

# **Record of Decision Appendix 3**

## **Non-significant Forest Plan Amendment**



# **Non-significant Forest Plan Amendment**

## **Small Old-growth Habitat Reserve Adjustments in the Big Thorne Project Area**

The Big Thorne project area includes small OGRs located in VCUs 5790, 5800, 5810, 5820, 5830, 5840, 5850, 5860, 5950, 5960, and 5972 (FEIS Figure OGR-1; FEIS Figure 1-2 in Chapter 1 displays the locations of the Old-Growth Habitat LUDs in relation to other LUDs and roadless areas). The project area also incorporates other VCUs or portions of VCUs (FEIS Table WLD-1). A substantial portion of the Honker Divide large OGR complex, which spans several VCUs and is made up of several different LUDs, is within the project area. Only VCUs with small OGRs and proposed project activities were considered for modifications. There was an alternative in the FEIS that included modification of the large OGR in the Honker Divide area; this alternative was not carried forward for detailed analysis. Medium OGRs have been designated in adjacent VCUs to the north and west. Under the Forest Plan conservation strategy, small OGRs were intended to facilitate functional connectivity (i.e., connectivity through disconnected patches of old-growth forest) between larger reserves and help ensure well-distributed wildlife populations.

During the 2008 Forest Plan Amendment process, an interagency biologist review team (2008 IRT) conducted a forest-wide review of small OGRs, because small OGR locations had not been finalized under the 1997 Forest Plan. For each VCU, the 2008 Interagency Review Team evaluated consistency with Forest Plan OGR acreage requirements (outlined in Appendix K of the Forest Plan). All existing small OGRs meet or exceed the Forest Plan acreage (USDA Forest Service 2008c, Appendix D). This evaluation formed the basis for the biologically preferred small OGR locations recommended by the 2008 IRT, one of several factors taken into account in finalizing the small OGR locations under the 2008 Forest Plan. Appendix D of the Forest Plan FEIS and Appendix K of the Forest Plan include design criteria used in the development of the reserve system (see the Wildlife and Subsistence resource report of the FEIS for additional detail).

Pursuant to Forest Plan Appendix K, OGR boundary changes proposed at the project level require an interagency team of USDA Forest Service (USFS), U.S. Fish and Wildlife Service (USFWS), and Alaska Department of Fish and Game (ADF&G) biologists to jointly evaluate the location and habitat composition of the OGRs. The interagency review team is to develop a biologically preferred location for OGRs that meets Forest Plan criteria and document why other proposals are not recommended.

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.” Thus, the primary direction for evaluating the capability of a modified OGR to provide a comparable achievement is contained in the Old Growth Habitat LUD goals and objectives and Appendix K of the Forest Plan. Appendix K further references Appendix D of the Forest Plan FEIS.

## Appendix 3

Determination of comparable achievement of Old-growth LUD goals and objectives for a modification to an OGR is subjective, and is supported by the process outlined in Appendix K of the Forest Plan and a review of additional OGR design criteria provided in Appendix D of the 2008 Forest Plan Final EIS (USDA Forest Service 2008b). Pursuant to Forest Plan (Appendix K), an IRT comprising USFWS, ADF&G, and Forest Service biologists met in Thorne Bay on June 2–3, 2011 (2011 IRT) to review the existing small OGRs in the project area. In response to comments received during scoping, the 2011 IRT evaluated Inventoried Roadless Areas as alternatives to OGRs and to allow timber harvest in currently designated OGRs. The 2011 IRT also considered biological values of the current small OGR locations and the location of biologically preferred small OGRs.

The 2011 IRT reviewed small OGRs in 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 large OGR complex were not reviewed by the 2011 IRT because there were no changes proposed to the Honker large OGR. The 2011 IRT used quantitative and qualitative information to develop recommendations for biologically preferred and Roadless area options for small OGR locations in the project area.

The Big Thorne ROD and FEIS include modifications to relocate the small OGRs within the 2001 Roadless Rule inventoried roadless areas. The purpose is to allocate the portions of the current OGRs that contain existing roads and past harvest units to development LUDs where timber harvest is allowed. The portions of existing OGRs that were relocated under the ROD are reallocated to Timber Production, Modified Landscape, and Scenic Viewshed LUDs, based on the adjacent LUDs and Visual Priority Travel Routes and Use Areas to address scenery concerns. Where necessary, the acres that are allocated from the OGRs into development LUDs have been replaced with acres from the Roadless areas.

As a non-significant amendment to the Forest Plan, I have modified small old-growth reserves for VCUs 5790, 5800, 5810, 5820, 5830, 5850, and 5950. The Selected Alternative was developed by an interdisciplinary team that met on April 15, 2013 by modifying Alternative 3 of the DEIS. These OGR options 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). They all meet Forest Plan Appendix K acreage criteria for small OGRs. However, these modifications also reduce the amount of POG (including large-tree POG and low-elevation POG), interior forest acres, goshawk and marbled murrelet nesting habitat, and deer and marten winter habitat in some OGRs (see Table OGR-2 in the Big Thorne FEIS for a comparison). Some of the modifications reduce the size of the OGRs from what they were in the Forest Plan, and small OGRs still meet the Appendix K acreage criteria.

The Secretary of Agriculture's implementing regulation indicates the determination of significance for a Forest Plan amendment is to be "[b]ased on an analysis of the objectives, guidelines, and other contents of the forest plan" (36 CFR 219.10(f)). The Forest Service has issued guidance for what constitutes a "significant amendment" under the National Forest Management Act (NFMA) in Forest Service Manual (FSM) 1926.51 and Forest Service Handbook (FSH) 1909.12, Section 25.4. Four factors were used in

determining whether a proposed change to a Forest Plan is significant or not significant. These four factors are: 1) timing; 2) location and size; 3) goals, objectives, and outputs; and 4) management prescriptions. A discussion of these factors follows.

### **Timing**

The timing factor takes into account when, during the life of the Forest Plan, the proposed change is to take place. Generally, the later the change in the life of the Plan, the less likely it is to be significant.

The Forest Plan revision was completed in 2008, so this change is proposed five years into the life of the Plan. The Old-growth Habitat Management Prescription in the Forest Plan recognizes that the small mapped reserves have received differing levels of field review and integration of site-specific information in their design. The intent of the Forest Plan was for project-level environmental analysis to evaluate the size, spacing, and habitat composition of mapped reserves, for project areas that include or are adjacent to mapped old-growth habitat reserves. Additionally, Forest Plan Appendix K gives specific instruction for how to make these changes.

Based on the Forest Plan implementation to date, I determined that the cumulative adjustments to Land Use Designations, in particular those made to adjust small OGRs, were anticipated by the Forest Plan and are relatively small in comparison to the overall land base. The net effect of all modifications to old growth reserves has been to increase acres in old growth reserves and to enhance achievement of the Forest Plan's goals for the old growth reserves system.

