RECORD COPY

USDA United States Department of Agriculture | Forest Service | Alaska Region | P.O. Box 21628 Juneau, AK 99802-1628

File Code: 1570
Date: February 22, 2007

Gabriel Scott
Cascadia Wildlands Project
Box 853
Cordova, AK 99574

Larry Edwards
Greenpeace
Box 6484
Sitka, AK 99835

Mark Rorick
Juneau Group of the Sierra Club
1055 Mendenhall Peninsula Road
Juneau, AK 99801

Dear Appellants:

Pursuant to 36 CFR 215.17, I have reviewed the administrative record for the Overlook Project Area Revised Environmental Assessment (EA), Decision Notice (DN), and Finding of No Significant Impact (FONSI). The Decision Notice was signed by Forrest Cole, Tongass Forest Supervisor. I have also considered the Appeal Reviewing Officer's (ARO) recommendation (enclosed) regarding the disposition of your appeal (Appeal No. 07-10-00-0003 A215). The ARO recommended that the decision be affirmed and your requested relief be denied.

DECISION

I concur with the ARO and I affirm the Forest Supervisor's decision. Your requested relief is denied. As discussed in the ARO's recommendation, I direct the Forest Supervisor to clarify the Habitat Suitability Index (HSI) values used in the analysis, provide rationale for why those values are appropriate for the Overlook analysis and why they differ from the model (if they do), and document and clearly explain the results of the model runs. The Forest Supervisor should follow the procedures outlined in FSH 1909.15, Chapter 10, Section 18, if he determines there are changes in estimated effects as a result of the additional analysis. At this time, I expect this clarification to be minor in nature. Documentation of the clarification will be completed prior to project implementation.

My decision incorporates, by reference, the entire administrative record, which includes the appeal and project planning records, and constitutes the final administrative determination of the Department of Agriculture (36 CFR 215.18(c)).

Sincerely,

DENNIS E. BSCHOR
Appeal Deciding Officer

Enclosure

cc: Tongass Forest Supervisor, Petersburg District Ranger, Tongass Appeal Coordinator

Printed on Recycled Paper

USDA United States Department of Agriculture | Forest Service | Alaska Region | P.O. Box 21628 Juneau, AK 99802-1628

File Code: 1570 **Date:** February 22, 2007

Subject: Overlook Project Area Revised Environmental Assessment and Decision Notice

To: Appeal Deciding Officer

This is my recommendation, as Appeal Reviewing Officer, on the action you should take, as Appeal Deciding Officer, on the pending appeals of the Overlook Project Area decision. The following appeals were filed under 36 CFR 215:

- No. 07-10-00-0002: Glen Ith, Forest Service Employees for Environmental Ethics (FSEEE)
- No. 07-10-00-0003: Cascadia Wildlands Project, Greenpeace, and the Juneau Group of the Sierra Club

The decision being appealed is the decision by the Tongass Forest Supervisor, Forrest Cole, to authorize the sale of timber and the construction of roads in the Overlook project area on Mitkof Island on the Petersburg Ranger District, Tongass National Forest. The project area is comprised of portions of Value Comparison Units (VCUs) 450, 451, 452, and 453, an area of approximately 8,408 acres. The selected alternative, Alternative 4B, harvests approximately 4.1 million board feet (mmbf) of timber from approximately 190 acres. Approximately 1.4 miles of new system roads and 0.4 mile of temporary road will be constructed to access harvest units. Repair work will be completed on Road 6232, including improvement of the last 600 feet of the existing road. All of the proposed roads will be placed into storage or decommissioned after timber harvest is complete. Most of the existing roads within the project area, including Road 6232 after milepost 0.58, will be placed in storage following harvest. Road 6235 will remain open. The decision also includes a non-significant Forest Plan amendment to change the small old growth reserves (OGRs) in VCU 450 (the Goose Lake and Three Lakes OGRs).

Background

The original Overlook Project Area Decision Notice (DN) and Finding of No Significant Impact (FONSI) were published in November 2005. The Forest Supervisor selected Alternative 4B, which was a modification of the Proposed Action identified in the Environmental Assessment (EA) (Alternative 4). The November 15, 2005, decision was appealed by Glen Ith in conjunction with FSEEE. The Forest Supervisor withdrew the decision on March 13, 2006, to clarify what road work had already occurred in the project area. The DN/FONSI for the Revised Overlook Project Area Timber Sale EA (Revised EA) was signed on November 3, 2006.

My review of these appeals was conducted pursuant to 36 CFR 215.19. The appeals and project planning record have been carefully reviewed in my consideration of the objections raised by the appellants and their requested relief. My recommendation hereby incorporates by reference the entire administrative record for the project.

Printed on Recycled Paper

The appellants list several interrelated issues in their appeals of the Overlook project. Although I may not have listed each specific issue, I have considered all the issues raised in the appeals and believe that they are adequately addressed in the following discussions.

Appeal No. 07-10-00-0002 – Glen Ith, FSEEE

Issue 1. Whether the Revised Overlook EA adequately assesses and discloses the effects of the project on wildlife and wildlife habitat.

Issue 1a. Whether the Revised EA properly evaluates important deer winter range.

The appellant contends that the methodology used to estimate the direct and cumulative effects of the Overlook project on important deer winter range significantly underestimates the effects and renders the evaluation of important deer winter range inconsistent with the Forest Plan Final Environmental Impact Statement (TLMP FEIS). The appellant contends that the acres of important deer winter range presented in the Revised EA are incorrect because the deer model places forested stands not meeting criteria set in the Revised EA into the important deer winter range category [Habitat Suitability Index (HSI) 0.5 to 1.3].

Discussion

While reviewing the documentation in the record related to this issue, I determined there are basically two questions to answer in response to this issue: 1) which numbers were used for deer habitat suitability index (HSI) scores; and 2) were forested stands not meeting criteria set into the important deer winter range category (high HSI scores)?

