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United States Department of Agriculture

Forest Service

Tongass National Forest R10-MB-473

December 2002











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# Woodpecker Project Area









Forest Service Alaska Region

Tongass National Forest

648 Mission Street

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Ketchikan, Alaska 99901

File Code:1950

Date: December 24, 2002

#### Dear Reader:

Here is your copy of the Record of Decision (ROD) for the Woodpecker Project Area on the Petersburg Ranger District, Tongass National Forest. The ROD documents my decision and the rationale considered in reaching the decision. The Right to Appeal information and the earliest effective date of implementation for the decision are also specified in the ROD.

The August 13, 2001 Record of Decision for this project was reversed on appeal because of some data discrepancies. A supplemental information report was prepared to analyze whether these discrepancies influenced the effects analysis. This review found that only minor changes were necessary and that these changes did not affect the analysis displayed in the Woodpecker Project Area Final EIS.

This Record of Decision for the Woodpecker Project Area includes only those areas outside roadless areas as defined by the U.S. District Court, District of Alaska. In Sierra Club v. Rey (J00-0009 CV (JKS)), the court issued an order that, with certain exceptions, enjoined the Forest Service from permitting timber harvest and road building in roadless areas until forty-five days after publication of the final supplemental environmental impact statement (SEIS) for the Forest Plan. This injunction precluded the signing and implementing of decision documents for timber sales in roadless areas. Because the Selected Alternative in this Record of Decision does not include areas outside of the already roaded corridors, it complies with the current court order and can move forward at this time.

The summary for the Woodpecker Project Area Final EIS and an errata sheet are included with this ROD. If you would like a copy of the complete Final EIS (2001) to be sent to you, contact Cynthia Sever, Woodpecker Project Team Leader, P.O. Box 1328, Petersburg, Alaska 99833; e-mail address: csever@fs.fed.us; or call (907) 772-3871. Copies of the Final EIS (2001) are also available at Forest Service offices and libraries throughout Southeast Alaska.

Sincerely,

THOMAS PUCHLERZ

Thomas Fuelly

Forest Supervisor







# Woodpecker Project Area

# **Record of Decision**

# Tongass National Forest USDA Forest Service Alaska Region

Lead Agency: Tongass National Forest

648 Mission Street

Ketchikan, Alaska 99901

Responsible Official: Thomas Puchlerz, Forest Supervisor

**Tongass National Forest** 

For Further Cynthia Sever

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# Woodpecker Project Area Record of Decision

#### Introduction

This Record of Decision (ROD) documents my decision to select a modification of Alternative 6 from the Woodpecker Project Area Final Environmental Impact Statement (Final EIS) published in August 2001. This modification excludes any timber harvest, road construction, or ground disturbing activities within roadless areas as defined by the U.S. District Court, District for Alaska, in Sierra Club v. Rey (J00-0009 CV (JKS)). That order, with certain exceptions, enjoined the Forest Service from permitting timber harvest and road building in roadless areas until 45 days after publication of the final supplemental environmental impact statement (SEIS) for the Forest Plan. This injunction precluded the signing and implementing of decision documents for timber sales in roadless areas. Therefore, the Record of Decision for this project includes only those areas not defined as roadless by the injunction.

The project area is located on Mitkof Island in Southeast Alaska, approximately 27 miles southwest of Petersburg, Alaska on the Petersburg Ranger District of the Tongass National Forest. This project area, which is approximately 32,590 acres, is adjacent to Sumner Strait and the Wrangell Narrows. This decision includes the specific location and design of timber harvest units and roads, recreation enhancement opportunities, and resource protection requirements. Timber from this project will be sold in multiple sales of varying sizes. In addition, this decision includes the implementation of road management objectives, including intended use and maintenance levels and projects such as culvert and bridge replacement.

## **Decision**

This Record of Decision documents my decision to implement activities in the Woodpecker Project Area. My decision consists of:

- the location and method of timber harvest, road construction and reconstruction, log transfer facilities, and silvicultural practices,
- road management objectives,
- recreation projects,
- mitigation measures and monitoring requirements,
- whether there may be a significant possibility of a significant restriction on subsistence uses, and
- whether any changes in small old-growth habitat reserves should be made and approved as a non-significant amendment to the Forest Plan (see Appendix 1).

In order to have a timely decision on this project, it is my decision to choose a modification of Alternative 6 as the Selected Alternative for the Woodpecker Project Area, and I authorize the actions necessary to implement this decision. This modification excludes all proposed timber harvest units and road construction within the roadless area, in compliance with the current court injunction. This decision is based on the environmental analysis in the Woodpecker Project Area Final EIS (August 2001) and takes into consideration the comments received on the Draft EIS, the issues raised on the appeal of the 2001 Record of Decision, and any comments received prior to the date of this decision. This decision meets the purpose and need for the project; is consistent with the Tongass National Forest Land and Resource Management Plan Record of Decision (1997); is responsive to issues raised from the public and other agencies; considers the information gathered during the environmental analysis; and responds to the court's order.

The Selected Alternative for this decision is a modification of Alternative 6. The modifications are:

- Units 88, 88b, 90, 90a, 90c, 90d, 90e, which are totally within the Crystal Inventoried Roadless Area, are deleted.
- Units 109, 110, 117a, 117b, 117c, 117d, 118, 119, 119a, 122, 122a, all or
  portions of which are located more than 1200 feet from existing roads, are
  deleted.
- Unit 35a is deleted since more than half of the unit is within the roadless area.
- Unit 98 is modified to exclude approximately two acres located within the roadless area.
- Proposed classified roads 40822 and 40821 and their associated temporary roads will not be constructed.
- The extension of 6282 to create a loop road will not be completed. A temporary road will be constructed to access Unit 121.
- The end of Road 6245 (approximately one-half mile) will not be reconstructed, and the temporary road needed to access Unit 35a will not be constructed since this unit has been deleted.

#### **Highlighted Features of the Selected Alternative:**

1) The Selected Alternative will harvest timber from approximately 400 acres in the project area. This harvest will provide an estimated 5.4 million board feet of sawtimber and utility volume based on estimates of unit volume (actual cruised volume may vary). Design features and mitigation measures for the 24 harvest units are described in detail on the unit card narratives in Appendix 3. Of these harvest units, 10 units totaling 140 acres will be managed as two-aged stands with a retention of 20-30 percent of the stand basal area, and 14 units totaling 260 acres will be managed as uneven-aged stands with the first entry retaining 50 to 75 percent of the stand basal area. None of these units are within the area identified as roadless by the court's injunction.

- 2) No new classified roads designed for long term use will be constructed. Approximately 2.5 miles of temporary roads will be constructed. No road construction will occur within any roadless area as defined by the court's injunction. All of the temporary roads constructed to facilitate timber harvest as part of this project will be decommissioned as soon as practicable after timber harvest activities are completed. Decommissioning will include activities that result in stabilization and restoration of roads not needed for long-term management to a more natural state. These activities may include blocking the entrance to a road, installing waterbars, removing culverts, restoring vegetation, and reestablishing former drainage patterns to initiate restoration of interrupted ecological processes.
- 3) There will be eight dispersed camping/picnic sites either improved or created throughout the project area. These sites will be accessible from existing roads. Four turnouts will be improved or created to enable safe roadside parking. See the Activity Cards in Appendix 3.
- 4) A total of ten miles of existing classified roads (Roads 6280, 6281, 6283, 6284, 6287, and 40083) will be managed as closed roads in storage (Maintenance Level I). This maintenance level may involve some of the same activities proposed for decommissioning roads, such as removing culverts and installing waterbars. However, the road bed will be left mostly intact and is planned to be used for future National Forest System land management activities. A 300-foot segment of an unclassified road at milepost 0.48 of Road 40004 will be decommissioned with a ditch at the entrance as soon as possible. The Selected Alternative will manage the existing roads as displayed in the Road Cards shown in Appendix 3.
- 5) An existing log transfer facility will be used for timber transport, or timber may be processed in Petersburg. There may be a floating logging camp to facilitate the timber harvest, but no land-based camp is being considered at this time. The operator of the camp will be responsible for securing appropriate permits from state and federal agencies.
- 6) This Record of Decision incorporates mitigation measures to reduce or eliminate adverse environmental effects of timber harvest specified in the Selected Alternative. These mitigation measures are listed in Chapter 2 and in Appendices B and D of the Final EIS. Chapter 2 also contains the project-level implementation and effectiveness monitoring planned to determine how well resource management objectives have been met.
- 7) The potential foreseeable future and cumulative effects from implementing the Forest Plan, including the no-action and action alternatives in the project area, do not present a significant possibility of a significant restriction of subsistence uses of resources other than deer. The direct effects from the action alternatives in the project area do not present a significant possibility

of a significant restriction of subsistence uses of any wildlife, fish and shellfish, marine mammals, other foods, and timber resources. However, there may be a significant possibility of a significant restriction of subsistence use of Sitka black-tailed deer based on projected past, present and reasonably foreseeable activities in the Woodpecker Project Area. This is true for any alternative, including the no-action alternative. Mitigation measures for minimization of impacts to subsistence resources suggested through agency and public scoping have been incorporated into the Selected Alternative. A subsistence hearing was held in Petersburg, Alaska, which is in the vicinity of the project area, to determine the extent of the use of the area for subsistence resources.

## Reasons for the Decision

In making my decision, I considered the many issues raised during the development and scoping of this project. These issues were raised in comments on the Woodpecker Project Area Draft EIS, in the appeal of the 2001 Record of Decision, and during a public teleconference to discuss the results of the supplemental information report. I took into account competing interests and values of the public. Many divergent public and agency opinions were expressed during the analysis. These comments have helped me make a better informed decision. I have considered all views that have been expressed, and have used these contributions where feasible and consistent with the purpose and need of the project.

- 1) The Selected Alternative provides a beneficial mix of resources for the public within the framework of the existing laws, regulations, policies, public needs and desires, and capabilities of the land, while meeting the stated purpose and need for this project. This decision is suited to this project area at this time. This project provides the opportunity to provide at least some wood fiber to society, supports the part of the local economy that is based on timber resources, and still protects the other resources within the project area. Providing even flows of timber products is one of several multiple-use goals of the Forest Plan, along with resource protection (see Chapter 2 of the Forest Plan). Without obtaining decisions on environmental analyses in a timely manner, an even-flow of timber products cannot be obtained (see Appendix A of the Final EIS).
- 2) This project has been accomplished with thorough public involvement and has gained public support. I acknowledge that some comments opposed this project (and some opposed any timber harvest on all National Forest System land), and some recommended that the no-action alternative or Alternative 3 be chosen. By eliminating proposed timber harvest and road construction in any roadless area from Alternative 6 at this time, this decision is more responsive to these comments. Timber harvest within this area is supported by the Forest Plan and the multiple-use policy of the Forest Service.

3) The data and level of analysis used in the EIS are commensurate with the magnitude of the possible impacts (40 Code of Federal Regulations (CFR) 1502.15). When encountering a gap in information, the interdisciplinary team (IDT) took one of two approaches: (1) the missing information was collected, or analysis necessary to identify important relationships was conducted, or (2) the IDT concluded that although the missing information would have added precision to estimates or better specified a relationship, the basic data and central relationships are sufficiently established in the respective sciences so that new information would be very unlikely to reverse or nullify understood relationships. Where relevant, the project analysis tiered to the information from the Forest Plan (40 CFR 1502.20).

During the environmental analysis, I recognize that less than complete knowledge exists about many relationships and conditions of wildlife, fish, forests, jobs, and communities. The ecology, inventory, and management of a large forest area is a complex and developing science. The analysis of wildlife species prompts questions about population dynamics and habitat relationships. The interaction between resource supply, the economy, and communities is not an exact science.

- 4) I have carefully considered the timing of this decision in view of ongoing changes in agency regulations and ongoing litigation. This is the reason that I am compelled to modify the previous decision even though the analysis proved to be valid, and to modify Alternative 6 as the Selected Alternative. Some of the factors I considered in making this decision include:
  - The Forest Plan allows for the activities approved by this decision to take place.
  - The repercussions of delaying decisions regarding timber harvest, even for a relatively short period, have a significant effect on the amount of timber available for sale in the next year, due to the time needed for sale preparation activities, appraisal and advertisement, and to provide for the winter period when sale units are typically inaccessible.
  - Delayed decisions affect other decisions "in line" for consideration, creating impacts to the entire sale program several years into the future.
  - The Tongass National Forest will continue to be managed in compliance with Section 101 of the Tongass Timber Reform Act of 1990 (TTRA), which states, in part, that the Secretary of Agriculture "...shall, to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, seek to provide a supply of timber from the Tongass National Forest which (1) meets the annual market demand for timber from such forest and (2) meets the market demand from such forest for each planning cycle" (Forest Plan ROD, page 37). In order to provide a steady flow of timber harvest

- volume, timber sale projects need to be completed through the NEPA process each year to meet current and future market demand.
- This project has received good support from the local community and is relatively uncontroversial. The Petersburg City Council passed a resolution on February 17, 1998 in support of small timber sales from National Forest Service System lands. On June 3, 2002, another resolution was passed by the City Council to support the Southeast Timber Task Force proposal which addresses the issue of sustaining a viable forest products industry in Southeast Alaska. A third resolution, passed on August 9, 2002, supported the No-action Alternative (Alternative 1) of the Forest Plan SEIS, which would allow the management activities currently authorized by the Forest Plan to continue, including this Selected Alternative.
- 5) My decision to implement this Selected Alternative conforms to the Forest Plan and the principles of sound National Forest management. The Selected Alternative limits harvest to about 400 acres and is consistent with direction in the Forest Plan. I have considered the need to help provide a sustained level of timber supply to meet annual and Forest Plan planning cycle market demand, and to provide diverse opportunities for natural resource employment, consistent with multiple use and sustained yield of all renewable forest resources. The timber volume from this project area will help meet society's and Southeast Alaska's timber supply needs.
- 6) The unit configurations and harvest prescriptions in the Selected Alternative reflect the best possible balance of the physical conditions and economic opportunities characteristic of this project area without affecting any roadless area. These conditions cannot be directly compared to projects in different locations with different land use designations and different environmental and social concerns. The terrain, stand conditions, scenery, economic opportunities and the Forest Plan guidance for the Woodpecker Project Area are, in their combination, unique to this area. The Selected Alternative still meets the purpose and need for the proposal to the extent feasible considering the court's injunction.
- 7) The effects to high value deer winter habitat were taken into consideration. Much of the 3,370 acres of high value deer winter habitat in the Woodpecker Project Area is already unavailable for timber harvest because of Forest Plan land use designations or standards and guidelines. Other stands available for timber harvest were not proposed for timber harvest for this entry, as discussed in the Woodpecker Final EIS. The Selected Alternative does propose partial harvest within high value deer winter habitat on 33 acres in Unit 121 and on 20 acres in Unit 161a. This will be mitigated by using an uneven-aged management silvicultural system. Group selection with 75 percent retention has been prescribed. Timber will be harvested in two-acre patches with an estimated total of 13 acres to be harvested within the high

value winter habitat. The harvested patches may have beneficial effects by creating more forage adjacent to good winter cover.

8) Many comments were received about road access for non-timber harvest uses, the effects of road construction on other resources, and the lack of road maintenance funds. These comments were carefully considered. No classified roads designed for long term use will be constructed. Approximately 2.5 miles of temporary road will be constructed. Temporary road construction facilitates the harvest and transport of timber, and is safer and more economically feasible and less dependent on optimum weather conditions than the use of helicopters.

About ten miles of existing classified road will be closed and put into storage to reduce maintenance costs. New classified roads are not feasible at this time because of the court's injunction. All classified roads, whether to be left open or closed, are part of the National Forest road system that has been identified to be necessary for current and future management, including timber harvesting. The 2.5 miles of new temporary road plus one short (300-foot) unclassified road that is not necessary for Forest Service administration or public transportation needs will be decommissioned and returned to a more natural state. This will reduce the amount of road maintenance needed for the area as explained in the Mitkof Island Road Analysis.

9) The two primary recreational uses of the Woodpecker Project Area are deer hunting and recreational driving. This will remain the case under the Selected Alternative. My decision to upgrade the Woodpecker Road (Road 6245) and the Snake Ridge Road (Road 40006 plus the beginning of Road 6246) for all vehicle access (Maintenance Level 3) will also improve the driving experience and public access for hiking on Crystal Mountain. These improvements will also reduce the potential for conflicts between passenger vehicles and log truck traffic.

The existing road system provides access to many of the areas currently favored for unroaded activities such as hiking and hunting. Less than one percent of the acres that are currently in semi-primitive recreation settings will change to a roaded setting in the Woodpecker Project Area. This is within the direction for Forest Plan land use designations that allow development activities. About 9,550 acres within the project area, in addition to areas adjacent to or near the project area, will continue to provide opportunities for these semi-primitive recreation types of activities.

10) The Woodpecker Project Area does include a portion of the Crystal Inventoried Roadless Area. No proposed activities, including timber harvest or road construction, are within this area. There will not be any effects to its wilderness characteristics or its eligibility for inclusion in the National Wilderness Preservation System.

I have considered harvesting timber and constructing roads within the roadless area. This would delay the decision on this project until 45 days after the Notice of Availability for the Forest Plan Final SEIS is published in the Federal Register. The need to make timber volume available to meet market demand compels me to modify Alternative 6 to only include the proposed units and roads within the existing roaded area and to go forward with this decision at this time.