For these reasons, I have determined that these changes relevant to timing are not considered significant.

### **Location and Size**

This factor takes into account location and size of the area involved in the change and the affected area's relationship to the overall planning area. Generally, the smaller the area affected, the less likely the change is to be significant.

A comparison of existing small OGRs (Alternatives 1, 2, and 5) and small OGR modifications proposed under Alternatives 3 and 4, based on Appendices K and D design criteria in the Forest Plan, is in the Big Thorne FEIS Table OGR-2. Modifications to small OGRs that do not maintain comparable achievement of Old-growth LUD goals and objectives have the potential to reduce the functioning of the reserve system, either through reductions in the habitat elements maintained within the reserve system or connectivity provided by the reserve system.

All modified small OGRs in the Selected Alternative (ROD) meet minimum Forest Plan acreage requirements (FEIS Table OGR-1), continue to meet Old Growth Habitat LUD goals and objectives, and are consistent with direction contained in Appendix K of the Forest Plan. The Selected Alternative increases the total acres of small OGRs within VCUs 5800, 5820, 5830, and 5950. Modifications in VCUs 5790, 5810, and 5850 would reduce total OGR and POG acreages. The remaining small OGRs in the project area do not change (FEIS Table OGR-2).

## Appendix 3

Following the Management Prescriptions for Old Growth Habitat (Forest Plan p. 3-62 WILD1 B2), a comparable achievement of the Old-growth Habitat LUD goals and objectives (Forest Plan 3-57) has been determined for the 11 modified OGRs listed in the Selected Alternative. For these 11 modified OGRs, I have followed the direction for project-level review and in doing so, considered the criteria contained in Appendix K of the Forest Plan and Appendix D of the Forest Plan FEIS as well as the biologically preferred alternative (Alternative 4) provided and discussed by the 2011 Interagency Review Team. The “Interagency Old Growth Reserve Review Big Thorne Project” document dated April, 2013 documents the biologically preferred location for the OGRs as well as alternate locations.

Three of the 11 modified small OGRs (VCUs 5800, 5810, and 5850) will 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. I have considered the effect of this action in these three VCUs at the scale of the VCU and relative to the purpose and need of the project. I have further considered their role in the Forest Plan Conservation Strategy and associated direction in the Forest Plan. I have followed the process outlined in the Forest Plan (Appendix K and Appendix D, Forest Plan FEIS) and believe this decision has very limited risk to old growth-dependent species in the project area.

**Analysis of Modified OGRs.** The following describes how this project implements direction in the Forest Plan and the analysis proposed OGR modifications, including those listed in the Selected Alternative.

### Interagency Review Team (IRT)

The 2011 IRT evaluated the location and habitat composition of each OGR by reviewing all large productive old growth blocks within a Value Comparison Unit (VCU). The team developed a proposal for OGRs that meets the criteria of this appendix and documented why other proposals were not recommended (Interagency OGR Report, April 2013).

The purpose and rationale for current location of Forest Plan OGRs was reviewed and determination made if the purpose and rationale had changed (see Interagency OGR Report, April 2013). The 2011 IRT used the design criteria to define the biologically preferred location for each OGR.

The interagency review team OGR recommendations were analyzed in the FEIS (Alternative 4), and the best biological locations for OGRs were considered while balancing other considerations. The interagency team also worked to develop alternate proposals to meet other Forest Plan objectives (Alternatives 2, 3 and 5).

### Modifications to OGRs Made by the Selected Alternative

According to the Forest Plan, all proposed modified OGRs provide a contiguous landscape of at least 16 percent of the National Forest System land area of each VCU and at least 50 percent of the small reserve should be productive old growth, and contain a minimum of 400 acres of productive old-growth forest. During the review process attempts were made to have OGR boundaries follow recognizable features that are identifiable on the ground.

In very large VCUs, generally larger than 10,000 acres, the allocated old growth may be mapped in separate reserves as long as each reserve has a minimum of 800 acres of productive old growth. However, larger contiguous reserves are preferred to multiple smaller reserves.

In the Selected Alternative, modifications to the biologically preferred OGRs were required to meet Forest-wide multiple use goals and objectives while following management prescriptions as defined for the Old-growth Habitat LUD. The following section explains each of the alternative reservations considered, the review process and application of direction in the Old Growth Habitat LUD goals and objectives and Appendix K of the Forest Plan, and Appendix D of the Forest Plan FEIS. The analysis displays the trade-offs of the modifications to the biologically preferred OGRs where applicable, and documented in the 2013 Interagency Report. The amount of suitable Forest land impacted by the modified OGRs was analyzed.

The OGR modifications in the Selected Alternative provide a comparable achievement of the goals and objectives for the Old Growth Habitat LUD by maintaining areas of old-growth forests and their associated natural ecological processes to provide habitat for old-growth associated resources. The modified OGRs also generally reduce the amount of road included in the OGR.

Most of the small OGR modifications under the ROD reduce the miles of roads and early seral habitat included in the small OGR, and also increase the amount of suitable timber available for harvest. However, some of these modifications reduce the amount of POG (including large-tree POG and low-elevation POG), interior forest acres, goshawk, and marbled murrelet nesting habitat, and deer and marten winter habitat in some OGRs. The various additions and deletions of conservation measures for each VCU with modified OGRs refer to Table OGR-2 in the FEIS.

Overall, these proposed OGR modifications result in a net increase of 630 acres being added to the Old Growth Reserve system as well as an increase of 95 acres of POG.

The following paragraphs describe the effects for each VCU individually. The IRT defined the purpose and rationale for desired small OGR locations based on habitat requirements of specific species or animal groups. These are listed for each VCU in the text below.

### **VCU 5810**

This VCU contains two separate, disconnected OGRs. Forest Plan direction (Appendix K p. K-3) states that for very large, large and medium VCUs, generally larger than 10,000 acres, the allocated old growth may be mapped in separate reserves as long as each reserve has a minimum of 800 acres of productive old growth. However, larger contiguous reserves are preferred to multiple smaller reserves.

IRT Purpose and Rationale for Desired Small OGR Locations: Low-elevation POG, high-value deer habitat, and connectivity to the shoreline.

## Appendix 3

**South OGR:** The biological preferred alternative: the mapped reserve in the southern portion of VCU 5810 could be modified to exchange high-elevation, mostly north-facing POG along its western edge for east-facing stands in the Roadless area along the eastern edge of the existing OGR.

**North OGR:** This mapped reserve is retained for its function on the landscape to meet conservation objectives. Any reduction in POG in this mapped reserve, with substitute acres designated elsewhere in the VCU, would reduce effectiveness of this mapped reserve.

The 2011 Interagency Review Team (2013 IRT Report) recommends maintaining the areas south and east of the 3030 road as part of the existing small OGR in the northern region of the VCU to maintain important high value, low elevation wildlife habitat and connectivity between Luck Lake and the beach.