The answer to the first question demonstrates a lack of consistency in the numbers used for deer HSI scores. The HSI range for high value deer winter habitat was defined in the Overlook Revised EA as follows:

> HSI values were calculated using the deer model and quartiles were determined. The values range from 0.0 for no habitat value to 1.3 for the best habitat. The highest scores (0.5 to 1.3, depending on aspect) are assigned to high volume strata below 800 feet in elevation in areas with low winter snow depth. In areas with intermediate winter snow depth, HSI values range from 0.25 to 0.49, depending on aspect, for high volume strata below 800 feet in elevation. In areas of high winter snow depth, low HSI values range from 0.15 to 0.24 for high volume old-growth below 800' elevation. The Overlook project area is mapped as having an intermediate winter snow level. Therefore an HSI value of 0.5 and above is used to represent high value deer winter habitat (high volume strata below 800 feet in elevation) in the Overlook project area.

[Revised EA, pp. 76-77].

The last sentence of this paragraph conflicts with the fourth sentence. The Overlook project area is mapped as having an intermediate winter snow level; therefore, one would conclude that based on the text of this paragraph, HSI values used to represent high value deer winter habitat should be 0.25 to 0.49, not 0.5 and above.

The HSI values described in the Revised EA and various other documents in the planning record are also inconsistent. It is difficult to determine what the correct values are or which values were used in the Overlook analysis. The HSI values represented in the Revised EA match those mapped in the Deer Habitat Suitability Index Map for the Selected Alternative, but do not match those in the document titled "Identification of High, Medium, and Low value deer winter habitat in the Overlook Project Area" [Decision Document #347]. In fact, even Document #347 has different HSI values in its text than in Table 1 of the document. To add to the confusion, the overlay map showing HSI values for Mitkof Island has different value ranges for the medium and low HSI categories. The table below highlights these discrepancies.

HSI Scores	Revised EA	Deer suit map for Alt. 4b (selected)	Deer suit map for Alt. 1 (no action)	Doc #347 In Table 1	Doc #347 In the text	Map overlay
Lowest	Not Defined	0.01-0.14	0.01-0.14			
Low	0.15-0.24	0.15-0.24	0.15-0.48	<0.26	<0.27	0.01-0.25
Medium	0.25-0.49	0.25-0.49	0.25-0.49	0.27-0.45	0.27-0.49	0.26-0.45
High	0.5-1.3	0.5-1.3	0.5-1.3	0.5 +	0.5-1.0	0.5-1.3

Although these discrepancies appear to be minor and may have no affect on the overall deer habitat capability analysis, it is unclear whether the Forest Supervisor had the correct information before him when he made the decision. Therefore, I recommend that you direct the Forest Supervisor to clarify the HSI values used in the analysis, provide rationale for why those values are appropriate for the Overlook analysis and why they differ from the model (if they do), and document and clearly explain the results of the model runs. If the model results are different than those disclosed in the Revised EA, the Forest Supervisor should follow the procedures outlined in the Forest Service Handbook (FSH) 1909.15, Chapter 10, Section 18 in determining what action to take.

The second question appears to be related to two low elevation stands in low snow areas on southern Mitkof Island that were categorized as high value deer habitat even though they were previously harvested. The two stands are highlighted and disclosed on the Deer Suitability Map for Alternative 4B [Decision Document #6] as being managed stands of 23.04 acres and 36.47 acres.

Decision Document #347 explains that "[t]he Forest Plan Deer Model assigns a habitat suitability index (HSI) to an area of land based on winter snow level, aspect, elevation, and timber volume." Since the deer model uses four main factors to categorize stands, and stands are evaluated in relation to the rest of the stands in the planning area, stands of marginal quality may end up being classified as important deer winter range (higher relative HSI scores). The project record disclosed the discrepancy with these two low elevation, low snow, southern aspect stands that likely do not have high timber volume. The other three factors may have provided the requisite inputs for inclusion in the higher value category.

It appears the model works imperfectly, as in all models, and applied a high value score to those stands based on low elevation, low snow, and southern aspect. These factors may have categorically "overshadowed" the timber volume present in the stand. While it is difficult for me to determine whether these stands should have been included as high value deer habitat, I am comfortable deferring to the professional judgment and on-the-ground experience of the biologists who prepared the Wildlife Specialist Report. Including those acres as important deer habitat appears to be consistent with a recent journal article that indicates some clearcuts 9-25 years old were used by deer similar to older stands (26-40 years old) which typically have higher value as deer winter habitat [see Decision Document #162; J.G. Doerr, E.J. DeGayner, and G. Ith, 2005, Journal of Wildlife Management 69(1): 322-331].

Issue 1b. Whether the EA adequately considers Forest Plan standards and guidelines for cavity nesting species.

The appellant asserts that the Revised EA fails to mention or consider the Reserve Tree/Cavity Nesting Standard and Guideline, and that the failure to consider this guideline, especially where cavity nesting species have been observed in proposed harvest units, is inconsistent with the Forest Plan and in violation of NEPA.

Discussion

Forest Plan standards and guidelines for reserve tree/cavity nesting habitat provide direction to retain reserve trees to provide habitat for cavity nesting wildlife species, and indicate that managers should consider retaining live reserve trees to facilitate recruitment and consider marking them as reserve trees following harvest [TLMP, pp. 4-117 – 4-118]. A review of the project record reveals several instances that refer directly and indirectly to reserve trees. For example, the Wildlife Specialist Report includes the following references:

- Pages 7-8 describe the interdisciplinary approach to unit design based on site specific field inventory information (species use and habitats), including recommendations for specific leave trees;
- Page 44 describes the use of reserve trees in harvest units as functional old growth habitat;
- Page 60 describes habitat retention for management indicator species, such as the red-breasted sapsucker, hairy woodpecker, and brown creeper. These species represent the cavity nesting species for reserve trees as intended in the Management Indicator Species (MIS) delineation; and
- Pages 61-62 describe mitigation measures, indicating that "[m]any of the reserve tree/cavity nesting habitat S&G will be exceeded."

[Decision Document #4].

The unit cards for the project describe the reserve tree retention concern and display the amount of retention prescribed in each of the harvest units (from 10 to 67 percent) [DN, Appendix 2]. While not explicitly stating the need for cavity nesting species, the reserve trees identified for the units meet cavity nesting requirements as described in the Forest Plan standards and guidelines.

