of the proposed modified OGRs in Alternative 3 would provide comparable achievement to the existing OGRs as required by the Forest Plan (Big Thorne Project record #736\_3156). ADFG was concerned that the design of the OGRs should maintain the capability to support goshawks. Other comments concerning the modification of the OGRs were received from The Nature Conservancy, Sierra Club, and David Beebe.

### **Big Thorne Project Final EIS**

Following the review of comments on the DEIS, a response to these comments was prepared. A summary of the comments and Forest Service responses about OGR modification is in Appendix B of the FEIS, pp. B-165 through B-167. For Alternative 4, the small OGR in VCU 5820 was updated to reflect the 2011 IRT biologically preferred design prior to analysis. The OGR analysis for the effects to riparian habitat was expanded to include Class I to IV streams instead of only Class I streams. Based on the analysis and the public comments, a determination of comparable achievement was made for each proposed small OGRs and added to Table OGR-2 (pp. 3-55, 3-57, and 3-59).

The determination of comparable achievement is subjective when weighing the different criteria listed in Appendix K. Although the results are mostly measured quantitatively in acres or miles, Appendices K and D do not stipulate any specific acre or mile requirements except for total acres and POG acres. For example, a modified OGR may contain fewer acres of deep snow deer winter habitat and miles of riparian habitat but also have fewer acres of young growth and miles of road; therefore, it can still provide a comparable achievement of the Old-growth habitat LUD goals and objectives.

As part of the interagency review, the 2011 IRT made a determination of comparable achievement. This determination was based on comparing the proposed modified OGRs with the existing OGRs. The 2011 IRT had concerns that some of the OGR modifications proposed in Alternative 3 would not provide a comparable achievement of the old growth habitat goals and objectives compared to the current OGRs. This opinion was based on the difference in acres and placement of acres for some of the criteria.

### **Development of the Selected Alternative for the Record of Decision**

On April 15, 2013, the Responsible Official and IDT for the Big Thorne Project met to discuss a possible Selected Alternative for the decision on the project. The discussion was centered on Alternative 3 based on comments on the DEIS, the analysis of the project and the purpose and need for the project. As part of the discussion, the comments from the USFWS and the Interagency OGR Report on the comparable achievement of the modifications to the small OGRs were reviewed. The Responsible Official proposed to modify the OGRs in Alternative 3 based on these comments. These modifications were done to provide a comparable achievement with Appendix K criteria while retaining a few units that are easily accessible from existing road systems to provide timber.

During deliberations on the modifications of Alternative 3 to develop the Selected Alternative, the Responsible Official decided not to modify the OGRs in VCUs 5840, 5860, 5960, and 5972 and to only

## Appendix B

partially modify OGRs in VCUs 5790, 5800, 5810, 5820, 5830, and 5850. The OGR in VCU 5950 would retain the design as in Alternative 3. Overall this resulted in the deletion of 34 old-growth harvest units. Twelve old-growth harvest units and two young-growth thinning units that were within areas previously allocated to small OGRs were included as part of the modified Alternative 3, which was the proposed Selected Alternative in the decision for the Big Thorne Project. See the following table.

Table 1: Summary of the Units affected by the further modifications of the small OGRs for the Modified Alternative 3, (the Proposed Selected Alternative), April 15, 2013.

VCU	Harvest units dropped from the Modified Alternative 3	Harvest Units remaining in Modified Alternative 3
5790	424	83
5800	439, 446, 448, 450, 447	440, 444
5810	464, 465, 466, 473, 475, 476, south piece 470	469, 471 and part of 470
5820	461*, 463, 212, 213	None
5830	461*	560, 561 (young-growth units)
5840	452, 454, 455, 456, 457	None
5850	434*, 435*	438
5860	426, 427, 428, 429, 430, 431, 433, 434*, 435*	None
5950	None	401, 402, 403, 404, 405, 407
5960	No proposed change to OGR from the existing OGR	N/A
5972	413, 414, 419, 420, 421, 422, 423	None

\* Unit overlaps two VCUs.

The outcomes from the April 15, 2013 meeting and notes were sent to both the USFWS and ADFG requesting additional comments on April 17, 2013. No additional information or meetings were requested by either agency. Several reminder e-mails were sent requesting comments; no specific comments about the modification of Alternative 3 were received from either agency. In an e-mail on April 25 the USFWS stated that the 15 April meeting notes did a good job of documenting the effort to reduce the impacts to the Conservation Strategy. The Forest Service sent a reply by e-mail back to USFWS the same day with a synopsis of the proposed changes in the ROD and again requesting input from them. No additional e-mails were exchanged on the proposed changes for the small OGRs configurations for the Big Thorne ROD. The final 2011 IRT report was signed in May 2013 prior to the signing of the ROD but did not directly discuss the modifications to the small OGRs proposed for the Selected Alternative. All correspondence for this review is in the Big Thorne Project record.