**Selected Alternative:** The north OGR contains about 1,560 acres, of which about 608 acres is POG. Previous decisions made changes to the OGR that resulted in reduction of POG below the Forest Plan requirement. The Selected Alternative includes 3 harvest units north of Forest Road 3030 road: Units 469, 470, and 471. Although on the surface this appears to be inconsistent with the Forest Plan, legacy acres and stream buffers among these units and extending to the existing OGR maintain some elevational travel corridors for wildlife. In addition, the Selected Alternative makes no changes to the south OGR which contains 2,188 acres, including about 1,421 acres of POG, which will continue to meet the goals and objectives of the Old Growth Habitat LUD and fulfill habitat conservation and timber harvest objectives.

Unit 469 is 38 acres and proposed for clearcut. Legacy acres in this unit connect with the legacy acres in Unit 470, following the landscape contours between about 400 to 600 feet in elevation with a stream buffer break in between the two units. The unit is from less than 400 to just over 1000 feet in elevation and has an east/southeast aspect. Retention of legacy forest structure also serves to divide the unit into 3 separate polygons. Unit 470 is 58 acres and will be clearcut. Legacy forest structure follows the contours around from about 500 to 800 feet in elevation. The legacy forest structure in the unit is split into two separate polygons. The legacy forest structure in this unit almost connects through a past harvest unit to the legacy in Unit 471 leaving only a short distance between legacy in the matrix. Both Unit 469 and 470 are in an area used by wildlife as an elevation travel corridor. Unit 471 is 35 acres in size and will be clearcut. Retained legacy forest structure in Unit 471 will connect to an OGR. Legacy acres in all three units cover some deer winter range acres. The net result of the modifications is that the clear cut harvest of Unit 469 and 470 will likely result in the loss of elevation corridor and a reduction of POG in the North OGR. However, legacy retention in the matrix between harvested areas will likely continue providing some level of connectivity for most species.

While this modification changes the physical condition of the existing OGR, the goals and objectives of the Old Growth Habitat LUD are still met and this VCU will fulfill both habitat conservation and timber harvest objectives on the landscape.

**VCU 5820**

IRT Purpose and Rationale for Desired Small OGR Locations: Maintain contiguous blocks of low-elevation POG for deer winter range.

The biologically preferred option is to maintain current Forest Plan location and boundaries. The currently mapped OGR in this VCU is the biologically preferred location.

**Selected Alternative:** Retains the biologically preferred (IRT Recommended location) and re-organizes the accounting of acres within the VCU. No net change on the ground. The decision to modify this OGR will not result in any changes to conservation measures on the ground. The decision reassigns acres currently mapped as part of the reserve in this VCU but are presently accounted for as reserve acres in VCU 5830. Those acres will now be counted as reserve acres in this VCU (5820). This does not change the location or boundary of the OGR as currently mapped; thus, this OGR will remain in the biologically preferred location. This results in a net increase of 386 acres in this VCU, including an increase of 300 acres of POG.

**VCU 5830**

IRT Purpose and Rationale for Desired Small OGR Locations: Maintain low-elevation, high-volume stands of bear, deer, wolf, and eagle habitat around Ratz Harbor and Trumpeter Lake.

Re-assign OGR acres that were previously mapped in the adjacent VCU to the north (VCU 5820) but counted towards the OGR in VCU 5830 to the OGR in VCU 5820. As a result, the OGR acres in VCU 5820 will increase and the acres in VCU 5830 will drop below minimum requirements. This OGR will receive additional acres along the south boundary of the existing OGR following Ratz Creek as a recognizable feature to increase POG acres in the small OGR and create a boundary that better follows recognizable features along the southern portion.

**Selected Alternative:** All of the old growth harvest units that were in this OGR previously displayed in the DEIS have been dropped. In order to meet Forest Plan requirements, acres have been added along the northern VCU boundary as well as to the southeast portion of the OGR to meet minimum total and POG acre requirements. The acres added in the southeast are some of the acres recommended by the 2011 IRT. Dropping the old growth harvest units maintains the low elevation, high volume stands in the area and connectivity to the OGR in VCU 5820. There are two commercial thinning units within the modified OGR boundary. Treatments in the commercial thinning area will improve wildlife habitat in the area. The net result is that the proposed modifications will enhance wildlife habitat near Trumpeter Lake by improving forage availability and removing the stand for the stem exclusion phase for the duration of rotation.

**VCU 5840**

IRT Purpose and Rationale for Desired Small OGR Locations: Include remaining POG and connectivity.

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Loss of OGR protections for a significant portion of low-elevation, high-volume stands in the east of the VCU adjacent to the beach buffer and connectivity to saltwater would no longer be protected as OGR.

**Selected Alternative:** Maintains 2008 Forest Plan OGR which is also biologically preferred OGR.

### **VCU 5850**

**IRT Purpose and Rationale for Desired Small OGR Locations:** Includes a coastline that provides important salmon, waterfowl, and black bear habitat and has documented high recreational use. Protect the last remaining blocks of POG in the VCU.

Due to the high level of fragmentation from previous harvest, and the limited remaining blocks of POG in this VCU, the biologically preferred option would extend north from the existing OGR to include a remaining block of high-volume POG.

**Selected Alternative:** The Selected Alternative drops all units in the modified OGR except one, thus maintaining most of the high-value, low-elevation stands, and most of the remaining blocks of contiguous low-elevation POG in this VCU. One of the larger blocks of POG remaining in the VCU is not included in the current, biologically preferred OGR.

The one remaining harvest unit carried forward in the Selected Alternative is located on the west side of the Sandy Beach road. The coastline that provides important salmon, waterfowl, and black bear habitat and has documented recreational use is maintained by the Selected Alternative. Harvest of the unit remaining will result in a reduction of POG acres currently protected by the OGR. The unit itself is about 58 acres, 19 acres of which are single tree selection harvest. The net result is that the even aged harvest portion of this unit will result in the loss of POG, which is limited in this VCU. The coastline to the east of the road, the uneven aged harvest of the partial unit, the limited size of the planned even-aged opening in relationship to surrounding lands and the ability of this VCU to meet the minimum requirements of Appendix K in the Forest Plan allows for the remaining old growth stands to provide the majority of conservation benefits in this modified reserve, while providing increased opportunity for timber management in a heavily managed and roaded landscape upon which timber management is being increasingly focused.

### **VCU 5860**

**IRT Purpose and Rationale for Desired Small OGR Locations:** Protect the last remaining blocks of POG in the VCU and maintain connectivity to the small OGR to the north in VCU 5840.

**Selected Alternative:** Maintains currently mapped and biologically preferred OGR that meets the goals and objectives of the Old Growth Habitat LUD.

### **VCU 5800**

**IRT Purpose and Rationale for Desired Small OGR Locations:** Protect limited remaining POG and maintaining connectivity in a fragmented landscape. Provide connectivity link from Honker Large OGR to saltwater in the east (Clarence Strait) via the Small OGR in VCU 5840.