- 11) The availability of timber sales that can be cost-effective even in lower economic cycles is an important benefit to the Tongass National Forest timber sale program as a whole. The Selected Alternative will provide timber sale opportunities that will likely result in economically viable sales of varying quantities in most (but not all) market conditions.
- 12) All of the timber harvest units that are included in the Selected Alternative employ a method of partial harvest that will leave a percentage of the forest stand remaining after timber harvest. Uneven-aged harvest prescriptions that retain at least 50 percent of the trees per acre within stands are prescribed for 65 percent of the timber harvest acres. The rest of the units will have green tree retention of 20-30 percent, which will create two-aged stands with large legacy trees and stand structure. A 200-year rotation for even-aged management stands and the cutting cycles scheduled for uneven-aged management stands that were prescribed for this project area will help maintain the values of the area for deer, marten, and recreation. This extended rotation combined with tree retention will enable the harvested stands to advance beyond the stem exclusion phase and retain large trees longer, create more forage for deer under the canopy, benefit cavity nesters and marten, and retain a more natural-appearing landscape. The prescriptions chosen are based on consideration of many factors which are described in Chapter 3 of the Final EIS and on a unit-by-unit basis in Appendix 3 of this ROD.
- 13) Significant adverse effects to soils, water, or fisheries are not anticipated due to the locations of the temporary roads and units in the Selected Alternative.
- 14) One issue that was raised during the appeal of the August 2001 decision for this project was the perception that the Forest Service is targeting specific tree species for harvest, in particular, high value Alaska yellow-cedar and western redcedar. The area with the most western redcedar, along the Snake Ridge Road, was avoided for this entry with the exception of Unit 187, a potential small sale unit, specifically because of the western redcedar component and the high amount of personal use in this area. Some units along the end of Road 6245 were chosen because of the amount of Alaska yellow-cedar decline (dead and dying trees) present in the stands. Harvest of these mostly small diameter, dead and dying trees is economically feasible because of the existing road access, and will improve the future vigor of the stands. The percentage of Alaska yellow-cedar to be harvested in the other stands is consistent with the percentage of this species in the stands. Details are

- provided in the silvicultural prescriptions, which are filed in the project planning record.
- 15) Windthrow has been, and will continue to be, a natural disturbance in the project area. The mitigation measures listed on the activity cards in Appendix B of the Final EIS, and in Appendix 3 of this ROD, lead me to conclude that the unit locations, designs, and harvest prescriptions used in the Selected Alternative would reduce the possibility of catastrophic windthrow. Much of the area that is exposed to severe winds, such as the areas adjacent to Sumner Strait, will not be harvested in this entry because they are either located within small old-growth habitat reserves and are unavailable for timber harvest, or they have been previously harvested.
- 16) The Selected Alternative will mitigate the effects on marten habitat capability by leaving large trees and stand structure within all units with high value marten habitat according to the Forest Plan standards and guidelines.
- 17) The Selected Alternative retains wildlife travel corridors between the medium old-growth habitat reserves on Mitkof Island and adjacent areas with the placement of the small old-growth habitat reserves on the perimeter of the project area. The area within the 1,000-foot beach fringe that is not available for commercial timber harvest is in old-growth forest, which further provides connectivity. This is strengthened by the modification of the small old-growth habitat reserve adjacent to the Wrangell Narrows, as described in Appendix 1.
- 18) The Visual Quality Objectives adopted by the Forest Plan will be met or exceeded. The effects to scenery from the Visual Priority Travel Routes and Use Areas designated in Appendix F of the Forest Plan have been mitigated by unit selection, harvest prescriptions, unit design, and an extended timber harvest rotation. Timber harvest viewed from Sumner Strait, Wrangell Narrows, South Blind Slough, and Crystal Mountain will not be evident to the casual observer.
- 19) The Selected Alternative allows the use of existing log transfer facilities at Woodpecker Cove or Olson's landing. Barging of logs will be the standard method of transport. Rafting logs may be acceptable on a case-by-case basis depending on the amount of material and the possibility of adverse effects to resources, and will be determined at the time of the sale. Any log transfer facility use will be monitored to ensure that bark accumulation remains within thresholds specified in the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) permit obtained for the facility.

# Purpose and Need for the Project

The purpose and need for this project is to respond to goals and objectives identified by the Forest Plan and to move the project area toward the desired future condition for all resources. The Forest Plan identifies the following goals and objectives, which are applicable to the Woodpecker Project Area:

- Manage the timber resource for production of sawtimber and other wood products from suitable lands made available for timber harvest on an evenflow, long-term sustained yield basis and in an economically efficient manner.
- Seek to provide a timber supply sufficient to meet the annual market demand for the Tongass National Forest and the demand for the planning cycle.
- Provide Forest visitors with visually appealing scenery in areas along the Alaska Marine Highway, State highways, major forest roads, and from popular recreation places; recognize that in other areas where the landscape is altered by management activities, the activity may visually dominate the characteristic landscape.
- Provide a range of recreation opportunities consistent with public demand, emphasizing locally popular recreation places and those important to the tourism industry.
- Maintain a Forest-wide system of old-growth forest habitat to sustain oldgrowth associated species and resources and ensure that the reserve system meets the minimum size, spacing, and composition criteria identified in the Forest Plan.
- Provide a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska; support a wide range of natural resource employment opportunities within local communities.
- Develop and manage roads to support resource management activities and to provide access for forest users.

# Background

This project is a component of the overall timber sale program on the Tongass National Forest. Timber harvest is allowed by the Forest Plan in order to maintain a supply of timber from National Forest System lands for Southeast Alaska. The possibility of a timber harvest project in this area was identified in the Mitkof Landscape Design in 1995. Field reconnaissance further confirmed the viability of the project. Public scoping began with the Notice of Intent to prepare an EIS, published in the Federal Register on January 18, 2000. A Draft Environmental Impact Statement (Draft EIS) was distributed in August 2000 and the public comment period lasted until October 15, 2000.

The Woodpecker Project Area Draft EIS was issued prior to the date of the publication of the 2001 Roadless Area Conservation Rule in the Federal Register, so this project could have moved forward regardless of the status of the Rule. During the analysis for the Woodpecker Project Area, alternatives that would affect the Crystal Inventoried Roadless Area (#224) were considered.

On August 13, 2001, Tom Puchlerz, Forest Supervisor, Tongass National Forest, signed the Record of Decision (ROD) for the Woodpecker Project Area environmental analysis. The Notice of Availability for the Final EIS appeared in the *Federal Register* on September 21, 2001. One appeal was received. On December 20, 2001, the Regional Forester upheld the appellant and reversed the decision. He considered the needed corrective actions, which involved a discrepancy between two tables in the Final EIS, to be minor in nature. A review of the information in question was conducted and documented in a supplemental information report. The review confirmed that the underlying analysis and the conclusions in the 2001 Record of Decision remained sound.

As this project evolved through the steps in the NEPA process, several policy changes at the local and national levels affected its progress. In Sierra Club v. Lyons (J00-0009 CV (JKS)), the U.S. District Court, District of Alaska directed the Forest Service to prepare a supplemental environmental impact statement (SEIS) for the Forest Plan to evaluate and consider roadless areas within the Tongass for recommendation as potential wilderness areas. The process for this evaluation has begun and the Notice of Availability for the Forest Plan Draft SEIS was published in the Federal Register on May 17, 2002. Currently, the comments are being reviewed and the Final EIS is in progress. The Forest Plan Draft SEIS is based on a roadless area inventory updated from the 1996 inventory that was used for the Forest Plan. This decision for the Woodpecker Project Area does not affect any roadless area.

On April 26, 2002, the court enjoined the Forest Service from permitting timber harvest and road building in roadless areas until 45 days after publication of the Final SEIS to the 1997 Forest Plan. This Decision for the Woodpecker Project Area fully complies with the court's injunction since no timber harvest or road construction will occur within any roadless area as defined by the court.

#### **Public Involvement**

Public involvement has been instrumental in the identification and clarification of issues for this project. This has been helpful in the formulation of alternatives and has assisted me in making a more informed decision for the Woodpecker project. Public meetings, Federal Register notices, newspaper and radio news releases, open houses, the Tongass National Forest Schedule of Proposed Actions, and group and individual meetings were used to solicit input for this project.

**Scoping Letters:** In June 1999 and January 2000, scoping letters were sent to everyone that requested to be on the project mailing list.

**Notice of Intent:** A Notice of Intent to Prepare an Environmental Impact Statement was published in the Federal Register on January 18, 2000.

**Open Houses:** Multiple open houses and public meetings were held in Petersburg and Kake during the environmental analysis process in 1999, 2000, and 2001.

**Federally-recognized Tribal Governments:** The Petersburg Indian Association, the Organized Village of Kake, and the Wrangell Cooperative Association, which are the tribal governments within or near the Petersburg Ranger District, were consulted about any potential impacts or concerns during the development of alternatives and mitigations to this environmental impact statement. No significant concerns were raised.

**Public Comment received for the Draft EIS:** Availability of the Draft EIS was announced in the Federal Register on August 18, 2000, with a due date for public comments listed as October 15, 2000. This document was available at public libraries and Forest Service offices throughout Southeast Alaska and copies were mailed to everyone who requested them. The Forest Service responses to the letters received during the comment period were included in the Final EIS (Appendix C).

Subsistence Hearing: In accordance with Section 810 of the Alaska National Interest Lands Conservation Act, a subsistence hearing for the Woodpecker Project Area was held in Petersburg, Alaska, on October 4, 2000 at the Petersburg City Council Chambers. The date, time, and location of the subsistence hearing were publicized in the local media. An open house to describe the analysis process and to answer public questions was held in conjunction with the subsistence hearing. Public comments on the Draft EIS were also accepted at that time.

Analysis and Incorporation of Public Comments into the Final EIS: Public comments and subsistence comments were analyzed and incorporated into the Final EIS. For an analysis of public comment and the Forest Service response to public comment, see Appendix C of the Final EIS.

The Final EIS was filed with the Environmental Protection Agency and was made available for public review in September 2001.

Appeal and Resolution: The Woodpecker Project Area Final EIS Notice of Availability was placed in the Federal Register on September 21, 2001, after the Record of Decision was signed. A public notice, which started the 45-day appeal period, was placed in the *Juneau Empire*, the newspaper of record, on September 21, 2001. A group of four appellants (Forest Conservation Council, The Wilderness Society, Sierra Club, and Sitka Conservation Society) appealed the Record of

Decision on November 6, 2001. Only the Forest Conservation Council was found to have standing.

On December 20, 2001, the Regional Forester reversed the decision of the Forest Supervisor. The reason for the reversal was due to a question about the volume strata information presented in the Final EIS, and a subsequent concern that this may have affected the results of the deer model and the economic analysis, and whether a change in this information would have had bearing on the subsequent decision. A supplemental information report was prepared to document that the information used in the analysis leading to the decision was correct. The supplemental information report was mailed to the appellants and filed in the project planning record, where it is available on request. In June 2002, a project update letter was sent to everyone on the Woodpecker Project Area mailing list. The letter explained the results of the supplemental information report and included an invitation for anyone with questions about the project to participate in a public teleconference, which was held on June 18, 2002. The notes from this teleconference are located in the project planning record.

# **Coordination with Other Agencies**

From the time scoping was initiated, meetings and site visits with all interested federal and State of Alaska agencies have occurred. Issues were discussed and information was exchanged. Personnel from the Alaska Division of Governmental Coordination, Alaska Department of Fish and Game, Alaska Department of Environmental Conservation, and the U.S. Fish and Wildlife Service visited the project area during the environmental analysis.

Coordination meetings were held with the State of Alaska, including the Department of Fish and Game and the Department of Environmental Conservation. The Alaska Coastal Management Plan (ACMP) consistency review process was initiated upon publication of the Draft EIS through the offices of the Alaska Division of Governmental Coordination.

A Biological Assessment was prepared and sent to the National Marine Fisheries Service as part of the Section 7 consultation process under the Endangered Species Act. Consultation with the U.S. Fish and Wildlife Service concluded that no terrestrial threatened or endangered wildlife species are present in the project area.

Section 404 of the Clean Water Act (1977, as amended) requires a permit from the U.S. Army Corps of Engineers before filling or dredging in wetlands and tidelands. A permit has been obtained for the Woodpecker Cove Log Transfer Facility. Any 404 permits needed for roads or other uses will be obtained.

The Final EIS identifies the agencies that were informed of and/or involved in the planning process (see *List of Agencies, Organizations, and Individuals Sent Copies of this Statement* in Chapter 4 of the Final EIS).

# **How Significant Issues are Addressed**

In making my decision, I considered four major issues identified during the planning process. In the following summary, I disclose how the Selected Alternative addresses each of the significant issues. Tables ROD-1 and ROD-2 and Chapter 3 of the Final EIS supplement the following discussion and provide a comparison of the alternatives.

#### Issue 1: Deer Hunting

This issue centers around the popularity of the Woodpecker Project Area for deer hunting by the residents of Mitkof Island, and the concern that any timber harvest on the island will affect deer populations. Mitkof Island has traditionally been used by residents of Petersburg for subsistence deer hunting. The Woodpecker Project Area is the most heavily used part of Mitkof Island for deer hunting, due to the accessibility provided by the road system that connects to Petersburg, and the higher numbers of deer inhabiting the area. The number of deer is higher in the Woodpecker Project Area because of good forage and less snow accumulation found on the southfacing slopes near saltwater.

The Selected Alternative responds to this concern by maintaining the majority (99 percent) of the 3,370 acres of high value deer winter habitat within the project area. The harvest treatments for Units 161a and 121, which contain high value deer winter habitat, will retain 75 percent of the basal area of the stands. This will help maintain old-growth characteristics. All proposed timber harvest units will contain residual trees, and many areas will be managed with uneven-aged management on an extended harvest cycle, which should maintain higher deer winter habitat values over time.

#### Issue 2: Recreation

This issue addresses concerns for outdoor recreation opportunities including scenic values offered in and around the Woodpecker Project Area and the effects timber harvest may have on these opportunities.

The Selected Alternative maintains all existing recreation uses, both roaded and unroaded, within the Woodpecker Project Area. These uses include deer and moose hunting, berry-picking, sightseeing, camping, and freshwater fishing. The improvement and/or creation of eight dispersed camping/picnic sites and four parking turnouts are included in the Selected Alternative. These sites are accessible from existing roads.

Unit location and design were carefully considered in all alternatives to minimize impacts to scenery. All alternatives meet the adopted Forest Plan visual quality objectives (VQOs) as specified for the visual priority travel routes and use areas. Key viewsheds of these areas include Sumner Strait, Wrangell Narrows, South Blind

Slough, and Crystal Mountain. The use of silvicultural systems that use partial harvest treatments (two-aged management and uneven-aged management) will result in textural changes, but these changes are not expected to be noticeable to the casual observer. The Selected Alternative meets a higher level of VQOs than is specified for the visual priority travel routes and use areas, as described in the Forest Plan. Views from the existing ferry route were considered during unit selection and design, and during selection of harvest treatments.

In coming to this decision, I did consider the future South Mitkof Island ferry terminal that is proposed as part of the Alaska Marine Highway System. Although the final location is not definite at this time, locations currently under consideration are outside of the Woodpecker Project Area, and any proposed activities cannot be viewed from those locations. Studies have predicted that increased road use associated with this proposed ferry terminal would be negligible within the project area. Traffic on Road 6245, as well as on other roads on Mitkof Island, is monitored as part of the District's road management plan and will determine if road use increases.

#### Issue 3: Economics

The Selected Alternative provides an estimated 5.4 million board feet of timber that will contribute to the Forest Service's efforts to meet market demand in a manner consistent with the Tongass Land and Resource Management Plan and the standards and guidelines for all resources. Timber from this project is needed as a component of the timber sale schedule to provide timber to industry in an even flow over the tenyear planning cycle. The harvest economic analysis for the Selected Alternative resulted in a stumpage value of \$42.72 per hundred cubic feet (CCF) during high markets and \$24.73 per CCF during low markets. Additional analysis based on a new program called the NEPA Economic Analysis Tool (NEAT) was conducted for the alternatives presented in the Final EIS. The ranking of alternatives in the NEAT analysis was similar to the original analysis, although the values were lower. This was expected due to lower timber values in recent years, and because of the way that NEAT calculates volume. The documentation for both types of economic analyses is located in the project planning record.

Stumpage values actually received on timber sales are highly variable and are subject to market conditions at the time the sale is offered. The risk of changing market conditions is reflected in the bid for timber, which is calculated by the purchasers who understand and track that risk. The values will also differ depending on the amount of volume and unit locations of that particular sale. It is expected that some of the sales offered will be more economical and will generate more revenue than others due to the composition of the stand in terms of tree species and value of trees, haul length, and topography.

The timber harvest from the Woodpecker Project Area is scheduled to be sold in multiple sales. Some sales may be less financially appealing to prospective bidders

during low markets due to the necessity of temporary road construction, distance from the mill, or the timber size and species offered. However, units and logging systems will be configured to create the most economical sales possible. The shortage of timber available for purchase in Southeast Alaska may also make sales in this area more attractive.

The permitted outfitters and guides operating within the project area use the Woodpecker Cove Log Transfer Facility and the road system. Effects to this use will be minor due to the low level of use, based on information from the permits issued in the past few years. Outfitter-guide use is not expected to increase much beyond the few current permits. Recreation use by the public may be displaced in some areas during timber harvest operations. Recreation use may increase with the improvement of dispersed recreation sites and turnouts, and the improvements to the Woodpecker Road (Road 6245) and the Snake Ridge Road (Roads 6246/40006).

#### Issue 4: Crystal Inventoried Roadless Area

About two-thirds of the Crystal Inventoried Roadless Area (#224) is within the Woodpecker Project Area. The analysis for the Crystal Inventoried Roadless Area focused on the effects on the values of the unroaded characteristics on the ground, regardless of whether the area is specifically labeled as an inventoried roadless area. Several alternatives were developed that proposed timber harvest units and/or road construction within the Inventoried Roadless Area. None of these proposed timber harvest units or roads are included in the Selected Alternative since this decision is being made before the completion of the Forest Plan SEIS. This decision therefore complies with the court order that prohibits decisions approving timber harvest or road construction that would affect any roadless area prior to the completion of the Forest Plan SEIS. The entire Crystal Inventoried Roadless Area remains eligible for inclusion in the National Wilderness Preservation System.