Based on the final interagency report approved on May 7, 2013, the 2011 IRT did not express opposition for the six old-growth units within the modified OGR in VCU 5950. In the final interagency report the IRT proposed an adjustment to the proposed modified OGR in VCU 5810 to drop the proposed harvest units south of NFS road 3030; in the modified Alternative 3 Units 469 and 471 and part of Unit 470 are

all north of NFS road 3030. The one unit in VCU 5790 is 5 acres of high-elevation POG resulting in minor effects. The two units in VCU 5830 are commercial thinning units in an area previously recommended during interagency review as a priority area for treatment.

The modification in VCU 5820 was involved moving the boundary line between the OGR in 5820 and 5830 to the VCU line. This resulted in the acres that were originally within VCU 5820 but had been counted as part of the OGR in VCU 5830 now to be counted as part of the OGR in VCU 5820. All previously proposed units in this area have been dropped for other resource concerns. All acres retained OGR designation.

Although the 2011 IRT did not support some of the proposed harvest in VCUs 5800 and 5850 resulting from the modification of the OGRs, the Responsible Official determined that even with the harvest of the proposed units these OGRs the Old-growth Habitat goals and objectives would be met.

In VCU 5800, there are the following mitigating factors:

- From the 2013 IRT report – “IRT not opposed to the proposed units in the roaded OGR land base along the northern portion of the OGR. There was some discussion on the effects of the proposed units in the flatter valley bottom of this OGR. IRT group felt that the current FP S&Gs (riparian, soils) would maintain the connectivity through this area. (2013 IRT p. 24 and 42).
- the partial harvest prescription of a portion of Unit 440 and all of Unit 444 maintains some of the elevational travel route and deer winter range,
- the young-growth units harvested in 1975 and 1988 are old enough to provide connectivity and snow interception ( Forest Plan, p. 4-91),
- the net increase of 246 total acres and 117 acres of POG, an increase of 105 acres of Large Tree POG, and
- maintenance of the east-west wildlife migration corridor through a low-elevation river drainage that provides connectivity between the Honker Divide large OGR and the coast.

The modified OGR for VCU 5850 has 228 total acres and 176 acres of POG fewer acres than the Forest Plan OGR. The harvest of Unit 438 results in a loss of 39 acres of POG within one of the largest contiguous POG blocks in the VCU outside of the beach buffer. However, the determination that the Old-growth Habitat goals and objectives would be met was made because of the following mitigating factors:

- The IRT said “As currently designed, [the OGR] in Alt. 3b [Alternative 3 in the FEIS] would remove high value, low elevation stands currently protected by the existing small OGR; thus, exacerbating the condition of limited blocks of contiguous low elevation POG in this VCU.” (2013 IRT p. 19 and 42).” However, only Unit 438 which is separated by the Sandy Beach Road (FSR 3000271) was retained in the Selected Alternative. Units 434 and 435 in VCU 5850 as well as seven proposed units in the OGR in the adjacent VCU 5860 were not included in the decision which will maintain low-elevation POG adjacent to the shoreline.
- the design of the OGR exceeds the size requirements for both total acres and POG acres;
- modified OGR maintains most of the high-value, low-elevation stands, and most of the remaining blocks of contiguous low-elevation POG in this VCU;
- a mainline road separates this unit from the beach buffer and shoreline;

## Appendix B

- the units to the west of the road are primarily older young-growth (harvested in the mid to late 1960s) so Unit 438 does not connect to old-growth forest;
- the part of Unit 438 that will be partially harvested and retain 50 percent basal area provides a connection from the stream complex and retained legacy northeast to the older young growth units; and
- the limited size of the even-aged opening in relationship to surrounding lands.

### Selected Alternative for the Record of Decision

The Forest Service determined that all modified small OGRs in the Selected Alternative (ROD) meet minimum Forest Plan acreage requirements (FEIS Table OGR-1) and comparable achievement for old-growth forest, minimizing development (roads and harvested units) and connectivity between the large and medium OGRs, and therefore would meet Old-growth Habitat LUD goals and objectives, and are consistent with the Forest Plan. The Selected Alternative would increase the total acres of small OGRs within VCUs 5800, 5820, 5830, and 5950. Modifications in VCUs 5790, 5810, and 5850 would reduce both total OGR and POG acreages. The remaining small OGRs (VCUs 5840, 5860, 5960, and 5972) in the project area would not change (FEIS, Table OGR-2). Overall there would be a net increase of 645 total OGR acres and 95 acres of POG in OGRs. Therefore, the Responsible Official prepared a non-significant amendment to the Forest Plan.