The 2011 IRT was not opposed to the proposed units in the roaded OGR land base along the northern edge of the OGR. There was some discussion on the effects of the proposed units in the flatter valley bottom of this OGR. The IRT group felt that the current Forest Plan Standards and Guidelines, such as riparian, soils, would maintain the connectivity through this area. South-facing stands on the southern flank of Ratz Mountain should be retained to protect an elevational migration corridor and winter range values.

**Selected Alternative:** The Selected Alternative protects more POG than the current small OGR and drops all of the units in the flatter valley bottom of this OGR, thus maintaining the purpose and rationale of maintaining OGR protection for the wildlife migration corridor through a low elevation river drainage that connects the Honker large OGR to the coastline through the current small OGRs in VCUs 5800 and 5840 and important winter habitat in the valley bottom.

There are two remaining units in the modified OGR for the Selected Alternative in the south-facing stands on the southern side of Ratz Mountain identified by the IRT as ones that should be retained to protect an elevational migration corridor and winter range values; however, these were not included in the purpose and rationale. Unit 444 is single tree selection (75 percent retention), while Unit 440 contains both clearcut harvest (39 acres) and single tree selection harvest with 50 percent retention (64 acres). The single tree selection areas as well as stream buffers would maintain some of the elevational travel corridor thru the area (less than what is currently provided on the landscape) and other habitat values. The net result is that clearcutting Unit 440 will likely result in the loss of the elevation corridor in this area. Partial harvest of Unit 444 will likely maintain this elevational corridor to some extent. Given the mitigating factors associated with the partial harvest prescription of Unit 444, the net increase in acres of old growth acres associated with the OGR in this VCU, the increase in large tree POG, and the balance of all additions and deletions of other conservation functions in this landscape (see Table OGR-2), this modified OGR will still maintain the goals and objectives of the Old Growth Habitat LUD.

### **VCU 5790**

**IRT Purpose and Rationale for Desired Small OGR Locations:** Include remaining POG and maintaining connectivity in the VCU.

Removing the westernmost block of POG, one of the few remaining blocks of POG in the VCU and a key element in the design of this small OGR, in Alternative 3 would sever the connection to the west, and would not provide comparable achievement of Old-growth LUD goals and objectives in this VCU.

**Selected Alternative:** This decision moves 5 acres of small OGR into harvest Unit 83. The Selected Alternative does not remove the western-most block of POG (identified as a key element for connectivity in this area and one that the OGR was designed to protect) from the OGR. The net result is minimal loss of high-elevation acres, and due to the very small size of this change, the continued function of conservation within the OGR is highly probable. Despite these changes, the modified OGR exceeds the minimum acre requirements from Appendix K, continues to meet the goals and objectives of the Forest Plan Old Growth Habitat LUD, and provides for increased harvest opportunities within the roaded landbase where timber activities have recently been concentrated.

## Appendix 3

### VCU 5950

IRT Purpose and Rationale for Desired Small OGR Locations: Protect known habitat for wolves, deer, black bears, marten, flying squirrels, and goshawks while providing connectivity to other OGRs in adjacent VCUs.

A significant portion of acres that the 2006 IOGR proposed be added to the small OGR along the east boundary, which contains a large block of important high-volume POG, was not implemented in the 2008 Forest Plan.

The 2011 IRT agreed that expanding the small OGR in VCU 5950 to the east to include the entire contiguous block of POG along the eastern boundary of the existing small OGR at its southern end would better meet the purpose and rationale, as well as the Forest Plan FEIS/ROD Appendix D criteria for small OGRs. The addition would also provide a buffer for cumulative effects from extensive timber harvest by both the Forest Service and native corporations in this watershed.

The 2011 IRT recommends adoption of an alternative that incorporates the entire block of Roadless area POG adjacent to the southeast corner of the existing OGR. Even though the option that would add only the high-elevation acres along the west side of the OGR is inferior to the option that would add the southeast POG block, the 2011 IRT felt that either option would provide comparable achievement of Old-growth LUD goals and objectives.

The 2011 IRT was 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 this area severing the connection to the Honker complex to the north; however, this connection is already severed by the State land selection in this area.

**Selected Alternative:** The Selected Alternative retains all harvest units within the modified OGR. While the Selected Alternative does not provide a comparable achievement on the ground following the proposed change and comparing to the existing condition regarding the connectivity within the OGR, it does add the high elevation acres on the west side of the VCU and thus provides a comparable achievement and meets the goals and objectives of the Old Growth Habitat LUD.

### VCU 5960

VCU 5960 contains both large and small OGR acres. The small OGR includes the area south of the paved highway and east of Control Lake. The rest of the OGR acres in this VCU are part of the Honker large OGR complex.

IRT Purpose and Rationale for Desired Small OGR Locations: Provide OGR areas that complemented and added value to the Honker large OGR complex, which provides a significant north/south connectivity corridor across the central Prince of Wales Island region, connecting the Sarkar reserve to the Karta reserve. The southern reach of the Honker large OGR complex is comparatively fragmented, and therefore, remaining POG stands in VCUs 5960 and 5972 are important features for achieving the intended connectivity between the Sarkar and Karta reserves through the Honker large OGR.

No roaded OGR units proposed in this VCU.

**Selected Alternative:** Maintains currently mapped OGR thus providing a comparable achievement and meeting the goals and objectives of the Old Growth Habitat LUD.

### **VCU 5972**

**IRT Purpose and Rationale for Desired Small OGR Locations:** Include known wolf habitat and provide a wildlife travel corridor through VCUs 5972 and 5980 to saltwater at the Salt Chuck.

2011 IRT does not recommend the proposed units in the roaded OGR.

**Selected Alternative:** Maintains currently mapped OGR thus providing a comparable achievement and meeting the goals and objectives of the Old Growth Habitat LUD.