## **Alternatives Considered in Detail**

The Draft EIS considered five alternatives in detail. I identified Alternative 2 as the Preferred Alternative at that time. After reviewing the public comments, the Preferred Alternative identified in the Draft EIS (Alternative 2) was modified to create Alternative 6. These changes to the preferred alternative were described in the Final EIS (August 2001).

Six alternatives were considered in detail in the Final EIS. Alternative 6 was chosen as the Selected Alternative for the 2001 Record of Decision. The 2001 Record of Decision was reversed by the Regional Forester on December 20, 2001. A review was conducted on the information in question, primarily the accuracy of the deer model analysis and the economic analysis. The review found that the analyses were correct and that the effects disclosed in the Final EIS are valid. This information was documented in a supplemental information report which is filed in the project planning record.

Each action alternative considered during the analysis process is consistent with the Tongass Land and Resource Management Plan. Refer to Chapter 2 of the Final EIS for a complete description of these alternatives. The alternatives developed in the Final EIS are:

**Alternative 1 -** This No-action Alternative represented the existing conditions in the Woodpecker Project Area, and served as the baseline against which the effects of the other alternatives were measured. This alternative proposed no timber harvest, road construction, or other activities within the Woodpecker Project Area. There would be no new resource outputs associated with this alternative. There would be no changes to scenery, recreation, subsistence, wildlife, or fisheries resources.

This alternative was not selected since environmental analysis showed that the desirable outputs of the purpose and need could be achieved with reasonable effects to the ecological and human environments. These effects are described in Chapter 3 of the Final EIS.

**Alternative 2** – This alternative was the Proposed Action presented during public scoping and identified as the Preferred Alternative for the Draft EIS. The theme of this alternative responded to the comments in favor of ground-based logging systems, small timber sale opportunities, and a new loop road connection.

In Alternative 2, an estimated 1,140 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume provided was estimated to be 12 million board feet, to be sold in multiple sales, including some sales of less than one million board feet. Approximately 4.8 miles of new classified road would be built to access the timber, of which about 1.8 miles would remain open after harvest. Approximately 6.1 miles of temporary road would also be built for timber access. All of the temporary roads would be decommissioned and allowed to return to a more natural state after harvest. About 10 miles of existing classified roads that would be needed for future management would be closed and put into storage to reduce resource damage. Improvement of fish passage through five existing stream crossings along Road 6245 would occur.

This alternative would also improve dispersed recreation opportunities, parking areas for hunting and recreation access, and watershed conditions through revegetation. This alternative would connect Roads 6282 and 6245 to form a loop road.

This alternative was not chosen in order to mitigate some of the effects to the deer winter habitat and landscape connectivity in the southeastern part of the project area (Watershed 2) by not harvesting units 128 and 129, and to mitigate possible scenery concerns for Unit 125 as viewed from Sumner Strait, a Visual Priority Travel Route.

Alternative 3 – This alternative was focused on providing only small timber sale opportunities and on the use of the existing road system with no construction of new classified roads designed for permanent use. It was designed to have the least impact on resources other than timber management within the project area.

An estimated 500 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume provided is estimated to be 6 million board feet to be sold in multiple sales. Existing roads and approximately four miles of new temporary road would be used to access the timber. All of the temporary roads would be decommissioned and allowed to return to a more natural state as soon as practicable after harvest is complete. About 10 miles of existing classified roads needed for future management would be closed and put into storage to reduce resource damage. Improvement of fish passage through five existing stream crossings along Road 6245 would occur. No other resource activities were incorporated with this alternative.

Several commenters identified this alternative as the one that should be chosen based on the environmental effects to resources other than timber supply. This alternative was not chosen because Alternative 6 (as modified) has less effects to deer winter habitat and landscape connectivity in the southeastern part of the project area (Watershed 2). Alternative 6 (as modified) also provides more economical small timber sale offerings.

Alternative 4 – This alternative was designed to respond to the request for helicopter logging while still providing small sale opportunities that could be harvested using ground-based systems.

This alternative would harvest approximately 16.8 million board feet of timber from approximately 1,850 acres. About 1,390 acres would be harvested by helicopter yarding and approximately 460 acres would be harvested by cable or shovel yarding. No new classified road would be constructed, but 3.1 miles of temporary road would be built within the project area. All of the temporary roads would be decommissioned and allowed to return to a more natural state after harvest. About 10 miles of existing classified roads needed for future management would be closed and put into storage to reduce resource damage. Improvement of fish passage through five existing stream crossings along Road 6245 would occur.

This alternative, as with Alternative 2, would also improve dispersed recreation opportunities, parking areas for hunting and recreation access, and watershed conditions through revegetation.

The primary reason that this alternative was not chosen was because of its emphasis on helicopter logging. Although helicopter logging can be economically viable, many of the proposed helicopter units could be roaded, which is preferable from an economic viewpoint and for long-term timber management of the area.

**Alternative 5** – The theme of this alternative was to provide more timber volume to seek to meet market demand by fully complying with, but not exceeding, Forest Plan standards and guidelines.

This alternative would harvest approximately 26.8 million board feet of timber using ground-based and helicopter yarding from approximately 1,730 acres. Most of the acres would have less than 50 percent of the trees remaining after harvest, resulting in even-aged or two-aged stands. This alternative would require construction of about 3.5 miles of classified roads and 4.1 miles of temporary road. About 1 mile of new classified road would remain open after harvest. All of the temporary roads would be decommissioned and allowed to return to a more natural state after harvest. About 10 miles of existing classified roads needed for future management would be closed and put into storage to reduce resource damage. Improvement of fish passage through five existing stream crossings along Road 6245 would occur.

This alternative would improve dispersed recreation opportunities to a slightly greater degree than Alternatives 2 and 4. Parking areas for hunting and recreation access would be improved, and watershed conditions would be improved through revegetation.

This alternative was not chosen since, although it would meet the standards of the Forest Plan, more protection for various resources was desirable because of the road connection to the city of Petersburg, and due to the nature of the human uses of the area and the surrounding waters.

**Alternative 6** – An estimated 1,300 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume provided was estimated to be 16 million board feet to be sold in multiple sales, including sales less than one million board feet.

Alternative 6 included both new road construction and helicopter logging from existing roads. Approximately 4.8 miles of new classified road would be built to access the timber. About 1.8 miles of this new classified road would remain open, and three miles would be placed in storage after harvest is completed. Temporary road segments, which total 3.8 miles, would be built for timber access. All of the temporary roads would be decommissioned after harvest. About 10 miles of existing road would be closed to motorized vehicles and placed in storage. A short 300-foot section of unclassified road that junctions with Road 40004 would be decommissioned and allowed to return to a more natural state with respect to vegetation and natural drainage patterns. Logs would be transported to an existing log transfer site or processing yard.

Several recreation sites were proposed for development. Improved or new road turnouts would be developed to provide additional safe parking areas. A segment of road would be constructed to create a loop by connecting the Woodpecker Road with another existing road to provide a new recreation opportunity. The Woodpecker

Road, the Snake Ridge Road and the access to the Snake Ridge Road would be improved for standard passenger vehicle use.

This alternative was the Selected Alternative for the 2001 Record of Decision. The modifications made to Alternative 6 as described earlier comprise the Selected Alternative for this decision and do fully comply with the court's order to avoid approving timber harvest or road construction within any roadless area until the completion of the Forest Plan SEIS.

#### **Comparison of Alternatives**

The following two tables display the proposed activities by alternative and the effects on the significant issues and other resources by alternative. For a complete discussion, refer to Chapter 3 of the Woodpecker Project Area Final EIS (August 2001).

<sup>&</sup>lt;sup>1</sup> All temporary road construction is within the existing roaded area and complies with the court's injunction.

Table ROD-2. Comparison of Alternatives by Effects							
Units of Measure	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 6, As Modified
Issue 1 - Deer Hunting							
Change in deer carrying capacity year 2003 <sup>1</sup>	%0	-1.5%	%6	-1.8%	-2.4%	-1.4%	-0.9%
Change in deer carrying capacity year 2043 <sup>2</sup>	-9.6%	-11.3%	-10.5%	-11.2%	-12.7%	-11.2%	-9.8%
Effect on historical levels of subsistence deer harvest?	yes	yes	yes	yes	yes	yes	yes
Effect on current levels of deer harvest?	ou	ou	ou	ou	no	no	no
Issue 2 – Recreation							
Acres changed from semi-primitive to roaded settings	0	1270	260	2280	2230	1365	260
% of area changed from semi-primitive to roaded settings	0	4%	<1%	8%	7%	4%	<1%
Issue 3 – Economics							
Amount of volume (mbf)	0	12,300	5,700	16,800	26,800	16,300	5,375
Amount of volume (ccf)	0	25,200	11,600	34,200	54,200	30,870	10,970
Appraised value (\$/ccf) (High Market values)	0	\$15.38	\$35.24	\$5.63	\$15.31	\$12.35	\$42.72
Appraised value (\$/ccf) (Low Market values)	0	-\$6.12	\$17.37	-\$20.24	-\$6.16	-\$10.44	\$24.73
Issue 4 – Crystal Inventoried Roadless Area (IRA) <sup>4</sup>							
Acres within the IRA affected by timber harvest	0	310 acres	0	830 acres	800 acres	370 acres	0
Miles of new classified road within the IRA	0	2.0 miles	0	0	1.4 miles	2.0 miles	0
Acres affected by timber harvest, including areas within 600 ft	0	850 acres	140	1,910 acres	1,860 acres	840	70 acres <sup>5</sup>
of harvest units			acres			acres	
Remaining size of IRA excluding acres within 600 ft of harvest	18,320	17,470	18,180	16,410	16,460	17,480	18,250
units	acres	acres	acres	acres	acres	acres	acres
Other Environmental Considerations							
Biodiversity							
Acres of old-growth habitat maintained	14,250	13,820	14,020	13,920	13,170	13,850	14,090
Effects on TES Species	None	None	None	None	None	None	None
Other Wildlife							
Percent change in marten carrying capacity by year 2003	%0	-1.8%	-1.1%	-2.4%	-3.3%	-1.9%	-1.1%
Percent change in marten carrying capacity by year 2043 <sup>2</sup>	-1.7%	-3.2%	-2.5%	-2.9%	-4.7%	-3.1%	-2.5%
Water Quality							
Number of new Class I stream crossings	0	0	0	0	0	0	0
Number of new Class II stream crossings	0	2	1	1	2	2	_
Number of new Class III stream crossings	0	13	1	1	11	13	
Number of new Class IV stream crossings	0	2	0	0	2	2	1

Table ROD-2. Comparison of Alternatives by Effects (cont'd)							
Units of Measure	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 6, As Modified
Wetlands		8					
Miles of new classified road on wetlands	0	1.1	0	0	1.1	1.1	0
Effects on Subsistence other than deer	None						
Effects on Heritage Resources	None						
Effects on Land Status	None						
Effects on Karst	None						
Transportation							
Miles of new classified roads	0	4.8	0	0	3.5	4.8	0
Miles of new classified roads left open	0	1.8	0	0	1.0	1.8	0
Miles of temporary roads (decommissioned after harvest)	0	6.1	3.9	3.1	4.1	3.8	2.5
Road density for Mitkof Island (mi/mi²) <sup>6</sup>	89.0	69.0	89.0	0.68	89.0	69.0	89.0
Effects on Wild, Scenic and Recreational Rivers	None						

<sup>&</sup>lt;sup>1</sup> For the purposes of alternative comparison and analysis for the deer and marten models only, it was assumed that all harvest would occur by 2003.

<sup>&</sup>lt;sup>2</sup> At year 2043, the canopies of the existing second-growth stands will close, reducing forage. This scenario does not account for the effects of future thinning, which would increase forage.

<sup>&</sup>lt;sup>3</sup> For total acreages in each Recreation Opportunity Spectrum class for each alternative, refer to Table 3-4 in Chapter 3 of the Final EIS.

<sup>&</sup>lt;sup>4</sup> 1996 Roadless Area Inventory, adjusted for project analysis (see Final EIS, Chapter 3, page 3-71).

<sup>&</sup>lt;sup>5</sup> Although there are approximately 70 acres within the Crystal Inventoried Roadless Area that are within 600 feet of a proposed timber harvest unit, all of the proposed timber harvest will occur outside any roadless area, within 1200 feet of an existing road, in compliance with the court's injunction.

<sup>&</sup>lt;sup>6</sup> Road density is determined after the temporary roads for this project are constructed and decommissioned.

# **Environmentally Preferred Alternative**

Based on a comparison of the alternatives and the discussion contained within Chapter 3 of the Final EIS, Alternative 1, the No-Action Alternative, would cause the least environmental disturbance and is therefore the environmentally preferred alternative of all the alternatives studied in detail. Of the action alternatives, Alternative 3 and Alternative 6 as modified (the Selected Alternative) are very similar in terms of effects. Either one of these could be considered the environmentally preferred alternative, since they have the fewest acres of timber harvest.

## **Alternatives Not Considered in Detail**

In addition to the alternatives described above, several other alternatives were considered during the analysis but eliminated from detailed study. These alternatives were discussed during the development of the alternatives. Some of them were suggested by comments received through public scoping. Some of the aspects of the ideas were modified and used in conjunction with the alternatives considered in detail. Other alternatives would not meet Forest Plan direction for this project. A summary of these, and the reasons they were not analyzed in detail, can be found in Chapter 2 of the Final EIS. Further information is available in the project planning record.

# **Planning Record**

The planning record for this project includes the Draft EIS, Final EIS, 2001 Record of Decision, the appeal and appeal decision letter, the Supplemental Information Report, Forest Plan, material incorporated by reference, and all materials produced during the environmental analysis of this project. The planning record is available for review at the Petersburg Ranger District.

# Mitigation

Mitigation measures are prescribed to avoid, reduce, minimize or eliminate the adverse effects of proposed actions. These measures were applied in the development of the project alternatives, including the Selected Alternative, and in the design of the harvest units and road corridors. The *Mitigation Measures* section of Chapter 2 and Appendix B of the Final EIS discusses mitigation measures for all alternatives.

Mitigation measures applicable to the Selected Alternative include measures contained in the Standards and Guidelines of the Forest Plan, and applicable Forest Service Manuals and Handbooks. Appendix 3 describes site-specific mitigation measures for the Selected Alternative. These measures are adopted as part of this decision and will be implemented. Measures to avoid or minimize adverse environmental effects of the project have been incorporated into the Selected Alternative.

# Monitoring

A monitoring program is the process by which the Forest Service can evaluate whether the resource management objectives of the final environmental documents have been implemented as specified and whether the steps identified for mitigating the environmental effects were effective. Project-level monitoring is specified in Chapter 2 of the Final EIS. These monitoring items are part of this decision and will be implemented.

Each monitoring item describes the objective of the monitoring, what will be done, how it will be done, and the approximate cost of the monitoring. Monitoring activities may reveal results that deviate from planned effects, in which case corrective actions are prescribed. The Petersburg District Ranger is responsible for ensuring that project implementation, mitigation, monitoring, and enforcement are accomplished as specified in the Final EIS.

# Findings Required By Law

#### **National Forest Management Act**

The National Forest Management Act (NFMA) requires specific determinations in this Record of Decision: consistency with the existing Forest Plan, a determination of clearcutting as the optimal method of harvesting, if used, and specific authorizations to create openings over 100 acres in size. Specific information and rationale used to develop unit prescriptions are summarized in this Record of Decision and are included in the unit card narratives in Appendix 3. More information is available in Chapter 3 of the Final EIS, and in the project planning record.

- Tongass Land and Resource Management Plan This decision is consistent with the Tongass Land and Resource Management Plan. I have reviewed the management direction, standards and guidelines, and the schedule of activities for the project area included in the Selected Alternative, and find the Selected Alternative to be consistent with these elements. The activities authorized in this decision are consistent with the standards and guidelines and management prescriptions of the Forest Plan.
- Clearcutting as the Optimal Method of Harvesting In order to comply with Forest Plan Standards and Guidelines and to mitigate effects on wildlife and scenery, no units in the Selected Alternative are proposed for traditional clearcutting where all trees would be removed.
- Harvest Openings Over 100 Acres in Size There are no harvest openings over 100 acres proposed for this project.

#### Tongass Timber Reform Act (TTRA)

Harvest units were designed and located to maintain a minimum 100-foot buffer zone for all Class I streams and Class II streams that flow directly into Class I streams as required

in Section 103 of the TTRA. The actual widths of these buffer strips will often be greater than the 100-foot minimum. The design and implementation direction for the Selected Alternative incorporates Best Management Practices (BMPs) for the protection of all streams.

#### **Endangered Species Act**

Actions authorized in the Selected Alternative are not anticipated to have a direct, indirect, or cumulative effect on any threatened or endangered species in the Woodpecker Project Area. The National Marine Fisheries Service has concurred that the actions described within the proposed project are not likely to adversely affect threatened and endangered species. A complete biological assessment is included in the planning record for this project. Consultation was done with the U.S. Fish and Wildlife Service. No terrestrial threatened or endangered species are known to occur in the Woodpecker Project Area. I have determined that this action will not have any adverse impacts on any threatened or endangered species.

#### **Bald Eagle Protection Act**

A Memorandum of Understanding (MOU) between the Forest Service and the U.S. Fish and Wildlife Service to facilitate compliance with the Bald Eagle Protection Act restricts management activities within 330 feet of an eagle nest site. The Selected Alternative is not anticipated to have a significant direct, indirect, or cumulative effect on any bald eagle habitat. No proposed activities are within 330 feet of a known bald eagle nest. If any nests are discovered that would be affected by any activity, the MOU and Forest Plan guidelines will be followed.