Most of the modified OGRs in the Selected Alternative reduce roads and young growth within their boundaries in response to Forest Plan direction to minimize, to the extent feasible, the amount of early seral habitat and roads within mapped reserves (Forest Plan Appendix K, page K-1). In addition, the amount of suitable timber available for harvest is increased. Some of the modifications do reduce the size of the OGRs from how they are currently mapped but all the OGRs in the Selected Alternative meet Forest Plan Appendix K acreage criteria for both total acres and POG acres for small OGRs. The modifications in some of the OGRs do result in a reduction of the amount of POG (including large-tree POG and low-elevation POG), goshawk and marbled murrelet nesting habitat, and deer and marten winter habitat (see FEIS, Table OGR-2, pp. 3- 55, 3-57, 3-59). Usually a reduction in acres results in a reduced quality of the habitat value; however, the magnitude, location, and juxtaposition of this habitat are also important considerations in determining comparable achievement.

An analysis was done for the modifications of the seven OGRs for the Selected Alternative and placed in the project record (Big Thorne Project record #736\_2955). A summary of the information was included as Appendix 3 to the Record of Decision for the Big Thorne Project. Tables in this appendix compare the modifications of the OGRs with the Forest Plan OGRs.

Three of the 11 modified small OGRs (VCUs 5800, 5810, and 5850) would not provide site-specific physical conditions of kind-and-like quality compared to the original location, especially with regard to elevational connectivity and blocks of POG. The responsible official considered the effects of these modifications at the VCU scale. He further considered their role in the Tongass Conservation Strategy and associated direction in the Forest Plan.

The conclusion by the Responsible Official for the Record of Decision, Appendix 3 states that –

“Based on a consideration of the factors above, I conclude adoption of this amendment is not significant in the context of the National Forest Management Act. This amendment is fully

consistent with current Forest Plan goals and objectives. The amendment provides added detail on implementation of the Old-growth Habitat Management Prescriptions of the Forest Plan.

I hereby amend the Forest Plan with this non-significant amendment by increasing the total acres of small OGRs within VCUs 5800, 5820, 5830, and 5950. Modifications in VCUs 5790 (only 5 acres), 5810, and 5850 would reduce total OGR and POG acreages. While the GIS data shows the OGR in VCU 5850 being 2 acres less than the acres required by the Forest Plan, this will be corrected and this OGR will meet the required acres. The remaining small OGRs in the project area would not change (FEIS Table OGR-2). The following OGRs proposed for modification have been determined to provide a comparable achievement of the old growth habitat goals and objectives: 5790, 5820, 5840, 5860, 5950, 5960 and 5972. ”

The decision on the non-significant amendment to the Forest Plan was with the decision on the Big Thorne Project and Appendix 3 to the Record of Decision signed by the Responsible Official on June 28, 2013. The legal notice of this decision was published in the newspaper of record on July 1, 2013 starting the public 45-day appeal period. Seven appeals were received, although one appellant did not have standing. The IDT responded to the other six appeals and the response was reviewed by the Regional Office. On September 30, 2013, the Appeal Deciding Official upheld the decision with instructions to prepare a Supplement Information Report. This report was prepared in support of those instructions to assist in the review of the decision to modify the small OGRs.

### Conclusion

The process used to propose and determine the modification of the small OGRs during the environmental analysis for the Big Thorne Project process followed Forest Plan direction and was consistent with previous analyses done for modification of small OGRs. All modified OGRs were analyzed using Forest plan criteria. A comparable achievement analysis was done and all modified OGRs including those in the decision on the Big Thorne Project meet the goals and objectives of the Old-growth Habitat LUD. The Forest Service followed the process outlined in the Forest Plan (Appendix K and Appendix D, Forest Plan FEIS) and the Responsible Official concluded that this decision has very limited risk to old-growth-dependent species in the project area (Big Thorne ROD, Appendix 3, p. A 3-4).

## Appendix B

### References

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

#736\_0002 – January 2008 Tongass National Forest Land and Resource Management Plan

#736\_0003 – January 2008 Tongass Land and Resource Management Plan; Final Environmental Impact Statement; Record of Decision

#736\_0037 – June 16, 2011 Big Thorne EIS Tongass National Forest; JRT Checkpoint 2 – Issues and Alternatives Meeting Notes

#736\_0063 – October 2012 Big Thorne Project Draft Environmental Impact Statement

#736\_0078 – May 1998 Control Lake Timber Sales Record of Decision

#736\_0079 – June 2000 Luck Lake Timber Sales Final Environmental Impact Statement and Record of Decision

#736\_0419 – June 2013 Big Thorne Project Wildlife and Subsistence Resource Report

#736\_2191 – April 2013 Interagency Old Growth Reserve Review; Big Thorne Project

#736\_2244 – June 2013 Big Thorne Project Final Environmental Impact Statement

#736\_2248 – June 2013 Big Thorne Project Record of Decision

#736\_2955 – Big Thorne Comparison of Small Old-Growth Reserves by Alternatives by VCU

#736\_3156 – December 2012 US Department of Interior comments to Big Thorne DEIS