# Appendix 3

## Figure A-1 Central LUD OGRs

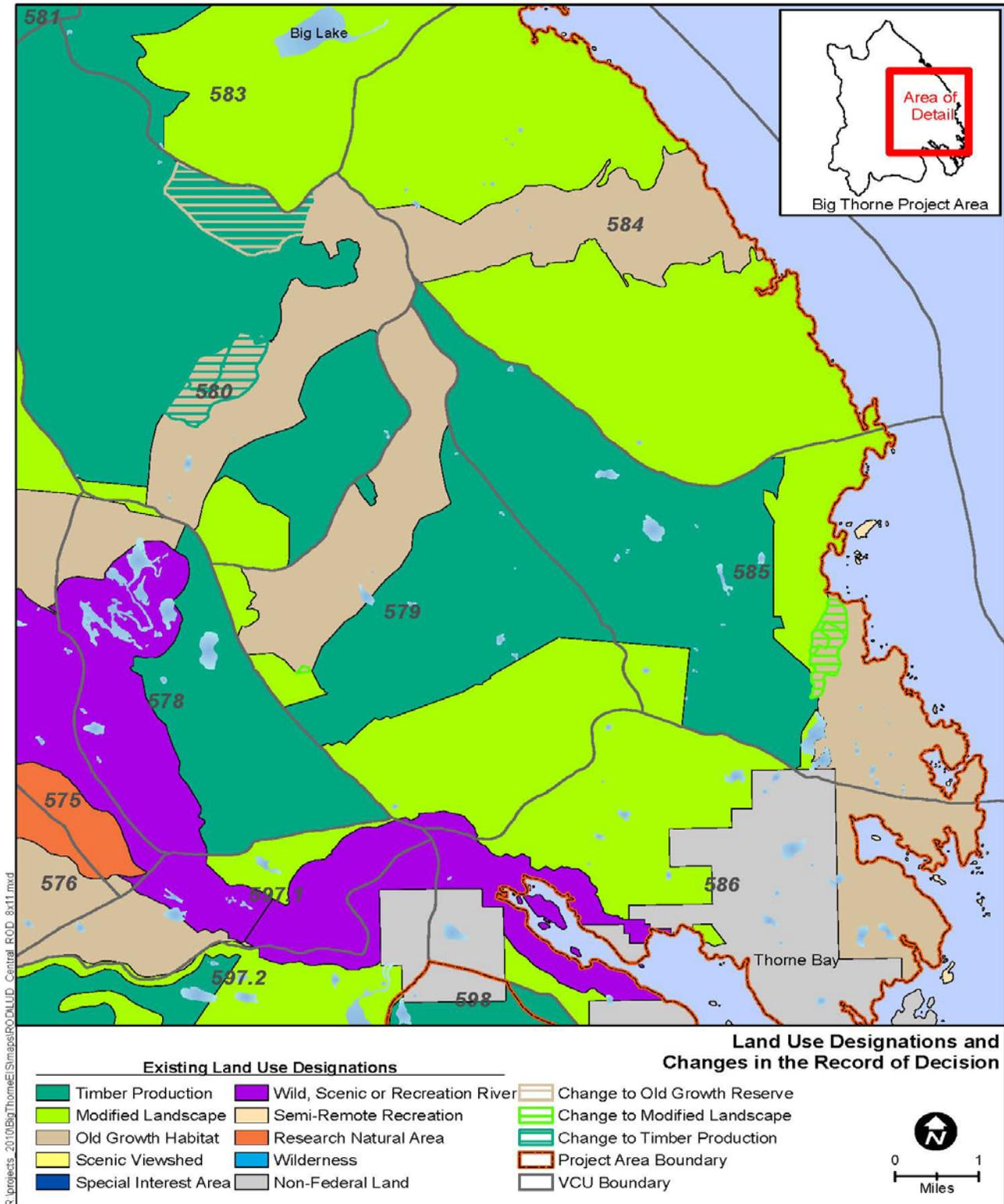
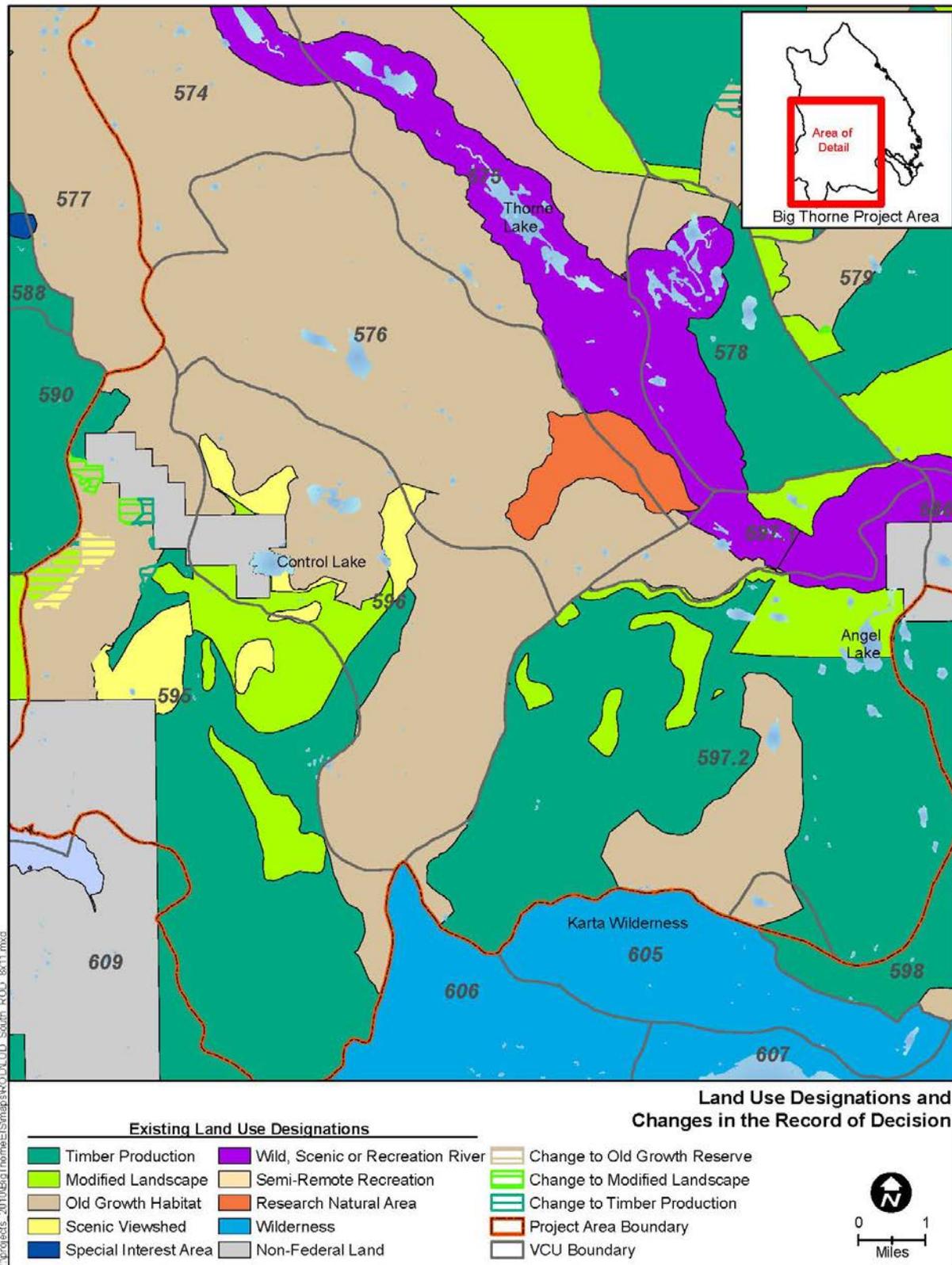
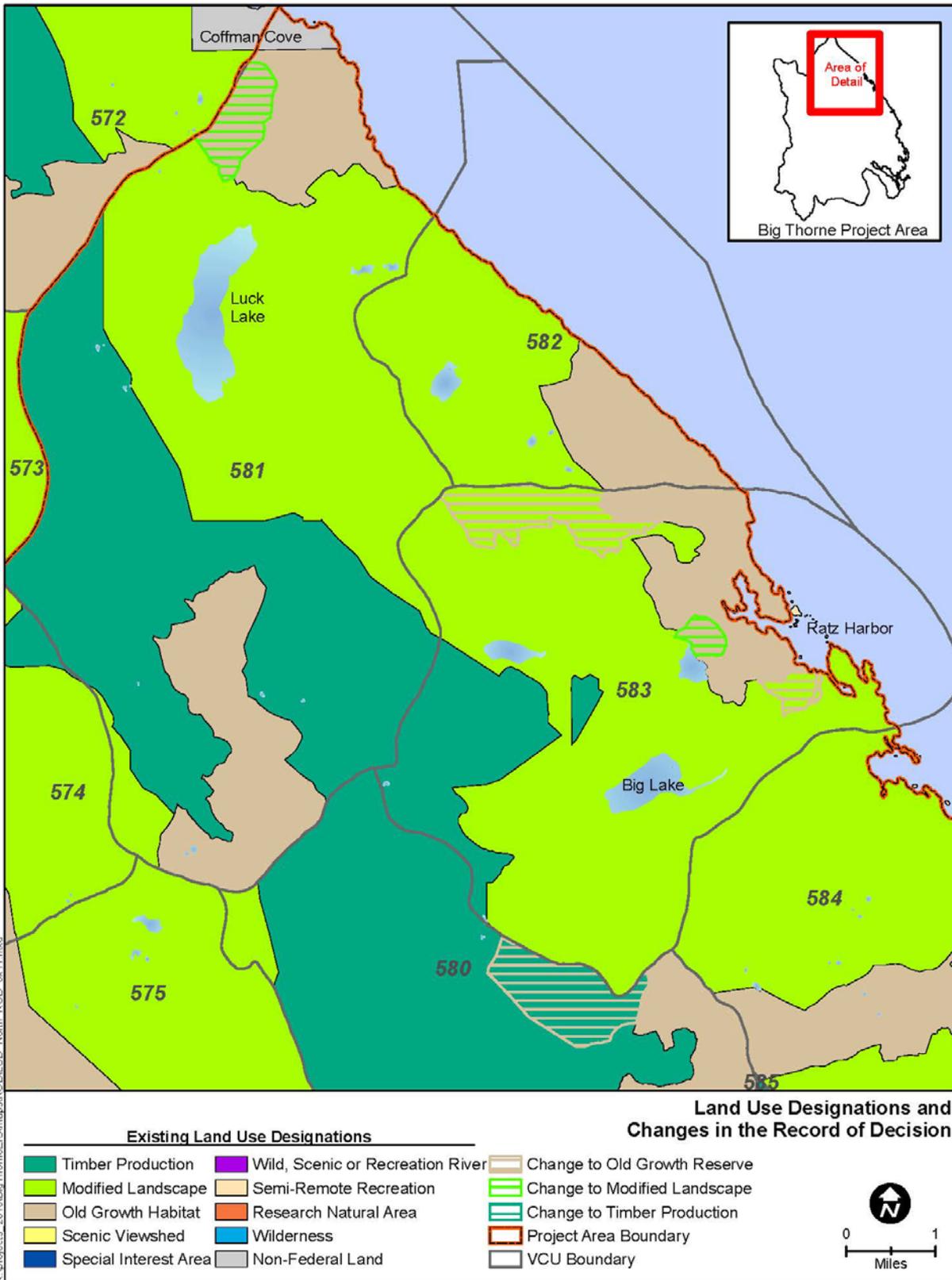