#### Clean Water Act

The design of harvest units for the Selected Alternative were guided by standards, guidelines and direction contained in the Forest Plan and applicable Forest Service manuals and handbooks. The Clean Water Act of 1972 (as amended in 1977 and 1987) was intended to protect and improve the quality of water resources and maintain their beneficial uses. Section 313 of the Clean Water Act and Executive Order 12088 of 1987 address Federal agency compliance and consistency with water pollution control mandates. Agencies must be consistent with requirements that apply to "any governmental entity" or private person.

In 1997, the State of Alaska approved the BMPs in the Forest Service's Soil and Water Conservation Handbook (FSH 25098.22, October 1996) as consistent with the Alaska Forest Resources and Practices Regulations. The site-specific application of BMPs, with a monitoring and feedback mechanism, is the approved strategy for controlling nonpoint source pollution as defined by Alaska's Nonpoint Source Pollution Control Strategy (October 2000). The Unit Cards and Road Cards in Appendix 3 contain details on specific practices prescribed to prevent or reduce non-point sediment sources.

#### **Essential Fish Habitat**

The Selected Alternative is unlikely to adversely affect essential fish habitat. The following measures will reduce the chance of any effects:

- 1. Partial harvest will occur in all units in the Selected Alternative. This will lessen the impact on soil resources.
- 2. Proposed temporary roads do not cross Class I streams. No classified roads designed for long term use are proposed.
- 3. All harvest units adjacent to Class I streams employ no-harvest buffers at least 100 feet wide and generally wider according to Forest Plan standards and guidelines. This will protect anadromous fish streams from bank erosion and stream temperature increases.
- 4. All harvest units adjacent to Class II and Class III streams will employ no-harvest buffers and windfirm buffers according to Forest Plan standards and guidelines. This will minimize the amount of sediment that flows downstream to anadromous fish streams.
- 5. Fish passage will be improved at five locations along Road 6245.
- 6. The Woodpecker Cove LTF complies with NPDES requirements. No bark accumulation was observed during the most recent dive survey of the area (September 2000) and this facility has not been used for log transfer since then.

The Best Management Practices described in the Unit Cards provide assurance of water quality and aquatic habitat protection for all freshwater streams and marine waters affected by the project. The Draft EIS was provided to the National Marine Fisheries Service for comment and the agency was contacted. Based on the Memorandum of Understanding between the Forest Service and the National Marine Fisheries Service, the essential fish habitat consultation has been completed.

#### **National Historic Preservation Act**

Heritage resource surveys of various intensities were conducted in the project area, following protocols approved by the State Historic Preservation Officer. The Section 106 review for all proposed timber harvest units and roads has been completed. The State Historic Preservation Officer has been consulted, and the project complies with the provisions of 36 CFR, Part 800. No known heritage resources are in the area of potential effects. Forest Service timber sale contracts contain enforceable measures for protecting any undiscovered heritage resource that might be encountered during sale operations. I have determined, consistent with Forest Service direction on heritage resources, that no sites eligible for listing on the National Register of Historic places would be affected.

#### Federal Cave Resource Protection Act of 1988

No cave resources have been documented within the project area and no caves were discovered during field work done for this analysis. The Selected Alternative will not

have a direct, indirect, or cumulative effect on any significant cave or karst resources in the Woodpecker Project Area.

#### **ANILCA Section 810, Subsistence Evaluation and Findings**

A subsistence evaluation was conducted for the alternatives considered in detail, in accordance with ANILCA Section 810. An open house followed by an ANILCA 810 hearing was conducted in Petersburg, Alaska, during the comment period for the Woodpecker Project Area Draft EIS.

The review of the subsistence hearing testimony, comments from the public, and the analysis conducted for the Final EIS indicate that there is no significant possibility of a significant restriction on subsistence uses of wildlife (other than Sitka black-tailed deer), salmon, other finfish, shellfish, marine mammals, plant foods such as berries, and personal use timber resources as a result of this project. (For more information, see the Subsistence section of Chapter 3 of the Final EIS.) Analysis does indicate that there may be a significant possibility of a significant restriction of subsistence use of deer for all of the alternatives including the no-action alternative. However, implementation of the Selected Alternative by itself does not present a significant possibility of a significant restriction to the current level of subsistence use of deer. The effects solely from the Selected Alternative on the subsistence use of deer are minimal, with a reduction of less than one percent in deer habitat capability. Rather, there may be a significant possibility of a significant restriction when the Selected Alternative together with other past, present, and reasonably foreseeable actions, are considered in a cumulative manner. This possibility exists regardless of which alternative is implemented, including the No-Action Alternative presented in the Final EIS. (For more information, see the Issue 1, Deer Hunting section in Chapter 3 of the Final EIS.) This restriction, if it occurs, would be a result of: (1) a cumulative decrease in habitat capability when existing second-growth forest stands mature and shade out forage that could decrease the abundance or distribution of deer, (2) a very severe winter, which does occur periodically, causing high deer mortality as happened in the late 1960's, (3) an increase of predator populations, especially wolves, due to less aggressive predator harvests, and (4) anticipated human population growth with its associated increase in subsistence hunter demand when compared to the habitat capability to produce deer.

#### **Subsistence Determinations**

Section 810 (a)(3) of ANILCA requires that when a use, occupancy, or disposition of public lands may result in a significant possibility of a significant restriction, a determination must be made whether (1) such a restriction is necessary, consistent with sound management principles for the utilization of public lands, (2) the proposed activity involves the minimum amount of public lands necessary to accomplish the purposes of the use, and (3) reasonable steps will be taken to minimize adverse impacts on subsistence uses and resources resulting from the actions.

Necessary, Consistent with Sound Management of Public Land – The Selected Alternative has been examined to determine whether the associated potential restriction to subsistence use is necessary, consistent with the sound management of public lands. In

this regard, the laws and direction that have been considered include: (1) the National Forest Management Act of 1976 and its implementing regulations; (2) the Alaska National Interest Lands Conservation Act (ANILCA) of 1980; (3) the Tongass Land and Resource Management Plan (1997, as amended); (4) the Tongass Timber Reform Act (TTRA) of 1990; (5) the Alaska State Forest Practices Act; (6) the Alaska Coastal Management Program, (7) the Multiple-Use Sustained Yield Act (1960), and (8) USDA Forest Service Subsistence Management and Use Handbook (FSH 2609.25).

Management activities on National Forest System lands must provide for the multiple use and sustained yield of renewable forest resources in accordance with the Multiple-Use Sustained Yield Act of 1960. Multiple use is defined as "the management of all the various renewable surface resources of the National Forest System so that they are utilized in the combination that will best meet the needs of the American people (36 CFR 219.3)". The alternatives presented in the Final EIS represent different ways of managing the resources of the Woodpecker Project Area in combinations that are intended to meet these needs. Each provides a different mix of resource uses and opportunities, and each has some potential to affect subsistence uses. Given the framework and emphasis of the Selected Alternative, the possibility of a restriction is necessary, consistent with sound management of public land.

ANILCA Title VIII places an emphasis on the maintenance of subsistence resources and lifestyles. However, the Act also provides for adequate opportunity for satisfaction of the economic and social needs of the State of Alaska and its people and recognizes that public lands are necessary and appropriate for more intensive uses. The Act also required the Forest Service to make available 4.5 billion board feet per decade from the Tongass National Forest. The TTRA removed the 4.5 billion board foot requirement, but directs the Forest Service to seek to meet market demand for timber to the extent consistent with providing for the multiple use and sustained yield of all renewable forest resources, and subject to applicable law.

As described in Appendix A of the Final EIS, the Selected Alternative is necessary as a component of the timber management program designed to implement the Forest Plan and to meet TTRA direction. There is currently a market demand for timber, a limited timber supply from other sources, and an under-utilized mill capacity in the region. The volume from the Selected Alternative is a component of the 10-year timber sale schedule which attempts to provide timber to industry in an even-flow over the planning cycle. The timber volume for this project was also designed to be sold in multiple small sales over a period of several years in order to offer sales for smaller timber operators in the area. The Selected Alternative can help meet these Forest Plan and TTRA objectives, while also providing reasonable protection measures for forest resources, especially for subsistence. It is consistent with the Forest Plan, laws, regulations, policies, public needs, and the capabilities of the land.

Based on a review of the subsistence hearing testimony and the analysis conducted in the Final EIS, it is apparent that all of the alternatives may involve some potential impact to subsistence deer use in the future. Due to the cumulative effects of past, present and

reasonably foreseeable actions, there is no alternative, including the no-action alternative, that would meet Forest Plan and TTRA objectives and yet completely avoid a significant possibility of a subsistence restriction somewhere in the Tongass National Forest. From the analysis of the information presented in the Final EIS and this ROD, and the guidance provided by the documents and laws listed above, I have determined that the actions involved in the implementation of the Selected Alternative are necessary, consistent with sound management of public lands and strike the best balance between meeting the needs of the public and protecting the forest resources.

Amount of Land Necessary to Accomplish the Purpose of the Proposed Action – The amount of public land involved to implement the Selected Alternative (considering sound multiple-use management of public lands) is the minimum necessary to accomplish the purpose of the Selected Alternative. Most of the Tongass National Forest is used by one or more rural communities for subsistence deer hunting purposes. It is not possible to reduce timber harvest in one area and concentrate it in another locale without impacting one or more rural communities' important subsistence use areas. In addition, harvestable populations of subsistence wildlife species could not be maintained in a natural distribution across the forest if harvest were concentrated in specific areas. A well-distributed population of species is required by the National Forest Management Act and is one of the objectives of the Forest Plan.

The Forest Plan allocated many of the important subsistence use areas to land use designations that do not allow timber harvest. Other areas that are important to subsistence use were protected through standards and guidelines, such as the 1,000-foot beach and estuary buffers and the stream-side Riparian Management Areas that do not allow timber harvest. Of the 28,440 acres of National Forest System lands within the Woodpecker Project Area, the Forest Plan allocated 17 percent of the area to the non-development land use designation of Old-growth Habitat, which does not allow timber harvest, and 83 percent to development land use designations such as Timber Production, Modified Landscape, and Scenic Viewshed. These designations provide for resource use and development for commodity resources such as timber.

The minimum amount of land and roading was used to resolve resource concerns while meeting the purpose and need for this project in a practical and efficient manner. The Selected Alternative harvests timber from only one percent of the total Woodpecker Project Area.

Partial harvest treatments using the two-aged and uneven-aged silvicultural systems are prescribed for all units. Because a partial harvest unit removes less timber than a traditional clearcutting unit of the same size, the effects for many resources will be less than the effects from clearcutting. Resources are protected to the maximum extent practicable and the Selected Alternative meets or exceeds the Forest Plan standards and guidelines.

Past harvest practices of clearcutting in the Woodpecker Project Area will also affect the future deer habitat capability. By the year 2043, a decrease in deer habitat capability for

the no-action alternative is predicted to be 9.6 percent when compared to conditions before large-scale timber harvesting occurred in the project area. This decline will occur when the existing second-growth stands reach complete canopy closure, which will result in a reduction of forage for deer. The Selected Alternative will result in an additional decrease of 0.2 percent by year 2043 for a cumulative decrease of 9.8 percent. The use of partial harvest, as designed for the Woodpecker Project, will not create the large openings that past clearcutting did, and future changes in habitat capability will not be as great as with the timber harvest that has already occurred

The greatest risk to meeting subsistence demand in the future is primarily related to the anticipated human population growth and its associated increase in subsistence hunter demand when compared to the habitat capability to produce deer. This anticipated population growth will happen regardless of this proposed project.

Management activities cannot completely avoid all subsistence areas, which are broadly distributed across the Forest. Other areas that could be harvested may be limited by additional resource concerns such as soil and water protection, high-value wildlife habitat, economics, scenic quality, or unfeasible unit and road design. The impact of viable timber harvest projects usually includes the alteration of old-growth habitat which reduces habitat capability for old-growth associated species.

The Woodpecker Project involves the minimum amount of public land necessary and strikes a balance between meeting the needs of the public and protecting forest resources. Choosing any alternative (including the no-action alternative) other than the Selected Alternative or locating harvest in another location on Mitkof Island would not avoid or substantially lessen the risk to subsistence use in the future.

Resources — The Forest Plan took considerable steps to minimize adverse impacts to subsistence uses and resources. Forest Plan standards and guidelines protect important deer winter habitat. Other reasonable steps taken to minimize adverse impacts to subsistence resources include: the overall Forest Plan land use designation strategy, the old-growth habitat reserve strategy, travel and access management planning, Forest Plan standards and guidelines for stream, beach and estuary buffers, and the use of silvicultural systems that maintain components of overstory tree canopy, such as two-aged and unevenaged management.

In 1995, during the analysis for the Mitkof Landscape Design, small habitat conservation areas that encompassed important wildlife habitat were recommended for Mitkof Island. These were later incorporated into the Forest Plan (1997, as amended) as small old-growth habitat reserves. Much deliberation occurred during the Mitkof Landscape Design analysis and the environmental analysis for the Woodpecker Project Area regarding the protection of high value deer habitat on Mitkof Island and especially within this project area. The deer habitat is relatively poor on Mitkof Island compared to many other areas of the Tongass National Forest. Most of the higher value deer winter habitat on Mitkof Island is located within the Woodpecker Project Area. Because of this, the small old-

growth habitat reserves within this area were designed to include much of the high value deer winter habitat. See the Biodiversity section in the Chapter 3 of the Final EIS.

The Selected Alternative will not construct any new miles of classified roads. All temporary roads will be closed after timber harvest. The Selected Alternative will maintain the current road density of 0.68 miles per square mile for Mitkof Island. Therefore, the current level of access to subsistence species will be maintained. In addition, drainage structures will be removed from almost ten miles of existing roads and the roads will be maintained in a storage condition. For more information, see the Transportation Section in Chapter 3 of the Final EIS.

Most of the high value deer winter habitat that is available to be harvested is not proposed for timber harvest as part of the Woodpecker Project. Two of the selected units, Units 121 and 161a, are within high value deer winter habitat. This will be mitigated by using an uneven-aged management silvicultural system. Group selection with 75 percent retention has been prescribed. Timber will be harvested in two-acre patches with an estimated total of 13 acres to be harvested within the high value winter habitat. After harvest, 75 percent of the stand will remain to mitigate the effects of the timber harvest by maintaining areas of old-growth forest and a diversity of age classes of trees. The other units contain deer winter habitat of varying values. The effects on this habitat will be mitigated by the use of varying amounts of tree retention. For more information, see the Issue 1, Deer Hunting section of Chapter 3 in the Final EIS.

The Selected Alternative reflects a reasonable balance between the projected need for timber from the project area to help meet the Forest Plan, ANILCA, and TTRA timber-related objectives, and the continued protection of subsistence uses and resources. Impacts on subsistence use have been minimized through the selection and design of the individual harvest units and road management objectives. I have determined that reasonable measures to minimize impacts on subsistence have been adopted to the maximum extent practicable while still meeting the purpose and need for this project.

#### **Coastal Zone Management Act**

The Coastal Zone Management Act of 1972 (CZMA), while specifically excluding Federal lands from the coastal zone, requires that a Federal agency's activities be consistent with the enforceable standards of a State's coastal management program to the maximum extent practicable when the agency's activities affect the coastal zone.

The enforceable standards for timber harvest activities are found in the State Forest Practices Act. The standards and guidelines for timber harvest activities in the Woodpecker Project Area meet or exceed the standards in the State Forest Practices Act.

I have determined that the proposed activities in the Selected Alternative are consistent with the Alaska Coastal Management Program to the maximum extent practicable. The State of Alaska has concurred with my determination.

#### Consumers, Civil Rights, Minorities and Women

No negative impacts to the civil rights of individuals or groups, including minorities and women, are anticipated to be associated with this project. Additional information can be found in the Forest Plan Revision Final EIS Chapter 3 and Appendix H, as well as Chapter 3 of the Woodpecker Project Area Final EIS.

#### **Executive Orders**

**EO 11988 (Floodplains)** - Executive Order 11988 directs Federal agencies to take action to avoid, to the extent practicable, the long and short-term adverse impacts associated with the occupancy and modification of floodplains. The Selected Alternative does not modify any floodplains. No roads will be constructed across floodplains, and timber harvest will not occur on any floodplain.

**EO 11990 (Wetlands)** - Executive Order 11990 requires Federal agencies to avoid, to the extent practicable, the long and short-term adverse impacts associated with the destruction or modification of wetlands. The Selected Alternative avoids most identified wetlands; however, many small wetlands or muskegs occur as inclusions within forested areas. These areas may be altered by timber harvest or temporary road construction. Techniques and practices required by the Forest Service serve to maintain the wetland attributes, including values and functions. It is estimated there will be only minimal loss of wetlands with any of the alternatives. Soil moisture regimes and vegetation on some wetlands may be altered in some harvest units; however, these altered acres would still be classified as wetlands and would still function as wetlands in the ecosystem.

Because wetlands are found throughout the project area, it is not feasible to avoid all wetland areas. However, there are no development activities planned on the more biologically significant wetlands.

**EO 12898 (Environmental Justice)** - Executive Order 12898 directs Federal agencies to identify and address the issue of environmental justice, i.e. adverse human health and environmental effects of agency programs that disproportionately impact minority and low-income populations. The order specifically directs agencies to consider patterns of subsistence hunting and fishing when an agency action may affect fish or wildlife. I have determined that implementation of the Selected Alternative will not cause adverse health or environmental effects that disproportionately impact minority and low-income populations.

**EO 12962** (Recreational Fisheries) - Executive Order 12962 directs Federal agencies to conserve, restore and enhance aquatic systems to provide for increased recreational fishing opportunities nationwide. Section 1 of the Executive Order is most pertinent to the proposed activity. Section 1 directs Federal agencies to evaluate effects on aquatic ecosystems and recreational fisheries, develop and encourage partnerships, promote restoration, provide access, and promote awareness of opportunities for recreational fishery resources.

The effects of this project have been evaluated throughout the Final EIS, including effects to freshwater and marine resources. Partnerships continue to be used to leverage Federal project funds to address water quality concerns in some areas of the Tongass National Forest, although none have been proposed for recreational fisheries in conjunction with this project.