In my opinion, the project record demonstrates that the reserve tree/cavity nesting standards and guidelines will be met, and the decision is consistent with applicable Forest Plan direction.

Issue 1c. Whether the disparity in deer habitat capability between the Forest Plan FEIS and the Revised EA is adequately discussed.

The appellant states that the Forest Plan FEIS included a chart displaying an estimated deer habitat capability of 3,035 deer in 1995 for Mitkof Island, WAA 2007, and that the Revised EA displays a deer habitat capability of 4,527 deer under existing conditions. The appellant contends that the Revised EA fails to explain this disparity of over 1000 animals when the same model should have been used for both the Forest Plan FEIS and the Revised Overlook EA. The appellant further contends that known habitat alterations on Mitkof Island as a result of timber harvest since 1995 would suggest a decrease in overall deer habitat capability, not an increase.

Discussion

The Forest Plan FEIS displays habitat capability sufficient to support 3,035 deer on 114,754 acres of federal lands in WAA 2007 (Mitkof Island) [TLMP FEIS, p. 3-378]. The Revised EA [Table 3-21, p. 87] displays 4,527 deer under existing conditions (assuming that habitats with a HSI score of 1.0 would support 100 deer/mi^2), for a total discrepancy of 1,492 deer.

The discrepancy in deer numbers is due to two main factors. The Overlook Revised EA states that the Forest Plan analysis of WAA 2007 only included National Forest System land, while the Overlook Revised EA included National Forest, State, City, and private lands [EA, p. 76]. However, the Forest Plan FEIS also displayed habitat capability to support an additional 167 deer on 21,363 acres of State and private land (Table 3-112), for a total of 3,202 deer in WAA 2007. Counting the numbers of acres being evaluated between the TLMP EIS and the Overlook Revised EA accounts for a small portion of the difference in deer, but a difference of 1,325 deer still remains.

The second, and larger, factor for the difference in total deer habitat capability results from having better site-specific information and better spatial resolution in WAA 2007 since the original TLMP estimates were made. This discrepancy is explained, in part, in the documentation of the 1996 deer panel discussions [Decision Document #9]. As explained in that document, the Forest Plan estimate was based on a 20-acre grid, and provided a theoretical framework for deer habitat capability. The 1996 habitat capability model was particularly effective for providing landscape level (Forest-wide) evaluations, and less effective for site-specific values.

The Revised EA uses the same model to evaluate deer habitat capability. However, to more accurately describe the habitat capability at the resolution of WAA 2007, the model now uses

polygons depicting volume strata, an improvement from the coarser 20-acre grid used in the Forest Plan FEIS. The Revised EA also relied on an improved and updated snow depth map [Decision Document #290], which resulted in higher resolution and better estimates of habitat capability.

Several factors and much dialogue went into improving the data inputs for the deer model and better describing deer habitat capability. In all, deer look for a heterogeneous landscape mosaic (with various metrics of juxtaposition), stratified by the ratio of unproductive to productive forest for forage and shelter needs, access to maritime winter range, the presence or absence of wolves, and high volume stands. This means that certain parts of the landscape will support more or less deer. The Revised EA adequately explains the habitat types, number of deer supported (roughly 20 deer per mi^2), and reported harvest. Although it was not explicitly stated in this manner, this information is referred to in several places and I was able to piece it together. In my opinion, the analysis conducted for the Overlook Revised EA followed established direction and used appropriate values in the deer habitat capability model.

Issue 1d. Whether the Revised Overlook EA adequately addresses effects to marten winter habitat capability.

The appellant asserts that effects to marten winter habitat capability due to open road density were not disclosed in the Revised EA. The appellant contends that taking road density into account would decrease the estimated marten habitat capability substantially, and that the failure to disclose these significant factors violates NEPA.

Discussion

The Forest Plan provides standards and guidelines for marten conservation and management [TLMP, pp. 4-118 and 4-119] and refers to high quality habitat as identified in the latest version of the interagency marten habitat capability model. The Overlook project record provides information on the Marten Model (Version 7.0) used for the analysis in the Revised EA [Document # 11]. This model included values for elevation, whether in riparian or beach buffer, and volume strata. Road density was not included in this version of the marten model, nor did it appear to be used in the previous version of the model (Version 5.0, Suring et al 1992). Rather, in certain instances, road density has been used as a post-capability model output multiplier (if road density was greater than 0.6 mi/mi^2, then the output was reduced 90 percent (Suring et al. 1992)). Road density was not considered a good predictor of habitat capability; rather, it was believed to be a better measure of mortality. Generally, a road connected to town in a low snow area usually resulted in a higher trapping effort, whereas a road not connected and overgrown in alder usually resulted in a lower trapping effort.

The Revised EA describes the effects of the project on marten, and states:

> WAA 2007 contains approximately 24,772 acres of high value marten habitat. This represents an approximate 35 percent reduction of the total acres of high value marten habitat in the WAA since 1954. For this project both National Forest and non-national forest lands in WAA 2007 were analyzed.

[Revised EA, pp. 79-82].

The Revised EA explicitly discloses the potential effects of road density on marten, and states that "[r]oad density can affect marten populations as they are easily trapped along roads accessible to vehicles" [Revised EA, p. 81]. The Revised EA also discloses that the current pre-harvest road density (0.71 mi/mi^2) of drivable roads is greater than the density (0.6 mi/mi^2) where marten habitat values may be reduced by up to 90 percent as discussed in Suring et. al., 1992. Even with the high road densities, the marten population is assumed to be abundant, common, and stable based on the number of animals harvested (below sustained yield projections of the models) per the Alaska Department of Fish and Game (ADF&G) 2004 report. The Revised EA discusses reasons why the marten trapping effort remains moderate (fuel prices, winter weather conditions, current economy, the marten population, and fur prices), and discloses that both the increased road access and higher prices for marten pelts could increase the trapping effort. The Revised EA discloses these concerns, and indicates that ADF&G has discussed closing the marten trapping season on Mitkof Island [citing personal communication with ADF&G, EA, p. 81].