Figure A-2 Southern LUD OGRs



# Appendix 3

## Figure A-3 Northern LUD OGRs



## Goals, Objectives, and Outputs

This factor examines whether the change alters long-term relationships between the levels of goods and services projected by the Forest Plan. In most cases, changes in outputs are not likely to be a significant change in the Forest Plan unless the change would forego the opportunity to achieve an output in later years.

### Goals

The Forest Plan goal for biodiversity is to maintain healthy forest ecosystems and to maintain a mix of habitats at different spatial scales (i.e., site, watershed, island, province, and forest) capable of supporting the full range of naturally occurring flora, fauna, and ecological processes native to Southeast Alaska. While some of the adjusted OGRs do vary from the biologically preferred alternative, the adjustment to these reserves is consistent with the goals of the Forest Plan.

### Objectives

The Forest Plan objectives are to maintain a Forest-wide system of old-growth forest habitat (includes: reserves, non-development LUDs, and beach, estuary, and riparian corridors) to sustain old-growth associated species and resources and to ensure that the reserve system meets the minimum size, spacing, and composition criteria described in Appendix K of the Forest Plan. While some of the modified OGRs do not provide the same achievement as compared to the existing condition, the goals and objectives of the Old Growth Habitat LUD are still met and the adjustments to these reserves are specifically designed to meet Forest Plan Objectives.

### Outputs

Adjustment of these OGRs will have a relatively minor effect on the Forest Plan outputs on a Forest-wide basis, primarily because the change in the acres of LUDs that allow scheduled timber harvest is relatively small. There is a net increase of 543 acres of forest lands classed as suitable for timber production, which is one percent of the lands classified as suitable for timber production in the project area. This is minor (less than one tenth of one percent) when considered at the scale of the Tongass National Forest. Suitable forest land is defined in the National Forest Management Act (NFMA) by the following criteria:

- The land is forest land capable of producing 20 cubic feet per acre per year of wood volume.
- Technology is available to ensure timber production from the land without irreversible resource damage to soils productivity or watershed conditions.
- There is reasonable assurance that the land can be adequately restocked.
- The land is not withdrawn from timber production by an Act of Congress, the Secretary of Agriculture, or the Chief of the Forest Service (e.g., Wilderness Areas or Resource Natural Areas).

## Appendix 3

### Management Prescriptions

This factor accounts for whether the change in a management prescription is only for a specific situation or whether it would apply to future decisions throughout the planning areas. It evaluates how the change alters the desired future condition of the land and resources or the anticipated goods and services to be produced.

None of the standards and guidelines associated with the management prescriptions has been changed as a result of this amendment. The changes to the mapped small Old-growth Habitat Reserves apply only to this specific situation. These changes also would apply in future management; however, this action does not preclude future modifications being made so long as the standards and guidelines for the management prescription are achieved. The proposed amendment fulfills the desired future condition for the Old-growth Habitat LUD management prescription as defined in the Forest Plan and does not significantly affect the goods and services produced.

### Technical Changes

Technical changes to a Plan's management direction may be made on the basis of new information about the actual resource characteristics of the area. This category does not apply to this case.