The Selected Alternative attempts to minimize the effects on aquatic systems through project design, application of Forest Plan Standards and Guidelines, BMPs and site-specific mitigation measures. Recreational fishing opportunities will remain essentially the same because aquatic habitats are protected through implementation of BMPs and riparian buffers, and may result in slightly increased opportunities. I have determined that there will be no significant effect to recreational fisheries.

### **Federal and State Permits**

Federal and State permits necessary to implement the authorized activities are listed in Chapter 1 of the Final EIS.

# **Implementation Process**

Implementation of any part of this decision may occur no sooner than 50 days following publication of the legal notice of the decision in the *Juneau Empire*, published in Juneau, Alaska, if no appeal is received.

This project will be implemented in accordance with Forest Service Manual and Handbook direction for Timber Sale Project Implementation in FSM 2431.3 and FSH 2409.24. This direction provides a bridge between project planning and implementation and will ensure execution of the actions, environmental standards, and mitigation approved by this decision, and compliance with TTRA and other laws. All applicable Best Management Practices (BMPs) will be applied to the Selected Alternative.

Implementation of all activities authorized by this Record of Decision will be monitored to ensure that they are carried out as planned and described in the Final EIS.

Appendix 3 of this ROD contains the Selected Alternative activity cards, including harvest unit design cards, road cards, and recreation projects. These cards are an integral part of this decision because they document the specific resource concerns, management objectives, and mitigation measures to govern the layout of the harvest units. These cards will be used during the implementation process to assure that all aspects of the project are implemented within applicable standards and guidelines and that resource impacts will not be greater than those described in the Final EIS. Similar cards will be used to document any changes to the planned layout as the actual layout and harvest of the units occurs with project implementation.

The implementation record for this project will display:

- 1. Each harvest unit as actually implemented,
- 2. Any proposed changes to the design, location, standards and guidelines, or other mitigation measures for the project, and
- 3. Authorization of the proposed changes.

# **Procedure for Changes During Implementation**

Proposed changes to the authorized project actions will be subject to the requirements of the National Environmental Policy Act (NEPA), the National Forest Management Act of 1976 (NFMA), Section 810 of the Alaska National Interest Lands Conservation Act, the Tongass Timber Reform Act (TTRA), the Coastal Zone Management Act (CZMA), and other laws concerning such changes.

In determining whether and what kind of NEPA action is required, the Forest Supervisor will consider the criteria set forth in the Code of Federal Regulations (40 CFR 1502.9(c)), and FSH 1909.15, Sec. 18 for determining whether to supplement an existing Environmental Impact Statement (EIS). In particular, the Forest Supervisor will determine whether the proposed change is a substantial change to the Selected Alternative as planned and already approved, and whether the change is relevant to environmental concerns. Connected or interrelated proposed changes regarding particular areas of specific activities will be considered together in making this determination. The cumulative impacts of these changes will also be considered.

The intent of field verification is to confirm inventory data and to determine the feasibility and general design and location of a unit or road, not to locate final boundaries or road locations. Minor changes are expected during implementation to better meet on-site resource management and protection objectives. Minor adjustments to unit boundaries are also likely during final layout for the purpose of improving logging system efficiency. This will usually entail adjusting the boundary to coincide with logical logging setting boundaries. Many of these minor changes will not present sufficient potential impacts to require any specific documentation or other action to comply with applicable laws. Some minor changes may still require appropriate analysis and documentation to comply with FSH 1909.15, sec. 18.

# Right to Appeal

This decision is subject to administrative appeal. Organizations or members of the general public may appeal this decision according to Title 36 Code of Federal Regulations (CFR) part 215. The appeal must be filed within 45 days of the date that legal notification of this decision is published in the *Juneau Empire*, the official newspaper of record. The written Notice of Appeal must be filed with:

Regional Forester, Alaska Region U.S. Department of Agriculture, Forest Service P.O. Box 21628 Juneau, AK 99802-1628

It is the responsibility of those who appeal a decision to provide the Regional Forester with sufficient written evidence and rationale to show why the decision by the Forest Supervisor should be changed or reversed. This written Notice of Appeal must:

- 1. State that the document is a Notice of Appeal filed pursuant to 36 CFR Part 215;
- 2. List the name, address, and, if possible, the telephone number of the appellant;
- 3. Identify the decision document by title and subject, date of the decision, and name and title of the Responsible Official;
- 4. Identify the specific change(s) in the decision that the appellant seeks or portion of the decision to which the appellant objects;
- 5. State how the Responsible Official's decision fails to consider comments previously provided, either before or during the comment period specified in 36 CFR 215.6 and, if applicable, how the appellant believes the decision violates law, regulation or policy.

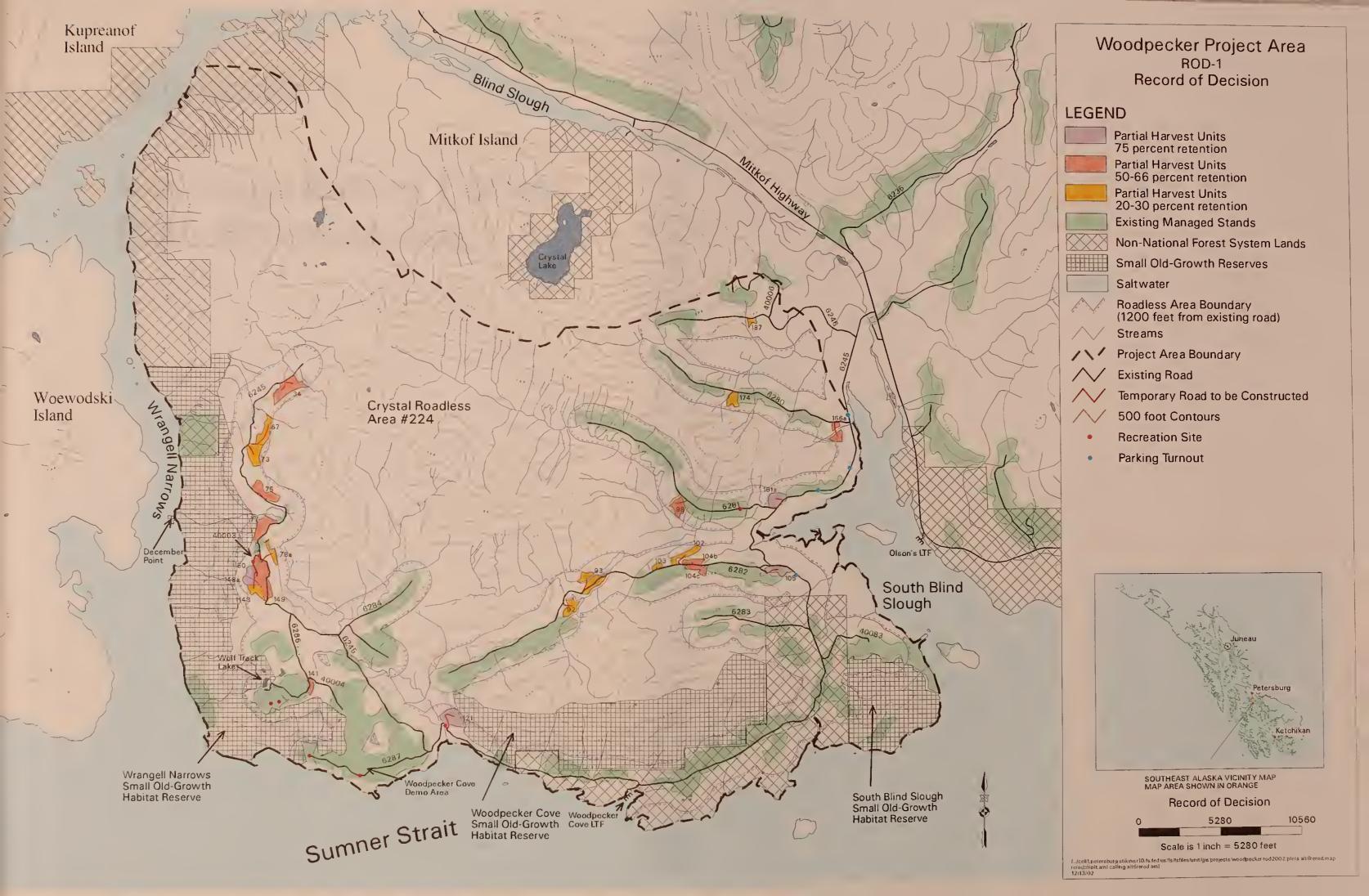
For additional information concerning this decision, contact Patricia A. Grantham, District Ranger, Petersburg Ranger District, P.O. Box 1328, Petersburg, AK 99833, or call (907) 772-3871.

THOMAS PUCHLERZ

Forest Supervisor

Date

12-24-02





# **Appendix 1**

# Non-significant Forest Plan Amendment



# Appendix 1 Non-significant Forest Plan Amendment

# Small Old-growth Habitat Reserve Adjustments in VCUs 448 and 452

Based on the project level analysis as described in the Old-growth Habitat Management Prescription and Appendix K of the Tongass National Forest Land and Resource Management Plan (1997), three small old-growth habitat reserves located in VCUs 448 and 452 have been adjusted to better provide size, location and habitat composition as part of the old-growth habitat reserve strategy. Specifically, the Wrangell Narrows small Old-growth Habitat Reserve, in VCU 448, as mapped in the Forest Plan, lacked sufficient acreage to meet the Appendix K criteria. The two small old-growth habitat reserves in VCU 452 (Woodpecker Cove and South Blind Slough), when combined as mapped in the Forest Plan, meet the criteria for both total acreage and productive old-growth, but the adjustment will improve habitat composition and avoid inclusion of a classified road.

The Secretary of Agriculture's implementing regulation indicates the determination of significance 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). This guidance, in Forest Service Handbook (FSH) 1909.12, Chapter 5.32, identifies four factors to be used in determining whether a proposed change to a Forest Plan is significant or not significant. These four factors are: timing; location and size; goals, objectives, and outputs; and management prescriptions. The Alaska Region issued a Supplement to FSH 1909.12, Chapter 5.32, effective October 17, 1990 that includes an additional factor that can be considered in determining the significance of a Forest Plan Amendment. This additional factor deals with technical changes. An analysis of the factors is presented below.

#### **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 1997, so this change is proposed early in the life of the Plan. However, the Old-growth Habitat Management Prescription in the Forest Plan recognizes 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, for project areas that include or are adjacent to mapped old-growth habitat reserves, to evaluate the size,

spacing and habitat composition of mapped reserves. Additionally, Forest Plan Appendix K gives specific instruction for how to make these changes. Clearly, modifications to the Old-growth Habitat Land Use Designation (LUD) were anticipated in the Forest Plan. For these reasons, I have determined that these proposed changes are not considered significant with respect to timing.

#### Location and Size

This factor takes into account the 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 a significant change in the Forest Plan.

The areas added to the small old-growth habitat reserves were taken from Scenic Viewshed and Modified Landscape LUDs adjacent to the existing reserves. The areas removed from the Old-growth Habitat LUD will change to the Scenic Viewshed or Modified Landscape LUD. The net change in total acres for the project area is a decrease of 390 acres for the Old-growth Habitat LUD, which is not considered significant with respect to the size of the overall planning area within the Tongass National Forest.

The boundaries of the old-growth habitat reserves were modified to better address the Forest Plan objectives for biodiversity and to improve connectivity between the medium old-growth habitat reserves north and south of the project area and other natural setting LUDs. The Wrangell Narrows small Old-growth Habitat Reserve in VCU 448 was modified to meet total size requirements and to incorporate some good wildlife habitat adjacent to some small ponds. The Woodpecker Cove small Old-growth Habitat Reserve was modified to include some of the higher volume old-growth stands in the project area. The South Blind Slough small Old-growth Habitat Reserve was modified by deleting the northern part of the South Blind Slough small Old-growth Habitat Reserve which included some young-growth stands and Road 6245, the main travel route through the project area.

#### 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. The adjustment to these three 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. The adjustments to these three reserves were specifically designed to meet the Forest Plan Objectives.

#### **Outputs**

Adjustment of these three reserves 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 was a net increase of 50 acres of forest lands classed as suitable for timber production on 470 acres of development LUDS within this project area, which is negligible when considered across the Tongass National Forest.

#### **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 area. 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 three 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 would 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 Woodpecker Project Area Record of Decision is one of fourteen National Environmental Policy Act (NEPA) decisions as of December 2002, to make non-significant amendments to the Forest Plan by modifying LUD boundaries. These changes are tracked with a monitoring question posed by the Forest Plan and are part of the Annual Monitoring & Evaluation Report.

The Niblack Environmental Assessment (EA) changed a Wild River non-development LUD to Old-growth Habitat and Timber Management LUDs. The other amendments involved enlargement or reduction of Old-growth Habitat LUDs, usually exchanging acres with one of the development LUDs in order to more effectively meet Forest Plan objectives. Usually, wherever an Old-growth Habitat LUD was expanded, there was a corresponding reduction of acres suitable for timber harvest. Likewise, an Old-growth Habitat LUD size reduction usually meant an increase in suitable acres. Often non-forest or low-productive forest land is included in the modification of the shape of a small old-growth habitat reserve due to the natural fragmentation of the forest in southeast Alaska.

While the LUD changes within each project decision constituted non-significant Forest amendments, Table A1-1 displays the accumulated effect on suitable acres for all projects. For each project the table displays acres that were changed from a non-development LUD to a development LUD, or from a development LUD to Oldgrowth Habitat, and the net change in acres suitable for timber management. The net change in suitable acres represents less than one percent of the suitable land base.

Table A1-1. Effects of Forest Plan Amendments on Acres Suitable for Timber Harvest as of December 2002

Project	Non-development to Development LUD (non- suitable acres changed to suitable acres)	Development to Non- development LUD (suitable acres changed to non-suitable acres)	Net Change in Suitable Acres <sup>1</sup>
Woodpecker EIS	180	130	+50
Salty EA (Revised)	99	126	-27
Luck Lake EIS	257	794	-537
Doughnut EA	0	19	-19
Kuakan EIS	416	542	-126
Sea Level EIS	185	500	-315
Canal Hoya EIS	0	151	-151
Chasina EIS	0	78	-78
Control Lake EIS	446	142	+304
Crystal Creek EIS	481	1,153	-672
Nemo Loop EA	177	932	-755
Todahl Backline EA	2	363	-361
Niblack EA	252	0	+252
Polk Small Sales EA	0	153	-153
Fire Cove Salvage EA	186	633	-447
Total	2,681	5,716	-3,035

<sup>&</sup>lt;sup>1</sup> Suitable acres are those acres which the Forest Plan determined are suitable for timber harvest.

#### 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.

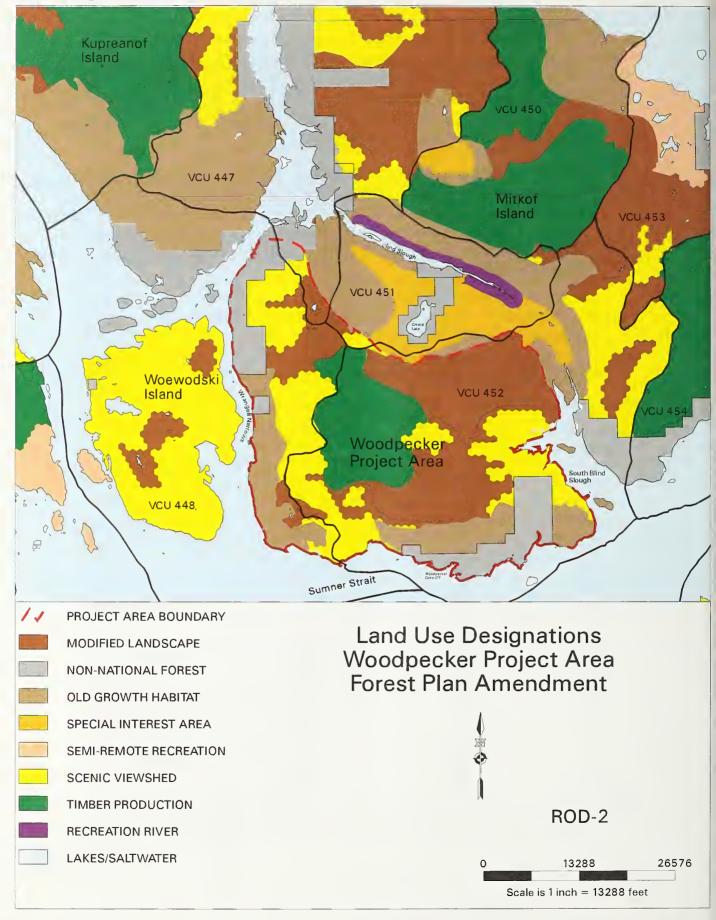
I hereby amend the Forest Plan with this non-significant amendment by adjusting the Wrangell Narrows, Woodpecker Cove, and South Blind Slough small Old-growth Habitat Reserves as shown on the Record of Decision Map (Figure ROD-1) and on the Land Use Designation Map for the Woodpecker Project Area (Figure ROD-2). Further documentation is provided in the Woodpecker Project Area Final EIS, and in the project planning record.

THOMAS PUCHLERZ

Forest Supervisor

-24-02

Date



# **Appendix 2**

# Mitkof Island Roads Analysis Determination



# Mitkof Island Area-Scale Roads Analysis Determination

#### Introduction

In the last few years, there has been heightened national interest in the conservation of roadless areas. The Roadless Area Conservation Rule of January 12, 2001 (Roadless Rule) is the subject of a number of lawsuits. While the Roadless Rule was being developed, the Forest Service was also developing a revised National Forest Transportation Policy that, among other requirements, addressed road-related activities within National Forest System unroaded lands. In 2001, the Secretary of Agriculture began a review of the Roadless Rule and the Chief of the Forest Service undertook a review of road management policy. These reviews have led the agency to issue interim directives with the intent that the values associated with inventoried roadless areas are fully considered within the context of forest planning before any projects are permitted that would build roads or harvest timber in roadless areas. This project has been prepared to fully comply with these interim directives (id 7710-2001-3 and id 1920-2001-1).