In the original EA for the Overlook project, the road density on Mitkof Island was 0.68 mi/mi^2. The Revised EA states that the current open road density for Mitkof Island is 0.71 mi/mi^2. The difference accounts for road work completed in the summer of 2005. This will not change after the project is completed as all new roads would be closed [Revised EA, p. 81; DN, pp. 3-4]. The Transportation Report [Decision Document #792, p. 10] states that newly constructed roads, as well as existing roads 6231 and 6235, will be closed after harvest, reducing the miles of open road from 13.9 miles pre-harvest to 11.7 miles post-harvest [p. 5]. In my opinion, the Revised EA adequately considers and discloses the potential effects of the project, including road density, on marten.

Issue 1e. Whether the Revised EA properly lists important reference materials concerning deer habitat capability models.

The appellant contends that the full account of citations used in the discussion regarding the deer habitat capability model are not identified in the reference section of the Revised EA and are therefore not available to the reader to understand the source of the statements. The appellant disagrees with a statement attributed to Gene DeGayner that the deer winter habitat model was designed to run on a landscape scale. The appellant states that the model was designed to function at a stand scale.

Discussion

Many important reference materials concerning deer habitat capability models are listed in both the Wildlife Specialist Report [Decision Document #4] and the Supplemental Wildlife Specialist Report [Decision Document #2]. These references include:

Wildlife Specialist Report	Supplemental Wildlife Specialist Report
• Hanley et al 1989 • Kirchhoff and Schoen 1985 • Suring et al 1982 • USDA Forest Service 1991 • Wallmo and Schoen 1980 • ADF&G • Doerr et al 1995 • Puchlerz dialogue August 6, 2002 • Forest Plan Deer Habitat Cap. Model	• Iverson 1996 • Suring and Prather 1985 • ADF&G-FS # 00 MOU-111001-026 • Gene DeGayner, personal communication • Joe Doerr, personal communication • Forest Plan • USDA Forest Service 1996

Communication between Gene DeGayner and the Wildlife Specialist for the Overlook project is also documented in the record [Decision Document #12]. In this memo, DeGayner states:

> Important deer winter range is defined as the number of acres in the top 25 percent quartile as defined by the deer model habitat suitability index (HSI) for the condition within the Wildlife Analysis Area (WAA). The WAA was chosen because it represents the smallest area the model would reasonably be expected to give a useable representation of deer activity. Anything smaller than the WAA does not really represent deer habitat well. The model was designed to be run at the Tongass National Forest level (17.8 million acres) and does not reflect habitat use by deer at smaller levels.

In my opinion, the record clearly documents that the deer model was designed to run on a landscape scale and that it was used appropriately in the analysis for the Overlook project.

Issue 2. Whether the Revised Overlook EA adequately addresses and discloses effects of irreversible and irretrievable commitments of resources.

The appellant makes two assertions related to this issue. First, the appellant contends that the development of the rock quarry adjacent to the project area, but within the proposed small old-growth reserve considered in the analysis, is inconsistent with Forest Plan direction and is a connected action. The appellant contends that this activity was not recognized, disclosed, or quantified in the EA, in violation of NEPA.

The appellant also asserts that the selected harvest of Sitka spruce in the summer of 2005 from proposed harvest units located within the project area needs to be disclosed and quantified in the Revised EA. The appellant contends that the Revised EA fails to disclose that many large defect-free Sitka spruce were removed from Unit 1, which is now included within the small OGR, prior to the decision for the project being made.

Discussion

The effects associated with the development of the rock quarry were considered in the Categorical Exclusion (CE) and Decision Memo (DM) for the 3 Lakes Aggregate Phase II and Phase III Projects [Decision Document #17]. The CE discusses various options for sources of

suitable rock for resurfacing Road 6235. Based on the analysis presented in the CE, the District Ranger states:

> In making this decision, I have considered the needs and direction of old-growth habitat management, public safety, the environmental costs of greater fuel consumption associated with increased haul distance and my responsibilities as a public servant to use financial resources wisely. I have taken into account the unique nature of the Goose Lake OGR in having within it an existing Forest development road with high public use, the minimal size of the proposed pit development (less than one acre), and the location of the proposed pit within the existing road prism. I have also considered the circumstances that the Goose Lake OGR will still exceed the Forest Plan requirements for acreage of a small OGR and that the activity will not fragment contiguous old-growth habitat, as it parallels an existing road.

[Decision Document #17].

The project record contains additional documentation supporting the analysis described in the CE, all of which demonstrate a thorough consideration of the potential effects and consistency with the Forest Plan standards and guidelines [Decision Documents #18 through #26]. The Revised Overlook EA considers past, present, and reasonably foreseeable future activities across Mitkof Island, including development of the rock quarry adjacent to the Overlook project area. All of these activities are identified in the Catalogue of Events for Mitkof Island [Decision Document #16, pp. 18 and 20].

The appellant contends that the Sitka spruce trees used for log stringer bridges were harvested from Unit 1 and that the Revised EA fails to disclose the effects of this irretrievable commitment of resources. Based on my review of the record, I found it difficult to determine exactly where the timber used for the bridge stringers on Road 6232 was cut. The record contains a map titled "Overlook Roads Project Materials Map" that indicates materials were taken from 100 feet of either side of Road 6235 between its intersections with Roads 6232 and 6231 [Decision Document #660]. However, the record is vague regarding the exact location and I was unable to find specific information addressing whether the individual trees were cut from Unit 1 or from another area along Road 6235. It is apparent that the trees were cut from within the project area. Regardless of whether the individual trees for the bridges were cut in Unit 1 or along a stretch of Road 6235, I find the Revised EA addresses the road maintenance work that occurred in the project area on Roads 6231 and 6232 in the summer of 2005, including replacement of the 4 log stringer bridges. The Catalogue of Events for Mitkof Island [Decision Document #16] includes the road maintenance work and indicates that it was considered in the cumulative effects analysis for various resources, including the effects on coarse canopy forest and the inclusion of Unit 1 in the small Old Growth Reserve.

Based on my review, I find that the Revised EA and project record adequately address the effects of the rock quarry development and the road maintenance work that was completed in the summer of 2005, including the removal of trees for log stringer bridges.

Issue 3. Whether the Revised EA adequately addresses and discloses relevant factors concerning the small old-growth habitat reserve in VCU 450.