### Cumulative Changes

The Big Thorne Project Area EIS and ROD is the only National Environmental Policy Act (NEPA) decision as of June 2013 to make non-significant amendments to the 2008 Forest Plan by modifying LUD boundaries. These changes are tracked with a monitoring question posed by the Forest Plan and are part of the Tongass National Forest Annual Monitoring and Evaluation Report.

Table A3-1 displays acres that were changed from a non-development LUD to a resource development LUD or from a development LUD to a non-development LUD and the net change in acres suitable for timber management. The net change in suitable acres represents approximately one percent of the suitable land base. As this is the only amendment to modify LUD boundaries there are no cumulative effects beyond the effects of this decision. The acres proposed to move from development LUD to OGR is an increase of 645 acres; however, these modifications also reduce the amount of POG (including large-tree POG and low elevation POG), interior forest acres, goshawk, and marbled murrelet nesting habitat, and deer and marten winter habitat in some OGRs.

Cumulative effects in terms of the intent of the conservation strategy modifying the OGRs has the potential to be additive to effects on viable, well-distributed populations of old-growth-associated species. The table below shows the total effects of the proposed OGR modifications and the proposed timber harvest in the ROD.

Table A3-1. Changes In LUD Acres and OGRs

OLD GROWTH HABITAT LUD		
Indicator	Alt. 1	ROD
<b>LUD Modifications (acres)</b>		
Change in Old Growth Habitat LUD	0	+645
Change in Development LUDs	0	-645
<b>Change in Suitable Timber (acres)</b>		
Change in Mapped Suitable Timber	0	+543
<b>Small OGR Modifications Metrics</b>		
# Small OGRs Consistent with Forest Plan Acreage Requirements	11 of 11	11 of 11
Net change in POG in Small OGRs (acres)	0	+107

Table A3-2 shows the changes in POG, High volume POG and Large Tree POG as a result of the proposed Alternative compared to what is currently available on the landscape and what is estimated to have been present in 1954.

Table A3-2. Changes In LUD Acres

Indicator	Alt. 1	ROD
<b>Acres of Productive Old Growth (POG) Remaining</b>		
<b>Total POG</b>		
Acres Remaining in Project Area	98,654	92,658
% Change from Existing	0%	-6%
% Change from 1954	-34%	-38%
Acres Remaining in North Central POW Biogeographic Province	569,005	563,008
% Change from Existing	0%	-1%
% Change from 1954	-49%	-49%
<b>High-volume POG</b>		
Acres Remaining in Project Area	43,867	40,629
% Change from Existing	0%	-7%
% Change from 1954	-42%	-47%
Acres Remaining in North Central POW Biogeographic Province	248,324	245,086
% Change from Existing	0%	-1%
% Change from 1954	-59%	-59%
<b>Large-tree POG</b>		
Acres Remaining in Project Area	22,116	20,543
% Change from Existing	0%	-7%
% Change from 1954	-41%	-45%
Acres Remaining in North Central POW Biogeographic Province	127,295	125,722
% Change from Existing	0%	-1%
% Change from 1954	-57%	-57%

Table A3-3 shows the changes in patch size classes for the project area only as a result of the Selected Alternative compared to what is currently available on the landscape and what is estimated to have been present in 1954. Table A3-4 shows the same changes but for all patches that intersect with the project area boundary as well as those within the project area.

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**Table A3-3. POG Patches Remaining by Size Category (fully within Project Area)**

Indicator	Alt. 1	ROD
0-25 acres	308	926
26-100 acres	96	109
101-500 acres	35	37
500-1,000 acres	7	7
1,000+ acres	8	9
% change in total no. patches	0%	+140%

**Table A3-4. Acres of POG in Remaining Patches by Size Category (all patches intersecting Project Area)**

Indicator	Alt. 1	ROD
0-25 acres	3,039	3774
26-100 acres	4,726	5,451
101-500 acres	7,178	8,757
500-1,000 acres	4,812	5,292
1,000+ acres	82,604	73,799
% change in acres of interior forest habitat in project area	0%	-10%

Table A3-5 shows the changes in deer winter habitat capability, on National Forest System lands only, as a result of the Selected Alternative both after project completion and at the stem exclusion stage, compared to what is currently available on the landscape and what is estimated to have been present in 1954.

**Table A3-5. Deer Winter Habitat Capability Change at Project Completion & After 25 Years (% of 2013 value/cumulative % change from 1954 value) NFS Land Only**

Indicator	Alt. 1	ROD
WAA 1315	0%/-7%	-5%/-44%
WAA 1318	0%/-5%	-5%/-12%
WAA 1319	0%/-4%	-6%/-28%
WAA 1420	0%/-11%	-6%/-48%
North Central Prince of Wales Biogeographic Province	-1%/-4%	-1%/-27%

Table A3-6 shows the changes in deer winter habitat capability, on all lands, as a result of the Selected Alternative both after project completion and at the stem exclusion stage, compared to what is currently available on the landscape and what is estimated to have been present in 1954.

**Table A3-6. Deer Winter Habitat Capability Change at Project Completion & After 25 Years (% of 2013 value/cumulative % change from 1954 value) All Lands**

Indicator	Alt. 1	ROD
WAA 1315	-41%/-45%	-11%/-48%
WAA 1318	-8%/-12%	-9%/-16%
WAA 1319	-24%/-27%	-10%/-31%
WAA 1420	-46%/-52%	-17%/-54%
North Central Prince of Wales Biogeographic Province	-26%/-29%	-4%/-29%

Table A3-7 shows the changes in acres of deer winter range harvested as a result of the Selected Alternative compared to what is currently available on the landscape and what is estimated to have been present in 1954.

**Table A3-7. Acres of Deer Winter Range Harvest**

Indicator	Alt. 1	ROD
Acres of deep-snow deer winter range harvest proposed (WAAs 1315, 1318, 1319, 1420)	0	1,798
% Change from Existing (by WAA)	0%	-3% to -7%
% Change from 1954 (by WAA)	-35% to -69%	-40% to -70%

Table A3-8 shows the changes in acres of goshawk habitat as a result of the Selected Alternative compared to what is currently available on the landscape and what is estimated to have been present in 1954.

**Table A3-8. Goshawk Habitat Harvest**

Indicator	Alt. 1	ROD
Acres of POG & High Volume POG harvest	0/0	5,996 and 3,238
% Change from Existing (by VCU)	0%	<-1 to -23% / <-1 to -25%
% Change from 1954 (by VCU)	0 to -61% / 0 to -82%	-1% to -66% / -1% to -85%

Table A3-9 shows the changes in acres of deep snow marten habitat harvested as a result of the Selected Alternative compared to what is currently available on the landscape and what is estimated to have been present in 1954.