The following is a summary from the Mitkof Island Road Analysis, completed in January 2001 and available in the planning record for the Woodpecker Project Area.

# **Area and Road System Description**

Mitkof Island is a logical portion of the Forest to analyze transportation system needs. The island is approximately 135,000 acres, or 211 square miles in size. There is no road access to the island from either the mainland or other islands in southeast Alaska. Access to Mitkof Island and the city of Petersburg is via the Alaska Marine Highway ferry system, by commercial airlines or by private planes and boats. The nearest communities accessed by the Alaska Marine Highway or commercial airlines are (a) Wrangell (47 miles by water, 30 miles by air), (b) Kake (74 miles by water, 38 miles by air), and (c) Juneau (140 miles by water, 123 miles by air).

The city of Petersburg is located on the northern tip of Mitkof Island. The 2000 census figures estimate a population of 3,224 within the city boundary. The city boundary extends approximately eight miles south of the downtown area; however, the majority of the population resides in a three to four square mile area on the northern tip of the island. The city streets were not considered in this roads analysis.

The National Forest System lands on the island can be accessed along a 35-mile section of the state of Alaska Forest Highway 7, known as the Mitkof Highway, which runs in a north-south direction from one end of the island to the other. About 18 miles of this is paved and maintained year-round. The rest of Mitkof Highway is a

double-lane gravel road and is maintained by the State. Numerous National Forest System roads lead off of the main state highway, some of which are loop roads that lead back to the highway. An additional seven miles of city and state-owned roads lead to the forest; these are maintained by the City and State respectively.

There are a total of 129 miles of National Forest System roads on Mitkof Island, of which approximately 95 miles are open and drivable for either standard passenger vehicles or 4-wheel drive vehicles. The remaining National Forest System roads are closed to vehicle traffic (in storage) through drainage structure removal and/or alder growth across the roadway.

# **Forest Plan Objectives**

The Mitkof Island road system supports the goals and objectives of the Forest Plan. The main transportation goal is to develop and manage a road system that supports resource activities based on long-term management. The objectives are to provide access, and manage and maintain roads to protect water, soil, fish and wildlife resources. The Forest Plan allows the construction of up to an average of 110 miles of roads annually in support of forest resource management activities forest-wide.

#### Land Use Designations (LUDs)

The Tongass National Forest Land and Resource Management Plan was revised in 1997. As part of this revision, management prescriptions or land use designations were assigned to various areas. These Forest Plan LUDs determine development and non-development uses. Development LUDs allow activities such as timber harvest and road construction. These activities are mostly incompatible within the non-development LUD classification. The Forest Plan LUDs for Mitkof Island described in the Forest Plan are shown in Table A2-1.

Most of the road miles located within non-development land use designations are major travel routes such as the Mitkof Highway or the Three Lakes Loop Road. Some of the roads are necessary to cross non-development LUDs to access areas of development LUDs where activities such as timber harvest are allowed, such as Roads 6246 and 40010.

In the Woodpecker Project Area, a portion of Road 6245 crossed the Forest Plan South Blind Slough small Old-growth Habitat Reserve (OGR). This OGR was modified during analysis for the Woodpecker Project Area. As a result of this modification, Road 6245 no longer crosses this OGR, and there are no roads that cross any non-development LUD in the Woodpecker Project Area.

Table A2-1. Mitkof Island Land Use Designations (LUDs)

Land Use Designations	Acres	Miles of road within the LUD
Development LUDs		
Timber Production	24,994	28
Modified Landscape	29,336	42
Scenic Viewshed	17,793	26
Total	72,123	96
Non-development LUDs		
Municipal Watershed	4,567	1
Old-growth Habitat	18,986	10
Special Interest Area	4,550	5
Semi-Remote Recreation	8,105	0
Recreation River	1,285	5
Total	37,493	21
Other		
Non-National Forest Land (includes state and private)	24,926	53

#### **Inventoried Roadless Areas**

Most of the National Forest System roads were constructed in support of timber harvest in order to transport logs to either mills on Mitkof Island or saltwater for rafting to mills. The Forest Plan included an inventory of roadless areas on the Tongass National Forest that were identified during the Roadless Area Review and Evaluation done in the 1970s (RARE II). Of the 110 Inventoried Roadless Areas (IRAs) described in the Forest Plan Final EIS, Appendix C, three of these areas are located on Mitkof Island; East Mitkof (#220), Manzanita (#223), and Crystal (#224). In addition to these three roadless areas, there are four other unroaded areas on the island smaller than 5,000 acres that were identified in the Forest Plan. These smaller areas are not contiguous with the IRAs (see Figure ROD-3). The three Inventoried Roadless Areas on the island and their respective LUDs and sizes are shown in Table A2-2 and Figure ROD-3.

The 1996 roadless area inventory was updated to support the Forest Plan Supplemental Environmental Impact Statement (SEIS) that responds to the March 2001 U.S. District Court Order to evaluate and consider roadless areas within the Tongass National Forest for recommendations as potential wilderness. The updated inventory includes the most current land ownership information, new developments (roads, timber harvests, powerlines, etc.) implemented since 1996. Two additional roadless areas - North Mitkof and Central Mitkof - were identified on Mitkof Island for the Forest Plan Draft SEIS. Descriptions of these areas can be found in the Forest Plan Draft SEIS, Appendix C.

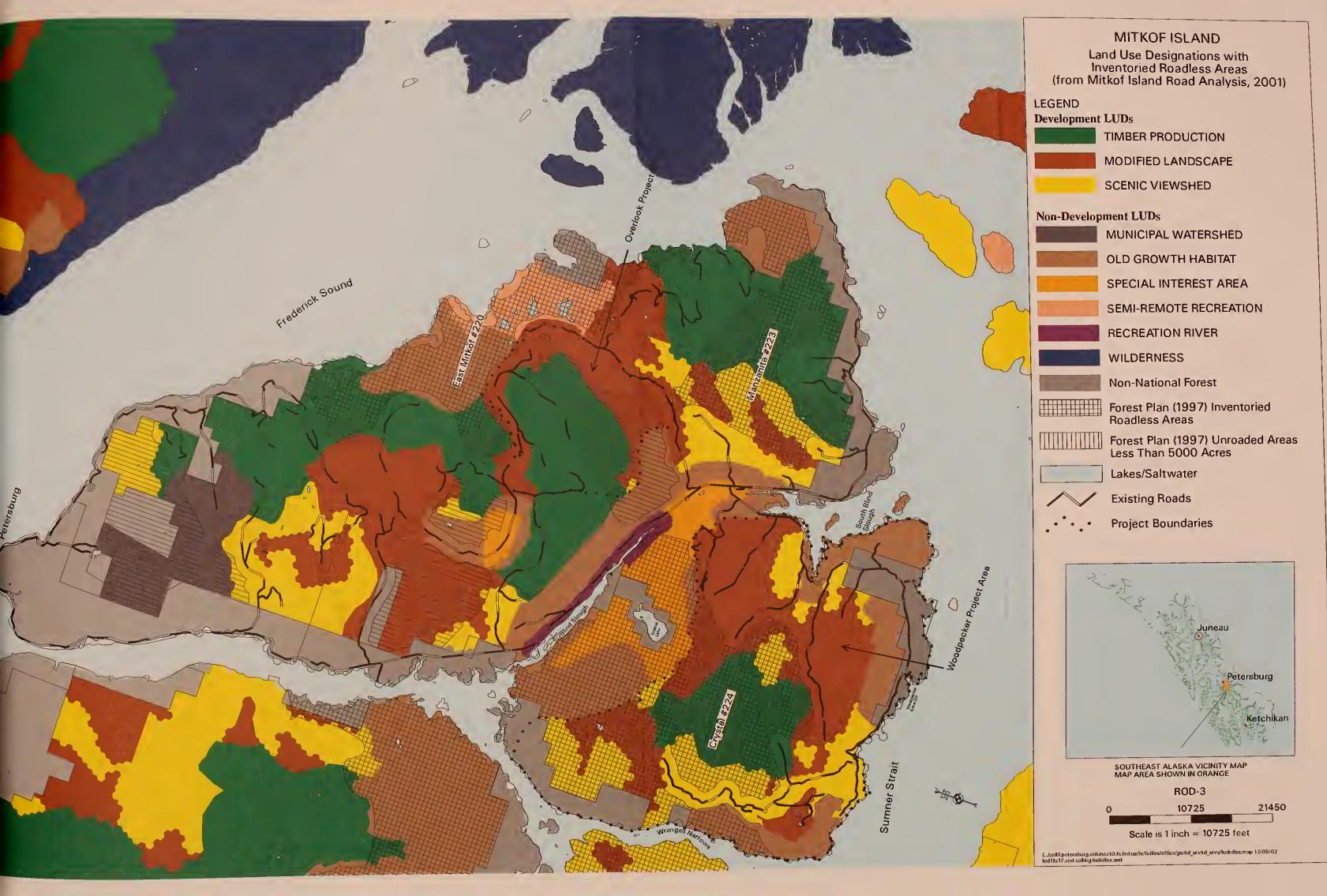
About two-thirds of the Woodpecker Project Area is within the Crystal Inventoried Roadless Area. In order to comply with the court's injunction that prohibits the Forest Service from permitting timber harvest or road building in roadless areas until 45 days after publication of the Forest Plan SEIS, no timber harvest or road construction is proposed within any roadless area at this time.

Table A2-2. Land Use Designations within Inventoried Roadless Areas (acres) on Mitkof Island

Land Use Designations	Inventoried Roadless Area Name and Number <sup>1</sup>			
	East Mitkof #220	Manzanita #223	Crystal #224	
Development LUDs				
Timber Management	2,360 acres	4,190 acres	4,320 acres	
Modified Landscape	680 acres	1,160 acres	3,790 acres	
Scenic Viewshed		1,530 acres	3,470 acres	
Non-development LUDs				
Old-growth Reserve	2,840 acres	1,550 acres	3,450 acres	
Special Interest Area			2,880 acres	
Recreation River			410 acres	
Semi-Remote Recreation	2,170 acres			
Other				
Non-national Forest <sup>2</sup> (includes state and private)	770 acres			

Two other roadless areas were identified during the 2002 inventory for the Forest Plan SEIS. Descriptions of these areas can be found in the Forest Plan Draft SEIS, Appendix C.

<sup>&</sup>lt;sup>2</sup> These acres were included in the roadless analysis for the Forest Plan. Since that time, they have been conveyed to the State of Alaska. They are no longer considered eligible for management as a roadless area and are only shown for tracking purposes.





# Mitkof Island Road Management

Local forest road users have become accustomed to open access to all forest roads. Travel management decisions need to be communicated to the public in order to be fair, consistent and effective. Recent road maintenance budgets have not been adequate to maintain all of the open roads on the Petersburg Ranger District. Decreasing timber production has also brought a reduction in sharing of road maintenance costs between the Forest Service and timber purchasers. Therefore, it is increasingly important to prioritize which roads are necessary for on-going administrative duties and for public use. Other roads can be put into storage by removing drainage structures. These roads can be re-opened when future needs are identified.

On Mitkof Island, certain parts of the forest road system are more heavily used, such as roads that form a loop with the Mitkof Highway or that provide access to a popular destination such as the Twin Creeks winter recreation area. Other roads receive less use. Some are used mostly during the two-week deer hunting season.

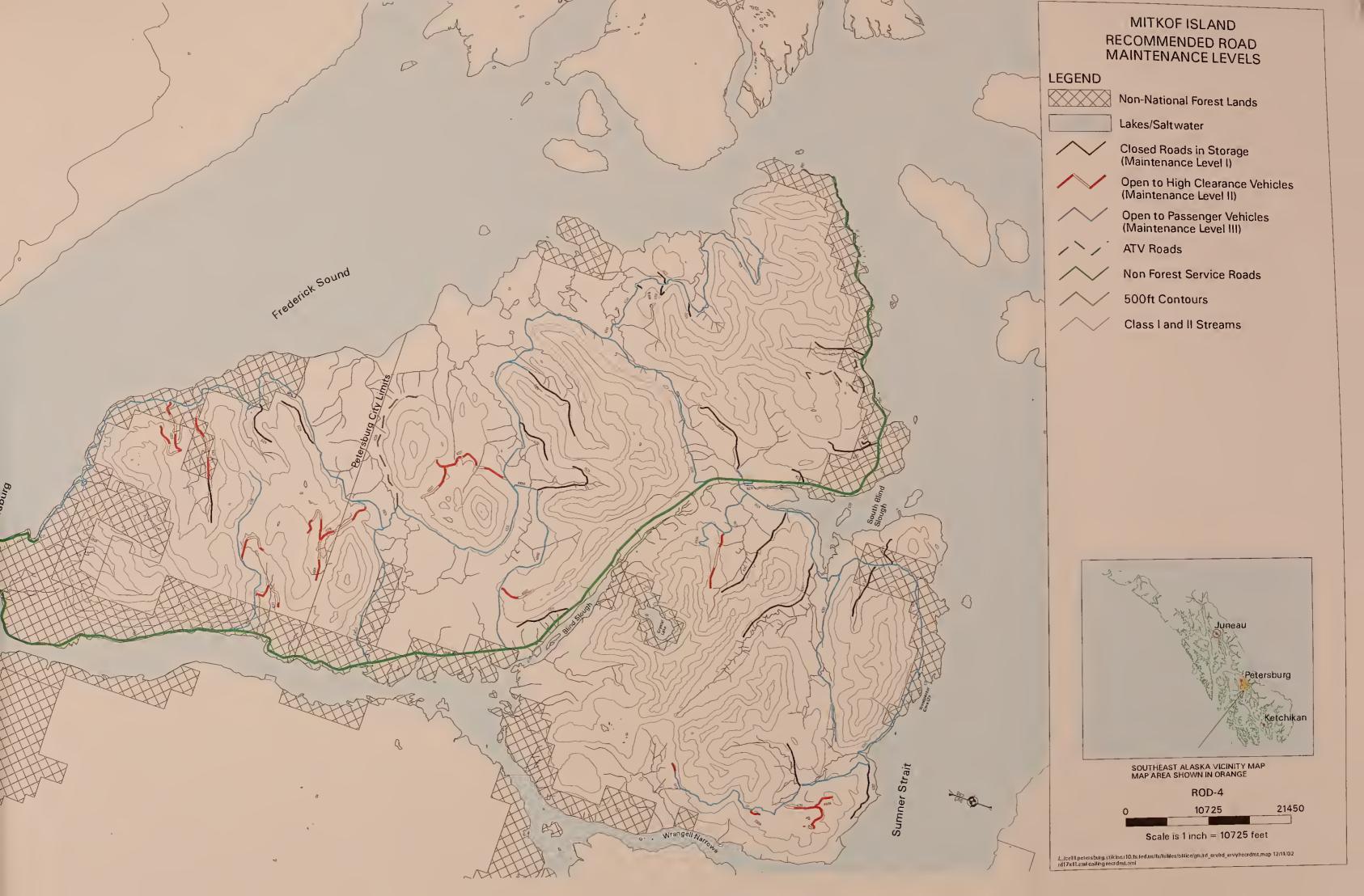
Forest roads on the island that are open to vehicle traffic are in two categories: those maintained for standard passenger vehicles, and those that are maintained to be drivable only for high clearance vehicles such as pickup trucks. All of the open classified road miles would receive periodic roadside brushing to maintain driving sight distance and annual drainage structure maintenance. Figure ROD-4 identifies all classified roads on the island and their respective desired future conditions. The three types of forest roads include those gravel or natural surface roads that are open to standard passenger vehicles (Maintenance Level III), those open to high clearance vehicles (Maintenance Level II), and roads in storage and closed to traffic (Maintenance Level I). There are no Maintenance Level IV roads. The paved parking lot at Blind River Rapids is Maintenance Level V. The Highway Safety Act is applied to Maintenance levels III through V and regulates signing and other safety standards.

Closing roads can be controversial since the public uses forest roads to access recreation areas and tends to value the ability to drive forest roads as a recreational activity in itself. Others favor closing all forest roads, viewing roads as a detriment to wildlife or as a threat to their livelihood (such as commercial fishing) due to road-related introduction of sediment into streams. The 1995 Mitkof Landscape Design recommended continuing the practice of allowing roads to close naturally. This practice has previously been used extensively on the Tongass National Forest, and has recently been called into question. Naturally closing roads allows alder growth, wind-thrown timber and naturally occurring slides to remain in place until a project such as a timber sale, recreation or fisheries project re-opens the road. Allowing roads to close naturally, while leaving drainage structures in place, has created the potential for erosion and subsequent water quality concerns downstream. In part due to the increased awareness of the potential effects of roads on water quality, the natural closure method for roads has been revised to include drainage structure removal and the addition of water bars to aid in controlled runoff.

Normally it takes more than 10 years for natural alder growth to physically close a road. During that time, use of the road by the public can extend this time period up to the point that it may never actually close. Since resuming the sport and subsistence deer hunt on the island in 1991, road closures by alder have slowed considerably since hunters tend to drive all of the available drivable roads. In the future, planned road closures on newly constructed roads will immediately follow timber harvest unless there is a compelling reason to keep them open on a short-term basis, such as the opportunity for firewood removal or reforestation. The closures will most often involve removal of all drainage structures, including culverts and bridges, with the addition of strategically placed water bars impassable to motor vehicles.