The appellant contends that the Revised EA fails to explain the rationale for having two separate small old growth habitat reserves in VCU 450 when the Forest Plan recommends avoiding separate reserves. The appellant also challenges the classification of the mature high volume second growth stand in the Falls Creek Botanical Windthrow Area as Productive Old Growth (POG) for the small OGR land allocation criteria for POG. The appellant states this area has not obtained the structure required to function as productive old-growth and lacks the large dead biomass required to function as important habitat for many associated wildlife species. The appellant contends that including this second growth stand as high volume POG in the calculations for both deer and marten habitat capability results in an overestimate of wildlife habitat capability for the small OGR, the project area, and the VCU, thereby underestimating the cumulative effects on wildlife habitat.

Discussion

Two options were presented in the Overlook Interagency Old-growth Habitat Reserve Review [Decision Document #37]. The first option was identified in the Forest Plan and the other option was a modified version that followed an interagency review, site visit, and evaluation using spatial metrics and the Geographic Information System (GIS). The Forest Supervisor, in the Selected Alternative, chose to maintain two separate reserves, and the record demonstrates that the interagency team worked to meet the old growth and total acreage requirements, while using existing boundaries as reserve boundaries. Although the Forest Plan suggests having single reserves rather than separate reserves, the old growth reserve criteria appear to be better met through two reserves rather than through one continual reserve [Revised EA, p. 40], and I find the rationale well explained in Appendix 1 of the Revised EA, which documents the analysis for the small old-growth habitat reserve adjustments in VCU 450.

The question as to whether the mature high volume second growth was appropriately classified as POG in the reserve design and selection was answered quite thoroughly in the Response to Comments on the Overlook Project Area EA to Glen Ith dated February 25, 2005 [Decision Document #38]. This includes a broad discussion regarding the Forest Plan definition of POG, the makeup of the forest stands in VCU 450, and a description of why the stands were classified as POG. In my opinion, these stands are properly classified.

Issue 4. Whether the Revised EA adequately addresses cumulative effects.

The appellant asserts that the Revised EA fails to catalog all past actions in the planning area, fails to consider all other projects and actions that may contribute to cumulative effects, and fails to disclose and quantify all effects on wildlife habitat by incorporating inconsistent methods of evaluation.

Discussion

Past, present, and reasonably foreseeable future activities across Mitkof Island are identified in the Catalogue of Events for Mitkof Island [Decision Document #16]. This 23-page document provides a summary of past, present, and reasonably foreseeable future activities on Mitkof Island, and was used as an aid for analyzing the potential cumulative effects of the Overlook project in conjunction with other projects on the Island. The table is based on the most current and complete information available. The Revised EA thoroughly discloses cumulative effects throughout Chapter 3. In my opinion, the record adequately supports the cumulative effects analysis presented in the Revised EA.

Appeal No. 07-10-00-0003 -- Cascadia Wildlands Project, Greenpeace, and the Juneau Group of the Sierra Club

Issue 1. Whether an EIS is necessary.

The appellants contend that the analysis for the project does not satisfy several of the "significance" criteria for context and intensity required by the National Environmental Policy Act (NEPA) regulations at 40 CFR 1508.27 for a Finding of No Significant Impact (FONSI), and therefore, an Environmental Impact Statement (EIS) is required. They contend that the FONSI fails to discuss how the project relates to society as a whole, the affected region, the affected interests, and the locality, and therefore fails to demonstrate that the project will not cause significant effects. The appellants also contend that the severity of effects for several of the criteria specified in 40 CFR 1508.27(b) are not adequately disclosed.

Discussion

The regulations at 40 CFR 1501.4(c) provide for the preparation of an Environmental Assessment (EA) to determine whether or not to prepare an EIS. As documented in the Decision Notice (DN) and FONSI, the Forest Supervisor determined that this project is not a major federal action with significant effects on the quality of the human environment (FONSI, pp. 1-3). The presence of important resource values in itself does not require the preparation of an EIS for analyzing the environmental effects of any given action if the effects of the action are determined to be insignificant. Chapter 3 of the Revised EA discloses the environmental effects of the Overlook project.

The record demonstrates that the Forest Supervisor clearly understood the context of the Overlook project. The DN and Revised EA describe the Mitkof Island Landscape Design analysis completed for the entire Island [DN, p. 5; Revised EA, pp. 5-6]. The project area description and map, vicinity map, and land use designation maps provide the context of the project as it relates to the surrounding area [Revised EA, pp. 3-9]. The Revise EA also describes the context of the project in terms of management activities that have already occurred or may occur on Mitkof Island, including a catalog of events that lists all past, present, and reasonably foreseeable future activities (private, State, and Federal) across the Island. Finally, the Revised EA and DN are tiered to the Forest Plan EIS, putting the Overlook project in the context of management of the Tongass National Forest as a whole.

With regard to consideration of the intensity or severity of effect of the project, the regulations at 40 CFR 1508.27(b) describes ten criteria that should be considered. The discussion below specifically addresses the criteria challenged by the appellants.

40 CFR 1508.27(b)(3) – Unique characteristics of the geographic area.

The appellants contend that the project area contains areas of coarse canopy forest, a rare, ecologically critical habitat type, and that the Selected Alternative will significantly reduce the amount of coarse canopy forest in the project area. They also contend that the project effects high value marten habitat in a biographical province that is considered high risk for marten. While the Revised EA acknowledges that certain types of Productive Old Growth (POG), particularly very high volume stands, are rare on the Tongass National Forest [Revised EA, p. 75], coarse canopy forest has not been identified as an "ecologically critical" habitat type on the forest. The project record contains a Table of Findings [Decision Document #1] that provides the rationale for the FONSI. With regard to the effects of the project on coarse canopy, the table indicates that the harvest units in the Selected Alternative include 67 acres, or 7.7 percent of the current coarse canopy forest in the project area, and 1.3 percent of the coarse canopy forest in the WAA. While the Forest Plan does not discuss coarse canopy in particular, it predicts that by the end of the rotation (2095), WAA 2007 would have 61 percent POG remaining. As indicated in the Revised EA, the cumulative reduction in POG associated with the Overlook project and other projects in the WAA are well within Forest Plan predictions.