**Table A3-9. Marten Deep Snow Winter Habitat Harvest**

Indicator	Alt. 1	ROD
Acres of harvest (WAAs 1315, 1318, 1319, 1420)	0	1,798
% Change from Existing (by WAA)	0%	-3% to -7%
% Change from 1954 (by WAA)	-35% to -69%	-40% to -69%

Table A3-10 shows the changes in road densities on both National Forest System lands only and on all lands, as a result of the Selected Alternative compared to what is currently available on the landscape and what is estimated to have been present in 1954.

**Table A3-10. Road Density by Wildlife Analysis Area (WAA) Below 1,200 feet**

Indicator	Alt. 1	ROD
Road density—Open & Closed Roads (NFS and non-NFS lands)		
WAA 1315	2.7	2.8
WAA 1318	2.4	2.5
WAA 1319	1.6	1.7
WAA 1420	2.4	2.5
Road density—Open & Closed Roads (NFS lands only)		
WAA 1315	2.1	2.3
WAA 1318	0.7	0.8
WAA 1319	1.6	1.7
WAA 1420	2.5	2.6

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Table A3-11 shows the changes in deer density on National Forest System lands only as a result of the Selected Alternative compared to what is currently available on the landscape and what is estimated to have been present in 1954.

**Table A3-11. Effects of Timber Harvest on Deer Density by WAA (NFS Lands Only)**

WAA	Year	Density or % of 1954	Existing	Alt. 1	ROD
1315	1954	deer/mi <sup>2</sup>	28.3	--	28.3
	2013	deer/mi <sup>2</sup>	16.7	--	16.7
		% of 1954	59%	--	
		deer/mi <sup>2</sup>	--	16.6	15.9
	2014 after Implementation	% reduction from 2013	--	0%	95%
		% of 1954	--	59%	56%
		deer/mi <sup>2</sup>	--	15.5	14.8
	2040 at Stem Exclusion	% reduction from 2013	--	-7%	-11%
		% of 1954	--	55%	52%
1318	1954	deer/mi <sup>2</sup>	14.7	--	14.7
	2013	deer/mi <sup>2</sup>	13.6	--	13.6
		% of 1954	92%	--	92%
		deer/mi <sup>2</sup>	--	13.5	12.9
	2014 after Implementation	% reduction from 2013	--	0%	-5%
		% of 1954	--	92%	88%
		deer/mi <sup>2</sup>	--	12.9	12.3
	2040 at Stem Exclusion	% reduction from 2013	--	-5%	-9%
		% of 1954	--	88%	84%
1319	1954	deer/mi <sup>2</sup>	20.9	--	20.9
	2013	deer/mi <sup>2</sup>	16.0	--	16.0
		% of 1954	76%	--	76%
		deer/mi <sup>2</sup>	--	15.9	15.0
	2014 after Implementation	% reduction from 2013	--	-1%	-6%
		% of 1954	--	76%	72%
		deer/mi <sup>2</sup>	--	15.3	14.4
	2040 at Stem Exclusion	% reduction from 2013	--	-4%	-10%
		% of 1954	--	73%	69%
1420	1954	deer/mi <sup>2</sup>	21.5	--	21.5
	2013	deer/mi <sup>2</sup>	11.8	--	11.8
		% of 1954	55%	--	55%
		deer/mi <sup>2</sup>	--	11.8	11.1
	2014 after Implementation	% reduction from 2013	--	0%	94%
		% of 1954	--	55%	52%
		deer/mi <sup>2</sup>	--	10.5	9.9
	2040 at Stem Exclusion	% reduction from 2013	--	-11%	-16%
		% of 1954	--	49%	46%
North Central Prince of Wales Biogeographic Province (all WAAs)	1954	deer/mi <sup>2</sup>	24.28	--	24.28
	2013	deer/mi <sup>2</sup>	17.95	--	17.95
		% of 1954	74%	--	74%
		deer/mi <sup>2</sup>	--	17.89	17.73
	2014 after Implementation	% reduction from 2013	--	-1%	-1%
		% of 1954	--	74%	73%
		deer/mi <sup>2</sup>	--	17.36	17.23
	2040 at Stem Exclusion	% reduction from 2013	--	-4%	-4%
		% of 1954	--	72%	71%

Table A3-12 shows the changes in deer density on all lands only as a result of the Selected Alternative compared to what is currently available on the landscape and what is estimated to have been present in 1954.

**Table A3-12. Cumulative Impacts to Deer Habitat Capability by WAA (All Lands)**

WAA	Year	Density or % of 1954	Existing	Alt. 1	ROD
1315	1954	deer/mi <sup>2</sup>	15.9	--	15.9
	2013	deer/mi <sup>2</sup>	9.4	--	9.4
		% of 1954	59%	--	59%
	2014 after Implementation	deer/mi <sup>2</sup>	--	9.4	8.9
		% of 1954	--	59%	56%
	2040 at Stem Exclusion	deer/mi <sup>2</sup>	--	8.8	8.3
% of 1954		--	55%	52%	
1318	1954	deer/mi <sup>2</sup>	6.6	--	6.6
	2013	deer/mi <sup>2</sup>	6.1	--	6.1
		% of 1954	92%	--	92%
	2014 after Implementation	deer/mi <sup>2</sup>	--	6.1	5.8
		% of 1954	--	92%	88%
	2040 at Stem Exclusion	deer/mi <sup>2</sup>	--	5.8	5.5
% of 1954		--	88%	84%	
1319	1954	deer/mi <sup>2</sup>	20.7	--	20.7
	2013	deer/mi <sup>2</sup>	15.8	--	15.8
		% of 1954	76%	--	76%
	2014 after Implementation	deer/mi <sup>2</sup>	--	15.7	14.9
		% of 1954	--	76%	72%
	2040 at Stem Exclusion	deer/mi <sup>2</sup>	--	15.1	14.3
% of 1954		--	73%	69%	
1420	1954	deer/mi <sup>2</sup>	19.4	--	19.4
	2013	deer/mi <sup>2</sup>	10.5	--	10.5
		% of 1954	54%	--	54%
	2014 after Implementation	deer/mi <sup>2</sup>	--	10.5	9.9
		% of 1954	--	54%	51%
	2040 at Stem Exclusion	deer/mi <sup>2</sup>	--	9.2	8.6
% of 1954		--	48%	44%	
North Central Prince of Wales Biogeographic Province (all WAAs)	1954	deer/mi <sup>2</sup>	19.8	--	19.8
	2013	deer/mi <sup>2</sup>	14.6	--	14.6
		% of 1954	74%	--	74%
	2014 after Implementation	deer/mi <sup>2</sup>	--	14.5	14.4
		% of 1954	--	74%	73%
	2040 at Stem Exclusion	deer/mi <sup>2</sup>	--	14.1	14.0
% of 1954		--	71%	71%	

## Appendix 3

### Conclusion

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.

Overall there is a net increase of 645 total OGR acres and 95 acres of POG in OGRs.



FORREST COLE  
Forest Supervisor

4.28.2013

DATE