Roads that are to remain open will either have a relatively smooth surface and be suitable for passenger vehicles or will have a surface more suitable for high clearance vehicles, with rolling dips and drivable water bars similar to speed bumps. In addition, roads that have naturally grown closed to vehicle traffic will have culverts and bridges removed and will be physically blocked to prevent further vehicle use. Natural drainage patterns will be restored if the road is not needed in the future for National Forest management. Though this could be controversial for those forest road users that desire more driving opportunities, it is in line with the national recognition that roads that receive little maintenance can contribute to erosion and subsequent water quality problems and that maintenance should be limited to those roads that are needed for public and administrative access. Foot traffic on roads closed to vehicles will continue to be allowed. Once these closed roads are physically closed and placed in storage, road maintenance funding can be better used on the remaining open roads.

A Road Management Objective (RMO) is used to describe, identify, and categorize the level of intended use. The RMO includes general design criteria, maintenance criteria, and operation criteria plus a narrative that explains the route and what uses the road provides. During an environmental analysis, the interdisciplinary team proposes an RMO based on resource concerns and opportunities and public comments. This RMO is then approved by the District Ranger. These RMOs are dynamic and can be updated as use, resources, or funding changes. The Mitkof Island Road Analysis (2000) and the Mitkof Landscape Analysis (1995) both developed RMOs for Mitkof Island. During every project-level analysis, the RMOs for the area are reevaluated and included in the project's decision document.





#### **Current Planning Efforts**

There are two Forest Service projects that involve timber harvest and road construction currently in the planning stages of environmental analysis on Mitkof Island. The entire island has had intensive road-related analysis in support of these planning efforts. The 32,590 acre Woodpecker Project Area is located in the southwestern corner of the island, and includes about 2/3 of the 18,320-acre Crystal Inventoried Roadless Area (#224). The 8,400 acre Overlook Project planning area is located near the middle of the island, and includes a portion of one of the smaller non-contiguous unroaded areas. There are five other areas on the island currently listed on the 10 year timber sale plan that have not yet begun the NEPA process. Other areas that have a land use designation where timber harvest is allowed as determined by the Forest Plan may be added in the future. The National Forest System lands with development LUDs may have road construction in the reasonably foreseeable future on Mitkof Island.

The State of Alaska Department of Transportation and Public Facilities is in the preliminary planning stages for a new ferry terminal on the south shore of Mitkof Island. To access this terminal, some upgrade of the State highway will be necessary and the road would need to be maintained year-round. Though some new additional use of Forest Service roads may occur, preliminary analysis suggests that the traffic generated from the use of the ferry terminal would be concentrated along the State highway rather than on the forest road system.

#### Social and Environmental Issues

Mitkof Highway is the main route from the city of Petersburg. It is managed by the State of Alaska, Department of Transportation and Public Facilities. It provides access to many Forest Service recreation sites, such as Ohmer Creek Campground and Blind Slough Picnic Area. Currently 18 miles are maintained for year-round use. There are plans to upgrade another section after the completion of the South Mitkof Ferry Terminal.

Roads are the link most often used for access to the forest on Mitkof Island. The following issues and concerns are relevant to Forest Service road use. Some of these topics are important to land managers, some are important to the public, and some are important to everyone.

#### **Recreation Site Access**

Some of the most popular recreation places on Mitkof Island are accessed by the Forest Service road system. Road 6235, the Three Lakes Loop Road, a scenic drive in itself, provides access to the Three Lakes Recreation Site, which is a series of trails and lakes with rowboats provided by the Forest Service. One of the trails also provides access to Ideal Cove. Road 6235 also provides access to LeConte Overlook, a small picnic area with a view of LeConte Glacier on the mainland. Road 6209, the

<sup>&</sup>lt;sup>1</sup> This project area was being analyzed during the completion of the Mitkof Island Road Analysis. Currently it is on hold until the Forest Plan SEIS is completed.

Twin Creek Road, provides access for winter sports, such as cross-country skiing and snowmobiling. Ski trails connect to this road and two public day-use shelters are in the area. The Snake Ridge Road (Road 6246) provides good views of the Blind Slough area and provides access for those who want to hike to the top of Crystal Mountain, the highest point on Mitkof Island. The Woodpecker Road (Road 6245) provides access to Woodpecker Cove LTF, which is used for launching kayaks and small boats. All of these roads are recommended to be kept open with a maintenance level suitable for passenger vehicles.

#### **Recreational Driving**

Although the Mitkof Island road system is isolated and not connected to the mainland and the rest of the country's road system, most people own or have access to a motor vehicle. Few vehicles are "highway only" passenger cars and can be driven on gravel roads without major damage. Most of the popular driving routes include roads that "loop". These roads do not dead-end so that the route does not have to be retraced. These roads include the Three Lakes Loop Road (Road 6235), the Froot Loop Road (Road 40000), and the Frederick Point Road (Road 6204). Of these, the Three Lakes Loop Road is the best maintained. Road 6204 is maintained for passenger vehicles. The Froot Loop Road is currently only suitable for high clearance vehicles but its desired future condition is to be maintained for passenger vehicles.

#### Subsistence Use

Petersburg residents rely strongly on subsistence resources to enhance their lifestyle. The road system supplements boats in providing access to fish and game, firewood, berries and other forest products. One of the most important roads used for hunting is Road 6245, which provides access to the Woodpecker Project Area, where about 44 percent of the deer harvested on Mitkof Island are taken. Dry Strait Road (Road 6241) provides beach access for waterfowl hunting. Several roads, including Roads 6235 and 6245, provide access to freshwater fishing opportunities. Many of the main roads have good berry picking areas. The Snake Ridge Road accesses a source of western redcedar which is at the northern part of its range on Mitkof Island. Between 1972 and 1992, deer hunting was closed on Mitkof Island, following a deer population crash. During this time, some of the shorter dead-end roads became closed over by alder. Since the deer hunting season resumed and moose have appeared on the island, more road use has occurred to access remote areas for hunting, and roads are not closing naturally. This may lead to erosion since maintenance funds are limited and directed to the main routes. Some of these roads are proposed for closure by removing drainage structures and/or ditching at the entrance to prevent resource damage. The Woodpecker Project analysis proposes to close about 10 miles of these roads - Roads 6280, 6281, 6283, 6284, 6287, and 40083.

#### Off-highway vehicles (OHVs)

There are no designated OHV trails on the island, yet most roads are used by OHVs. Some users would like to see designated OHV trails. Others would like to see them

banned from open roads for safety purposes. Two roads on Mitkof Island are proposed for OHV use; these are Road 6221 and Road 6226.

#### Fish Passage

Recently, there has been a concern that not all of the stream crossing structures provide adequate fish passage. Of the 80 intersections between fish streams and roads on Mitkof Island, 38 crossings were found not to provide fish passage to the extent recommended by Alaska Department of Fish and Game (ADFG), which is to maintain fish passage 97 percent of the year. Most of these sites are located on major travel routes, such as Roads 6235, 40000, 6245, 6204 and 6241. A contract to reconstruct 29 of the highest priority sites is currently in progress. Within the Woodpecker Project Area, four of the five stream crossing sites on Road 6245 are included in this contract and are scheduled to be reconstructed in 2003. Future stream crossing structures will be designed to meet standards agreed upon between the ADFG and the Forest Service.

#### Wildlife

Road access can directly affect wildlife populations through hunting pressure, poaching, road kill, and denning, nesting and rearing disturbance. Since forest roads are designed for travel at lower speeds than the Mitkof highway, few direct collisions with deer and other animals occur on forest roads.

The Forest Plan recommended an open road density of 0.7 to 1.0 miles per square mile where Alexander Archipelago wolf mortality concerns were identified. Mitkof Island has no wolf mortality concerns. The wolf population is stable, with a few trapped or shot every year. A marten telemetry study on the island showed that marten were more often trapped near a road. In general, the Mitkof Island road system does not have a major impact on the area's wildlife.

#### **Erosion**

Some of the roads built in the 1970s, such as Road 40083 and Road 6283 were constructed with less rock and less drainage structures than today's standards. The Road Condition Survey reported locations where surface erosion was occurring. This erosion results in rutting, surface water, and blocked culverts. Because these roads are mostly closed by alder growth, it is often impossible to properly maintain them. The Mitkof Island Road Analysis recommends closing them by removing the drainage structures, restoring natural drainage, and prohibiting motorized traffic. Roads 6280, 6281, 6283, 6284, 6287, and 40083 within the Woodpecker Project Area will be closed by this method.

Cut and fill slope erosion was also noted during Road Condition Surveys. Although these slopes are seeded at the time of construction, sometimes vegetation is not successfully established. Alder planting is sometimes necessary to stabilize the bank. Several areas were identified during the Woodpecker project analysis and have been recommended for seeding or planting if necessary.

#### **Road Failures**

Slides from the roadbed material occur during severe storms and debris flows are sometimes exacerbated by a partly blocked or crushed culvert. Sometimes, debris flows caused by upslope events are of a magnitude that cannot be prevented, such as the one that occurred on the Three Lakes Loop Road in 1993. Several sections of roads experienced failures during 1999 and 2000 within the Woodpecker Project Area. The sections of Roads 6245 and 6286 have been repaired. The failures on Road 6282 are under evaluation for a contract at this time.

# Interagency and Public Coordination Efforts in Support of the Road Analysis

The Mitkof Island road analysis process has been in progress for over a year. Several public meetings in Petersburg displayed the Mitkof Island road system with opportunities for the public to respond to road issues. Prior to this, the 1995 Mitkof Island Landscape Analysis compiled numerous road related comments that were incorporated into the more recent analysis.

Maintaining fish passage through drainage structures along forest roads is a common goal that has brought several agencies together. The Alaska Department of Fish and Game (ADFG) has been working closely with the Forest Service in regard to fish passage through road drainage structures during the last several years. Other agencies involved in establishing fish passage protocol include the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Transportation and Public Facilities (ADOTPF). Results from the multi-agency protocol along with Road Condition Surveys have helped produce the list of drainage structures on Mitkof Island that may impede fish passage. This has led to several reconstruction projects on the island to restore fish passage.

The Alaska Marine Highway System has proposed construction of a new ferry terminal on the southern shore of Mitkof Highway. The environmental analysis for this project has just begun; however, indications point to possible sites on State of Alaska lands that lead directly onto Mitkof Highway. During the road analysis procedure, communication between the Forest Service and ADOTPF was maintained in order to incorporate the site of the new terminal and any potential effects from increased traffic as part of the road analysis.

The Forest Service has supported the city of Petersburg in its effort to apply for Federal Highway funding for the upgrade of the 7-mile-long Frederick Sound Loop Road. This road, located on city and state land, was completed in 1999 and is currently a single-lane gravel road with turnouts. The primary reason for its construction was to provide access to the recently built water reservoir for the city of Petersburg and access for residents of the Frederick Point subdivisions.

#### Information Sources

Several other recent efforts have generated natural resource and development related information, in addition to the analyses associated with the revision of the Forest

Plan, the Woodpecker Project Area EIS and the Overlook Project EA<sup>2</sup>. The 1995 Final Mitkof Landscape Design represented a two year process of community involvement through workshops, interviews and mailings. The Twin Creek Environmental Assessment (May 1998) included analysis of the northern part of the island. Information gathered during the analyses is stored in the district and Forest databases and is periodically updated.

The most recent information associated with the Woodpecker and Overlook planning efforts are located in the project planning records. Road related analyses for these project areas have determined where roads are appropriate and whether the roads proposed are needed for short-term or long-term management of the project areas. These are documented as Road Management Objectives and will be stored in the Forest Roads Atlas via the Geographic Information System (GIS) and the integrated information application that is used in support of travel routes among other items (INFRA) as appropriate.

#### **Opportunities for the Mitkof Island Transportation System**

The following opportunities represent a summary of ideas, goals, and potential projects as a result of the road analysis:

- Providing hardened ATV trails to help keep all-terrain vehicles from traveling off of the forest roads and leaving indelible marks in muskegs.
- Remove log bridges and culverts to provide user safety.
- Some older roads that have had little maintenance since they were last used need corrective action to restore natural drainage and to provide fish passage.
- Temporary roads constructed for one-time use during timber sales should be surveyed and any problems identified.
- Continue to repair/replace fish passage barrier drainage structures.
- Monitor forest road use before and after the South Mitkof Ferry Terminal is constructed to quantify any increased traffic and any associated impacts.
- Identify all roads that are being used by wheeled traffic. Closed roads (Maintenance Level 1) that still receive traffic should be either physically closed (placed in storage) to prevent resource damage or be reopened with proper drainage structures installed.
- Discuss with the city of Petersburg the need for Road 6206 within the Cabin Creek watershed.
- Work with the city of Petersburg on the Forest Highway Roads Program.

<sup>&</sup>lt;sup>2</sup> This project area was being analyzed during the completion of the Mitkof Island Road Analysis. Currently it is on hold until the Forest Plan SEIS is completed.

- Continue efforts to include Mitkof Island in the Forest Service Public Roads program.
- Decommission the identified former temporary roads that were not closed to traffic after completion of their intended use.
- Convert the former temporary roads leading to the sand pit and moose hunting camp sites to classified road status.

#### Minimum Road System

The Forest Service Manual (FSM 7712.01, December 14, 2001) requires a determination of the minimum road system needed to meet resource and other management objectives relevant to the Forest Plan. Figure ROD-4 represents the current minimum road system needed for Mitkof Island.

At times, during timber harvest activities, some of the roads shown as closed (in storage) may be open for use. Also, special use permittees, timber purchasers, and cooperators may require the use of new constructed roads, both classified and temporary in addition to the roads shown on the map. Upon termination of the contracts and/or permits allowing such use, temporary roads will be decommissioned and returned to a natural state, and will not become part of the long term transportation system. The need for classified roads will be analyzed as part of the environmental documentation and will include public involvement. Some future roads may be built and left open and some currently maintained, open roads may be proposed for closure depending on the results of those analyses.

The Selected Alternative in the Record of Decision for Woodpecker Project Area (December 2002) proposes to build no new miles of classified road for long-term use within the project area. About 2.5 miles of temporary roads will be needed to facilitate timber harvest. All of these temporary roads will be closed and decommissioned to be allowed to return to a more natural state. Ten miles of existing classified roads have been identified as not being currently needed and will be closed and put into a storage condition. These roads will still be part of the long-term forest road transportation system.

# Mitkof Island Roads Analysis

# **Forest Plan Consistency**

The amount of road system necessary to implement sound multiple use management of National Forest System lands is based on the Forest Plan (1997, as amended) and identified community needs. The activities proposed for road construction and maintenance in the Woodpecker Project Area respond to the Forest Plan goals and objectives to provide forest access for forest users and to protect water, soil, fish, and other resources. Since no new classified road construction is proposed, this project is well within the Forest Plan objective of classified road construction of up to 110 miles annually. The road management objectives for this project work toward the desired future condition of a well-maintained transportation system that meets the needs for National Forest management and public use. Road Management Objectives have been updated to reflect any changes needed in road maintenance levels within the project area. Roads have been chosen to be closed based on resource concerns, public use, and funding. Conflicts with roads and land use designations have been resolved. The location and design of new temporary roads will meet the Forest Plan standards and guidelines (Forest Plan, page 4-104 to 4-110). Stream crossing structures have been analyzed for safety and resource concerns.

I have determined that this is the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of resources for the Selected Alternative. No new classified roads are to be constructed at this time, all activities are compatible with the land use designations in the current Forest Plan, and no ground-disturbing activities are within any roadless area. I have determined that no revisions or amendments to the Forest Plan are needed.

THOMAS PUCHLERZ

Forest Supervisor

12-24-02 Date



# **Appendix 3**Activity Cards for Selected Alternative



# **Introduction to Activity Cards**

Activity cards are used to explain site-specific proposed projects and any resource concerns and mitigations. These activities include: 1) timber harvest units, 2) existing roads needed for timber harvest, and 3) development of recreation sites. Both narratives and maps showing site-specific information are provided.

The first section, Introduction to Unit Cards, explains the harvest treatments for this entry plus the long-term objectives. Following that is a summary of which measures can be used to mitigate resource concerns. These mitigation measures can be either from the Forest Plan or project-specific.

The Introduction to Unit Cards is followed by a narrative card and a map for each harvest unit in the Selected Alternative. These units are in numerical order, but not all the units from the original unit pool were included. The maps show all proposed adjacent units in the Selected Alternative.

The second section describes the current condition of existing roads and proposed management for those roads. The Introduction to Road Cards explains the terminology used for the Road Management Objective narratives. A map showing all the roads and their desired future management is also included.

The Road Management Objective (RMO) cards for the existing roads are listed in numerical order, but the major roads (the 6000 series) are listed before the lower standard roads (the 40000 series). Some of these roads also have a site-specific design criteria narrative, if needed.

The Recreation Cards consist of a narrative and a map. Design narratives for each proposed project will be completed during implementation. The proposed projects include dispersed campsites, picnic sites, a trail, and turnouts for parking.

# Introduction to Unit Cards for Selected Alternative

# **Unit Card Header Information**

Each unit card has a header block with the following information. This information is used to generally describe the stand's size, location, and volume removed.

**Unit size** – estimate of acres using aerial photos and GIS information. No units have been flagged on the ground or traversed at this time.

**Aerial Photo** – the identification number of the most recent aerial photograph taken in 1998-1999.

Volume Strata – This is the number of acres broken out by volume strata. Volume strata is defined in the Forest Plan and explained under Vegetation in Chapter 3 of the Final EIS. The total volume strata acres do not always add up to the total unit size, since some units contain nonforested areas.

VCU – the Value Comparison Unit as determined by the Forest Plan

**Land Use Designation** - the management prescription allocated by the Forest Plan

**Est. Timber Volume** – an estimated number of board feet to be harvested. This was derived from GIS and field estimates. A cruise will be done during implementation to determine a more accurate volume.

Within Inventoried Roadless Area? – whether the unit is within the Crystal Inventoried Roadless Area as described in the Forest Plan. This is not the same as the roaded/roadless boundary shown on some of the unit maps. That boundary refers to the roaded/roadless boundary as defined by the court in Sierra Club v. Rey (J00-0009 (JKS)).