The Revised EA also explains that the reduction of coarse canopy is overestimated, as GIS assumes all harvest units are clearcut. However, all units in the Overlook project have partial harvest prescriptions, which will retain valuable habitat structures [Revised EA, pp. 75-76].

The Selected Alternative includes 172 acres, or 0.7 percent of the high volume marten habitat in the WAA. The effects of the project on marten habitat are disclosed on pages 79 through 82 of the Revised EA. The analysis concludes that:

> This harvest will not have a significant impact to the high value marten habitat because alternative silvicultural prescriptions are used in many of the units. All units with high value marten habitat are designed to meet Forest Plan standards and guidelines and will retain 30-67 percent of the stand after harvest. Large standing trees, snags and woody debris, all important marten habitat characteristics, would be retained following Forest Plan standards and guidelines. A large reduction in animals available for harvest is not expected as a result of this project.

[Revised EA, p. 80].

In my opinion, the FONSI related to this criterion is adequately supported by the analysis documented in the Revised EA and project record.

40 CFR 1508.27(b)(4) – The degree to which environmental effects are likely to be highly controversial.

The appellants assert that the effects of the Overlook project on environmental quality are likely to be as controversial as other projects on the Tongass National Forest for which EIS's have been prepared. The appellants claim that controversy would have been heightened had the Revised EA disclosed and fully discussed the project's heavy reliance on coarse canopy forest and the project's contribution to cumulative effects on marten, wolves, deer, coarse canopy forest, and the human values and uses of those resources.

One of the 10 factors set out by the CEQ regulations [40 CFR 1508.27(b)] is the degree to which the effects on the quality of human environment are likely to be highly controversial, but the regulations do not define controversy. However, the courts have been clear that the controversy factor is not meant to test whether there is public opposition to the proposals. The term "controversial" refers to cases where a substantial dispute exists as to the size, nature, or effect of the major federal action, rather than to the existence of opposition to a use. Chapter 3 of the Revised EA discloses the environmental effects, including cumulative effects, of the project on the various resources identified by the appellants. My review of the record indicates that the analysis presented in the Revised EA is supported by specialist reports and other documentation, and that the project is consistent with Forest Plan standards and guidelines.

In my opinion, the documentation for the Overlook project responds to the information provided by the public, adequately discloses the direct, indirect, and cumulative effects of the project, and supports the finding that the effects on the human environment are not highly controversial.

40 CFR 1508.27(b)(5) – The degree to which the possible effects are highly uncertain or involve unique or unknown risks.

The appellants assert that the risks of the project to marten, deer, wolves, and subsistence hunting are unknown because best available science for deer, wolves, and marten has not been applied in the Revised EA, habitat capability models have been used incorrectly, and loss of coarse canopy forest has not been fully disclosed.

See the discussion above for my response to the issue regarding the disclosure of the effects of the project on the loss of coarse canopy forest and high volume marten habitat. I disagree with the appellants with respect to whether habitat capability models have been correctly applied. For example, the Supplemental Wildlife Specialist Report [Decision Document #6] contains thorough discussions of the deer and marten habitat capability models and how they were used in the analysis for the Overlook project. Both models were developed by teams of interagency biologists [Decision Documents #11 (marten) and #12 (deer)]. The Revised EA discloses the effects of the project on deer [pp. 76-79] and marten [pp. 79-82] habitat based on the model runs. The deer and marten habitat capability models are the best scientific tools currently available and any changes to them will be the result of field observations, thorough analysis, and peer review.

In my opinion, the analysis presented in the Revised EA and project record uses the best available science to adequately disclose the effects (risks) of the project on the resources in the

project area. The Unit Cards also identify resource concerns and mitigation measures designed to minimize potential effects [DN, Appendix 2]. As stated in the FONSI, mitigation measures, harvest methods, and other features of the decision are either commonly used and/or present known risks.

40 CFR 1508.27(b)(7) – Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The appellants contend that the project clearly contributes to cumulatively significant effects on marten, deer, wolves, subsistence, and loss of coarse canopy and other high value habitat.

Although the appellants believe the Overlook project contributes to cumulatively significant effects on various wildlife resources, they do not provide any specific examples regarding the inadequacy of the cumulative effects analysis other than to state that the deficiencies were pointed out in public and agency comments and in the subsistence hearing. Lacking any specific examples, I find the Revised EA adequately identifies cumulative effects analysis boundaries for each resource and thoroughly discloses the potential cumulative effects throughout Chapter 3. The past, present, and reasonably foreseeable future activities across Mitkof Island are identified in the Catalogue of Events for Mitkof Island [Decision Document #14].

40 CFR 1508.27(b)(10) – Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The appellants assert that the action threatens to violate the Tongass Timber Reform Act (TTRA) regarding providing for the sustained yield of all renewable resources by adding to existing effects from other development in the project area. Specifically, the appellants contend that marten habitat capability will be reduced by over 90 percent due to road density alone. As previously discussed, the Revised EA discloses the effects of timber harvest on high value marten habitat and states that units with high value marten habitat are designed to meet Forest Plan standards and guidelines [Revised EA, p. 80]. The Revised EA also discusses the effects of road density on marten:

> Road density can affect marten populations as they are easily trapped along roads accessible to vehicles. Suring et al. (1992) assumed that where trapping is heavy, as road densities exceed 0.2 miles per square mile densities of marten would decrease and that reductions in marten habitat values may be reduced by up to 90 percent as road densities approach 0.6mi/mi^2. Current road density of drivable roads on Mitkof Island is 0.71mi/mi^2. All things being equal this model would indicate that marten habitat values on Mitkof Island may have already been reduced by up to 90 percent. However, ADF&G (2004) reported that in Game Management Area (GMA) 3 (of which Mitkof Island is a part of) "[m]ost furbearer populations appear to be abundant or common and remain stable in suitable habitat. Trapping effort is moderate, reflecting the current low-to moderate fur prices. Harvest is well below sustained yield potentials. Large areas of noncoastal habitat on the mainland and islands remain untrapped and provide refuge for furbearer populations". Also, marten

> harvest records indicate that trapping effort has remained moderate over 13 years, with an average of 35 animals/year (see Subsistence section of this document). This does not indicate the dramatic drop in marten populations that might be expected from the model.
>
> ADF&G has recently expressed concern that new road construction and reconstruction of currently closed roads may lead to increased human access thus increased trapping access which could potentially be detrimental to marten populations (Lowell per. com. 2006). Lowell states that, while trapping effort remains moderate, it can fluctuate year to year depending on fur prices, fuel prices, winter weather conditions, the current economy, and marten population. Lowell's concern is that the recent doubling of prices for marten pelts is likely to increase trapping effort in 2006-07. When combined with the current road density, this could potentially lead to over harvest. Lowell states that ADF&G does not have reliable estimates of the current or historic marten populations on Mitkof Island. While ADF&G has yet to request a reduction in the trapping season, or implement limits on the number of marten each trapper may harvest annually, the department has discussed closing the marten trapping season on Mitkof Island (Lowell per. com 2006).

[Revised EA, p. 81].

The appellants also contend that the deer model and deer multiplier were not properly applied, and, therefore, the 1997 Forest Plan standard to provide sufficient deer habitat capability to first maintain sustainable wolf populations and then consider meeting estimated human deer harvest demands is not being met. The current standard for deer habitat capability is 13 deer/square mile [TLMP, p. 4-116]. As previously discussed, the Supplemental Wildlife Specialist Report [Decision Document #6] contains a thorough discussion of the deer habitat capability model and how it was applied in the analysis for the Overlook project. Pages 24 through 27 of the Supplemental Wildlife Specialist Report discuss the effects of the project on the abundance and distribution of deer related to subsistence [Decision Document #6]. The Revised EA discloses the effects of the project on deer habitat based on the model runs [pp. 76-79]. Based on my review and understanding of the model, I find that the Overlook project analysis follows established direction and uses the appropriate values in the deer habitat capability model.

Based on my review of the record related to these criteria, I find that the Forest Supervisor properly determined that this project is not a major federal action with significant effects on the quality of the human environment (FONSI, pp. 1-3), and that the FONSI is consistent with the regulations at 40 CFR 1501.4(c).

Issue 2. Whether the decision is balanced and based on sound land management.

The appellants contend that the decision is improper because it is based on a balancing of admittedly insignificant project benefits against what the decision maker wrongly considered to be insignificant adverse effects. The appellants further assert that the decision was based on an incomplete economic analysis because the Revised EA did not include a discussion of how employment or jobs relate to the benefits of the project. They also contend that various factors are not included in the economic balancing for the project, including (1) the cost of roadwork recently done that would contribute to the Overlook project; (2) the economic value of the

extreme high grading of coarse canopy forest that contributes to the estimated bid prices of the action alternatives; and (3) adverse effect to sustained yield of marten and wolves, which may be a factor in the local economy.

Discussion

The appellants contend that they have demonstrated there are significant effects related to the Overlook project. I disagree. As stated above in my response to Issue 1 of their appeal, I agree with the Forest Supervisor's determination that this project is not a major federal action with significant effects on the quality of the human environment [FONSI, pp. 1-3]. I also believe that he properly balanced the benefits of the project against the potential effects.

With regard to the economics of the project, the appellants do not allege any specific violation of law, regulation, or policy related to the issue. The task for the agency is to weigh the economic and other benefits of the project against its environmental costs. One tool used to do this is the NEPA Economic Analysis Tool (NEAT). A NEAT analysis compares estimated costs and determines the predicted bid value (and related employment produced) for each alternative. The Supplemental Analysis for Timber Economics Resource Report documents the analysis that considered the road work costs, species and volumes, employment estimates, and expected bids produced by the NEAT model for each alternative in the Revised Overlook EA [Decision Document #21].

In my opinion, while the Revised EA does not specifically address employment related to the project, the Forest Supervisor properly weighed the economic benefits of the project against the environmental costs based on the NEAT analysis, and his decision strikes a reasonable balance between them.

Issue 3. Whether the rationale for the decision improperly relies on mitigation.

The appellants assert that in order for a FONSI to serve as the basis for a decision, the project must have no significant effects with or without mitigation. The appellants note that the Revised EA does not disclose where the timber used for bridge stringers on Road 6232 was cut. They contend that the logs for the bridges came from the project area, and they suspect they came from coarse canopy forest in Unit 1 or other project units. The appellants point out that the decision claims to mitigate concerns raised during subsistence hearings and in written comments on the Revised EA by dropping Unit 1 from the Selected Alternative. The appellants contend that if the logs used for the stringer bridges came from Unit 1, the effectiveness of the mitigation is drawn into question because the effect of the logging on coarse canopy forest in Unit 1 was not disclosed, nor was the corresponding reduction in the effectiveness of this mitigation disclosed or discussed in the Revised EA or DN. They contend that mitigation that only partially removes a project's significant effects (including Unit 1 in a small OGR and reducing visual effects in Unit 9) is not appropriate for a project approved under a FONSI.

Discussion

See my response to Issue 1, above, for a discussion regarding the "significance" of effects related to this project. The regulations at 40 CFR 1501.4(c) provide for the preparation of an EA to determine whether or not to prepare an EIS.

The appellants claim the removal of individual trees for log stringer bridges undercuts the mitigation of "dropping" Unit 1 (assuming the trees came from Unit 1) from the Selected Alternative. I disagree. Unit 1 is not a unit that was proposed for harvest in Alternative 4B of the Revised EA (the Selected Alternative), nor was it a unit proposed for harvest in the original decision for the project. Unit 1 was proposed for harvest (uneven-aged management, single tree selection) in Alternative 3, and the effects of this alternative are disclosed in Chapter 3 of the Revised EA. The Forest Supervisor acknowledged that there were concerns expressed regarding harvest of Unit 1 and selected Alternative 4B because of those concerns [DN, p. 5]. He did not "drop" Unit 1 from the Selected Alternative to mitigate effects; he simply chose an alternative that was designed to address concerns related to harvesting in Unit 1. To further alleviate concerns regarding Unit 1, the Forest Supervisor's decision includes this unit in the selected small Old Growth Reserve modification.

The same argument can be made for the design for the harvest of Unit 9 in the Selected Alternative. The unit card indicates that there are visual quality concerns related to harvest of this unit. In order to address these concerns, the harvest prescription calls for 67 percent retention that will minimize visibility from Three Lakes Road and Frederick Sound [DN, Appendix 2, p. 11].

In my opinion, the Forest Supervisor's determination that the Overlook project is not a major federal action with significant effects on the quality of the human environment is reasonable [FONSI, pp. 1-3].

The appellants further contend that the Revised EA does not disclose where the timber used for bridge stringers on Road 6232 was cut, and that the removal of the trees was not considered in the Revised EA or DN. Based on my review of the record, I agree with the appellants that it is difficult to determine exactly where the timber used for the bridge stringers on Road 6232 was cut. The record contains a map titled "Overlook Roads Project Materials Map" that indicates materials were taken from 100 feet of either side of Road 6235 between its intersections with Roads 6232 and 6231 [Decision Document #660]. I am unable to find specific information in the record addressing whether the trees were cut from Unit 1 or from another area along the road. It is apparent that the trees were cut from within the project area. However, regardless of where the individual trees for the bridges were cut along this stretch of Road 6235, the Revised EA addresses the road maintenance work that occurred in the project area on Roads 6231 and 6232 in the summer of 2005, including replacement of the 4 stringer log bridges. The Catalogue of Events for Mitkof Island [Decision Document #14] includes the road maintenance work and indicates that it was considered in the cumulative effects analysis for the various resources, including the effects on coarse canopy forest.

Although it is unclear whether the trees for the log stringer bridges came from Unit 1, in my opinion, the removal of a minimal amount of volume from harvest of individual trees (whether they were in the unit or not) would not deter from the overarching decision not to harvest Unit 1 and further protect it by including it in the small Old Growth Reserve.

Issue 4. Whether the DN is in compliance with TTRA.

The appellants contend that the Overlook project does not comply with TTRA's requirement that timber be provided "to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources" because the cumulative effects associated with the project can be expected to reduce the sustained yield of martens and wolves by trappers and the number of deer by hunters.

Discussion

The direct, indirect, and cumulative effects of the project on marten habitat are disclosed on pages 79 through 82 of the Revised EA. The cumulative effects analysis states, in part:

> ...ADF&G (2004) reported that in Game Management Area (GMA) 3 (of which Mitkof Island is a part of) "[m]ost furbearer populations appear to be abundant or common and remain stable in suitable habitat. Trapping effort is moderate, reflecting the current low-to moderate fur prices. Harvest is well below sustained yield potentials. Large areas of noncoastal habitat on the mainland and islands remain untrapped and provide refuge for furbearer populations." Also, marten harvest records indicate that trapping effort has remained moderate over 13 years, with an average of 35 animals/year (see Subsistence section of this document). This does not indicate the dramatic drop in marten populations that might be expected from the model.

[Revised EA, p. 81].

The Revised EA also addresses the effects of open road density on wolves, stating:

> ...ADF&G data (Wolf Management Report 2003) indicated that wolf populations in Unit 3 (including Mitkof Island) have increased while wolf harvest levels have remained fairly stable over the last 15 years, with an average of 8 wolves harvested annually on Mitkof Island. While ADF&G has expressed concern over the potential for increased wolf mortality from roads, as long as trapping and hunting pressure remains consistent, road density at these levels is not expected to contribute significantly toward wolf mortality and wolf populations are expected to maintain at current levels. At this time, ADF&G has not determined limiting wolf trapping on Mitkof Island as necessary.

[Revised EA, pp. 83-84].

Finally, with respect to the harvest of deer by hunters, the Revised EA states:

> The Forest Plan estimated that a deer population at carrying capacity could support an annual harvest by hunters of up to about 10 percent of winter carrying capacity, with the population remaining stable and hunter satisfaction remaining fairly high (Forest Plan FEIS, page 3-361 (USDA Forest Service 1997b)). According to the TLMP deer model, Mitkof Island theoretically has enough habitat to support a maximum of 4,527 deer, or approximately 22 deer per square mile (Table 3-21). The action alternatives for the Overlook project would reduce the island-wide carrying capacity by up to 16 animals.
>
> The model predicts that by the year 2046, due to stand development in existing managed stands, the estimated deer carrying capacity on Mitkof Island would be between 4,410 for the no action alternative and 4,387 for Alternative 3. Based on the 10 percent harvest guideline, Mitkof Island could theoretically support a maximum sustainable harvest of approximately 439 to 440 deer in the long term, depending on which alternative is selected. This is well above the current (1992-2003) average annual harvest level of 123 deer on Mitkof Island.

[Revised EA, p. 87].

The conclusions regarding the sustained yield of marten, wolf, and deer populations are supported by the analyses documented in the Supplemental Wildlife Specialist Report [Decision Document #6]. I find no basis for the appellants' statement that "[c]umulative impacts associated with the project can be expected to reduce the sustained yield of martens and wolves by trappers and the number of deer by hunters." In my opinion, the Forest Supervisor's decision is consistent with the requirements of TTRA.

Recommendation

In my opinion, the analysis in the Overlook Revised EA and project record is sufficient to support the Forest Supervisor's decision with respect to all the issues raised in these appeals, except those related to the potential effects of the project on deer. With respect to the deer habitat capability analysis, I find that the information regarding HSI values is inconsistent and it is unclear whether the Forest Supervisor had the correct information before him when he made the decision. Therefore, I recommend that you direct the Forest Supervisor to clarify the HSI values used in the analysis, provide rationale for why those values are appropriate for the Overlook analysis and why they differ from the model (if they do), and document and clearly explain the results of the model runs. The Forest Supervisor should follow the procedures outlined in FSH 1909.15, Chapter 10, Section 18, if he determines there are changes in estimated effects as a result of the additional analysis.

Based on my review of the Revised EA, the DN/FONSI, and the project record, and my discussions of each specific appeal issue above, I believe the Revised EA and DN/FONSI meet all applicable requirements of law, regulation, and policy. Therefore, I recommend that you affirm the Forest Supervisor's decision, with the direction discussed above.

Mary Anne Young

MARY ANNE YOUNG
Appeal Reviewing Officer