# **Harvest Treatments**

The harvest treatment descriptions on the unit cards are basic guidelines to achieve resource concerns and logging system operability for the unit. The harvest treatments describe the appearance of the residual stands after harvest. It includes the amount of retention and whether trees will be removed or retained in patches or dispersed throughout the stand. A more detailed explanation of the harvest treatment is listed below.

# Silvicultural Systems

Silvicultural systems have been developed to meet the management objectives based on the site and Forest Plan direction. These objectives include retaining stand legacy or old-growth characteristics to maintain biodiversity, economics, logging feasibility and protection of the soil, watershed, wildlife habitat, and scenery values of the proposed unit. Adjacent areas were taken into consideration when developing these objectives.

A complete silvicultural prescription for the entire length of the rotation has been written for each stand selected for harvest. These prescriptions provide guidance for treatments following this proposed timber harvest, including subsequent entries, cedar interplanting, thinning, pruning, and fertilization through the entire rotation.

Silvicultural prescriptions will include these unit cards plus the sale layout and marking guidelines and will be completed for each of the timber harvest units that are included in the Woodpecker Project Area Record of Decision. Minor changes are expected during implementation to better meet on-site resource management and protection objectives. Minor adjustments to unit boundaries are also likely during final layout for the purpose of improving logging system efficiency or for site conditions.

These cards will be used during the implementation process to assure that all aspects of the project are implemented within applicable standards and guidelines. If needed during sale implementation, an interdisciplinary team will discuss any changes. Subsequent analysis and supplements to the EIS may be needed, as determined by the Responsible Official. Similar cards will be used to document any changes to the planned layout as the actual layout and harvest of the units occurs with project implementation.

The harvest treatments found on the unit cards are descriptions of what will occur under various silvicultural systems. Two silvicultural systems based on the number of age classes (uneven-aged and two-aged) and three regeneration methods (group selection, single tree selection, and clearcut with reserves) were used to develop these harvest treatments. The harvest treatment for a proposed unit for the Woodpecker Project Area is the initial entry for the silvicultural prescription.

# Uneven-aged Management

An uneven-aged silvicultural system with a regeneration method of group selection is described in the unit cards as a harvest method where 50 – 66 percent or 75 percent of the stand is retained. Trees are to be removed in 2-acre or less openings and corridors, and 3-acre or less openings and corridors.

#### Removal of patches of trees

Merchantable trees (trees greater than 9 inches in diameter) would be harvested in small patches to form a mosaic of irregularly shaped openings within the stand. Smaller trees may be left in this area if the larger trees can be safely removed. Each group harvested would consist of a mixture of tree sizes. These groups will provide small foraging areas interspersed with cover. Groups of trees infected with dwarf mistletoe would be targeted for removal to avoid infection for the regeneration. Groups with windfirm characteristics are a high priority to leave. The large trees provide habitat for cavity nesters and marten. Each harvested opening will regenerate, creating a patch of trees with a uniform age and height. This will maintain or create a stand of three or more distinct size classes in small groups. The appearance of the residual stand mimics natural blowdown patches. In 200 years, at the end of the scheduled cutting cycles, the result will be an uneven-aged stand.

Cable yarding and shovel yarding will be used to harvest the trees within the groups. Cable yarding results in a more linear pattern up-and-down the slope to form a corridor. There is more flexibility for yarding uphill since there is more control over the tree being removed. Shovel yarding can harvest groups, but these groups would either be connected by a narrow path or adjacent to the road.

Three types of removal based on the size of the patches to be harvested and the amount of trees to be retained were recommended for the selected harvest units. These are: harvest of two-acre or smaller patches with 75 percent retention, harvest of two-acre or smaller patches with 50-66 percent retention, and harvest of three-acre or smaller patches with 50-66 percent retention. These are described below.

#### 75 percent retention

Twenty-five percent of the area within the unit would be harvested in patches two-acres or less in size. The selection of these patches will also be based on the basal area of the stand, resulting in the same percentage of basal area removed. This prescription meets the Marten Standards and Guidelines. To minimize the possibility of windthrow in areas with windthrow potential, the patches will be designed with irregular boundaries. Additional entries removing up to 25 percent of the basal area within the unit would occur approximately every 50 years (the cutting cycle).

#### 50-66 percent retention

One-third to one-half of the area within the unit would be harvested in patches up to two acres or less in size. The selection of these patches will also be based on the basal area of the stand, resulting in the same

percentage of basal area removed. This prescription meets the Marten Standards and Guidelines. To minimize the possibility of windthrow in areas with windthrow potential, the patches will be designed with irregular boundaries. One additional entry will likely be made in 100 years (the cutting cycle) following the initial entry.

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One-third to one-half of the area within the unit would be harvested in patches up to three acres in size to meet Visual Quality Objectives. The selection of these patches will also be based on the basal area of the stand, resulting in the same percentage of basal area removed. To minimize the possibility of windthrow in areas with windthrow potential, the patches will be designed with irregular boundaries. One additional entry will likely be made in 100 years (the cutting cycle) following the initial entry.

An uneven-aged silvicultural system with a regeneration method of single tree selection is described in the unit cards as a harvest method where 50 - 66 percent or 75 percent of the stand is retained. Scattered trees and/or clumps of trees are to be removed.

#### Removal of trees distributed across the stand

This will regenerate and maintain a multi-aged structure by removing some trees in various size classes distributed across the stand. The trees to be harvested would be selected using criteria such as species, diameter limits or spacing. A range of diameters, or everything above or below a certain diameter limit may define the trees selected for harvest. Different diameters may be used for different species. The percent distribution of tree species harvested will be similar to the naturally-occurring species composition. The diameter limits may need to be based on statistically accurate cruise data determined at the time of implementation to ensure that the percent of retention will be met. Other units may have each tree marked on the ground according to the management objectives. The resulting stand may have small openings and/or individual trees harvested throughout the stand. Sometimes other trees may be harvested to create safe working conditions or for logging operability. The stand after harvest will retain old-growth characteristics but may fall within a lower volume strata.

Removing trees throughout the stand will retain a continuous large tree canopy following harvest while continuing to manage the stand for timber production. The residual stand will have structural diversity that will provide wildlife habitat and maintain scenic quality. This will maintain or create a stand of three or more distinct size classes distributed throughout the stand. In 200 years, at the end of the scheduled cutting cycles, the result will be an uneven-aged stand. Cable-yarding systems will be restricted to uphill yarding and some short

(less than 300 ft. slope distance from yarder) downhill yarding. Cable corridor widths will be minimized and lateral yarding will be used to access the individual selected trees. Shovel yarding is effective but some trees other than the selected ones may need to be removed for operability.

#### 75 percent retention

Twenty-five percent of the trees would be harvested within the unit. Additional entries removing up to 25 percent of the trees would occur approximately every 50 years (the cutting cycle). Marten Standards and Guidelines would be used to select some of the trees retained in areas of high value marten habitat. This would mean leaving large trees that would be good for marten habitat – see the guidelines under mitigation measures for marten. Trees displaying windfirm characteristics would be retained.

#### 50 to 66 percent retention

One-third to one-half of the trees would be removed. One additional entry will likely be made in 100 years (the cutting cycle) following the first entry. Marten Standards and Guidelines would be used to select some of the trees retained in areas of high value marten habitat. This would mean leaving large trees that would be good for marten habitat – see the guidelines under mitigation measures for marten. Trees displaying windfirm characteristics would be retained.

# Two-aged Management

A two-aged silvicultural system with a regeneration method of clearcut with reserves is described in the unit cards as a harvest method where 20-30 percent of the stand is retained as scattered trees or in clumps of trees.

#### Retention of 20-30 percent reserve trees

Some of the trees will be reserved as legacy trees through the 200-year rotation. These reserve trees may be dispersed throughout the stand or in clumps and can be merchantable or unmerchantable. Reserve trees may be of any size and should be relatively windfirm. In stands where there is possible windthrow, reserve trees may be positioned to provide a windfirm buffer to adjacent stands and riparian areas. The residual stand will have a two-layered canopy structure with two or more age classes of trees. In areas of high value marten habitat, the Marten Standards and Guidelines for tree size and numbers of trees will be followed to determine the trees to be left. This will include at least seven large standing trees and smaller trees for stand structure to retain 20-30 percent of the basal area.

The large trees that remain will provide wildlife habitat for old-growth associated species, such as cavity nesters and roosts for foraging raptors. These trees will also provide stand structure that will lessen the effect for

scenery concerns. This will maintain or create a stand of two or more distinct size classes. At the end of the 200-year rotation, the result will be a mature stand with some older trees.

Where cable-yarding systems are used, the trees would be left in clumps along splitlines rather than scattered for downhill yarding. Uphill cable yarding can leave some scattered trees along with clumps. Shovel yarding can leave scattered residual trees but some clumps may be left.

# **Logging/Transportation Systems**

This section lists the logging system and whether a classified road needed for long-term management or temporary road construction is needed for access to the unit. More information on the roads is located on the Road Cards that follow the unit cards.

# **Resource Concerns and Mitigations**

Some resource concerns are mitigated by using silvicultural prescriptions other than clearcutting. In the Woodpecker Project Area, most of the wildlife, scenery, and windthrow concerns are mitigated with the silvicultural system. Other resource concerns, such as watershed, soils, and fisheries concerns are mitigated by unit design.

The following Forest-wide Standards and Guidelines for the American Marten (Forest Plan, pages 4-118 and 4-119) were applied to harvest units in high value marten habitat in the Woodpecker Project Area:

- Retain approximately 10-20 percent of the original stand structure.
- Retain an average of at least four large trees per acre (20-30" DBH or greater) for future snag recruitment. Where not available, substitute the next largest trees.
- Retain an average of at least three large decadent (dead or dying) trees per acre (20-30" DBH or greater). Where not available, substitute the next largest decadent trees.
- Retain an average of at least three pieces per acre of down material (logs 20-30" or greater in diameter at the large end and 10" long), generally distributed throughout the harvest unit.

#### Marten

- Retained trees should have a reasonable assurance of windfirmness.
- Consider adding smaller or younger trees for future structure recruitment and to improve windfirmness.

Implementation of these guidelines helps meet the objective to manage high value marten habitat to retain features of forest stand structure important to marten habitat use. Additional habitat is provided by an old-growth habitat reserve system, which has been adopted and implemented in accordance with Forest Plan direction. Habitat is also retained in beach, estuary and riparian buffers.

#### Loss of Old-Growth Habitat

Loss of old-growth habitat is a wildlife concern for most of the proposed harvest units. The use of uneven-aged management mitigates this concern for many units. Another method of mitigating the loss of old-growth habitat is to leave reserve trees of all ages and sizes, with an emphasis on snags and dying trees. The retention of these reserve trees is part of two-aged management.

# Sitka Black-Tailed Deer

Several harvest treatments maintain habitat value to deer through time. Removal of trees in patches will create a mosaic of old-growth forest with regeneration in the openings. If 25 percent of a unit were harvested by removal of patches of trees, the harvested 25 percent will have deer winter habitat values similar to a clearcut, and the other 75 percent of the unit will have old-growth values. When 25 percent of the trees dispersed throughout the stand are removed, the volume of the stand will be lower, but the stand will retain some old-growth characteristics.

# Raptor and Great Blue Heron Nests

Habitat buffers will be established around all known or subsequently discovered raptor and great blue heron nests, in accordance with Forest Plan standards and guidelines. Timing restrictions will be placed on activities around the nests during active nesting and fledging periods to minimize disturbance to the birds using the nests. Standards used to protect nest sites vary depending on the type of nest located.

# Waterfowl Nesting and Brood-Rearing

Wetlands that are known or likely to be used by waterfowl for nesting, brooding, and rearing have been identified. Buffers of 330-foot width have been placed around these wetlands, according to Forest Plan standards and guidelines. Timing clauses have been placed on these buffers and on adjacent units to restrict logging and roading activities, generally during the period April 1 to July 31, if waterfowl activity is present.

# Windfirmness

Windthrow concerns were mitigated through selection of windfirm trees for retention, unit design and silvicultural prescriptions.

Where possible, trees remaining in harvested units will display windfirm characteristics. This will occur under uneven-aged management where

individual trees are to be removed and under two-aged management where individual trees or small clumps will be left dispersed throughout the unit. Some of the characteristics of windfirm trees include:

- open-grown trees, which have been exposed to storm winds throughout their life,
- dominant trees with crowns well above the average stand height,
- short trees with a low form class and high stem taper,
- straight trees, with well-formed stems and no lean,
- no stem or root decay and no stem swelling, and
- western redcedar, Alaska yellow-cedar, and immature alder species (Harris, 1989).

In two-aged managed units where a windthrow potential occurs, windfirm buffers may be designed to mitigate the effects on adjacent stands. A windfirm buffer would generally be about 100 feet wide along an irregular unit boundary and consist of approximately 25 dispersed small diameter trees per acre (usually under 18" DBH).

In many units uneven-aged management prescriptions mitigate windthrow concerns by harvesting small patches of trees (2-3 acres). These patches will be irregularly shaped and target trees infected with dwarf mistletoe. Patches with windfirm characteristics will be a high priority to retain in these units.

# Water Quality and Fisheries

All known streams are shown on the unit card maps in relation to the location of existing roads and approximate location of proposed roads. These streams, and any additional streams, if found, will be protected by following the Forest Plan Riparian Standards and Guidelines listed below. Class IV streams will be protected following Best Management Practices (Forest Plan, Appendix C). Timing restrictions for in-stream work are located on the road cards.

Units were designed so that all Class I and Class II streams and their associated no-programmed-timber harvest buffers are outside of the unit boundaries.

# Riparian Management Areas

Riparian Forest-wide Standards and Guidelines are a combination of no harvest buffers and windfirm buffers along streams and yarding guidelines to protect soil from erosion based on stream classes and channel types. For full descriptions of the standards and guidelines, see the Forest Plan, (pages 4-53 to 4-73).

#### Riparian Standards and Guidelines for Timber Harvest

The Tongass Timber Reform Act (TTRA) mandates the use of minimum 100-foot wide buffer strips along both sides of all Class I and Class II streams that flow into Class I streams. This was incorporated into the Forest Plan Riparian Standards and Guidelines as "No commercial harvest within 100 feet of Class I streams and Class II streams that flow directly into Class I streams."

The minimum 100-foot-wide buffer strips mandated by TTRA are expanded for some channel types to include an additional buffer where no programmed commercial timber harvest can occur. The need for this no-harvest buffer is determined for streams using the Aquatic Habitat Management Unit (AHMU) Class and the process group. The width is based either on the height of a site-potential tree, the presence of riparian vegetation or soils, flood plains, or fens. The height of a site-potential tree is determined by the productivity of the site and ranges from 110 feet to 140 feet.

#### Windfirm buffers

Windthrow events are the dominant agent for disturbance within the Woodpecker Project area. The affects of these events on the landscape vary depending on the position of the windthrow in the landscape, the magnitude of its occurrence, and its proximity to streamside riparian buffers. Small-scale windthrow in combination with bank undercutting plays an integral part in maintaining healthy fish habitat. These natural events supply the stream with the large woody debris needed for pool formation, hiding cover, sediment retention, and energy dissipation.

When large woody debris is parceled to streams over long periods of time, the tools streams need for habitat maintenance are available. However, when streamside windthrow occurs on larger scales, loss of wildlife corridors, increased sedimentation, channel scour, and debris jam formation are often the results. More importantly, the mechanism that allows the recruitment of large woody debris to a stream over time for the maintenance of fish habitat will be compromised. To mitigate these effects, the Forest Plan has set standards and guidelines for the establishment of windfirm buffers.

An appropriate distance will be managed beyond the no-harvest zone, for all buffers within and adjacent to proposed units. This will provide for a reasonable assurance of windfirmness of the Riparian Management Area buffer, paying special attention to the area within one site-potential tree height of the Riparian Management Area. Other management techniques may reduce the occurrence of windthrow to the riparian buffer. The use of partial harvest retention in or around streamside buffers is applied in

all units. The partial harvest units that retain 20 to 75 percent of basal area are expected to dissipate wind energy before it reaches riparian buffers.

#### **Logging System Controls**

Log yarding practices are based on channel type and stream class. Some yarding guidelines include: partial or full suspension of logs, minimizing the exposure of mineral soil, and split-line yarding on either side of the stream. The objective is to minimize alder growth and formation of new channels (BMP 13.9).

#### **Best Management Practices**

The following Best Management Practices (BMPs) are applied to streams in the Woodpecker Project Area, as specified in the Forest Plan (pages C-1 to C-3). The BMPs are cited on the Unit Cards where appropriate. Not all BMPs apply to every stream.

BMP 12.6 (Riparian Area Designation and Protection) - To identify riparian areas and their associated management activities.

**BMP 12.6a (Buffer Design and Layout) -** To design streamside buffers to meet objectives defined during the implementation of BMP 12.6.

**BMP 13.16 (Stream Channel Protection - Implementation and Enforcement) -** To provide site-specific stream protection prescriptions consistent with objectives identified under BMPs 12.6 and 12.6a. Objectives may include the following:

- maintain the natural flow regime,
- provide for unobstructed passage of stormflows,
- maintain integrity of the riparian buffer to filter sediment and other pollutants,
- restore the natural course of any stream that has been diverted as soon as practicable,
- maintain natural channel integrity to protect aquatic habitat and other beneficial use, and
- prevent adverse changes to the natural stream temperature regime.

**BMP 13.9 (Determining Guidelines for Yarding Operations) -** To select appropriate yarding systems and guidelines for protecting soil and water resources.

**BMP 14.6 (Timing Restrictions for Construction Activities) -** Minimize erosion potential by restricting the operating schedule and conducting operations during lower risk periods.

#### Process Groups and Channel Types (Forest Plan, page D-3)

A process group describes streams with similar interrelationships between watershed runoff, landform relief, geology, and glacial or tidal influences on erosion and deposition. A channel type more precisely characterizes a stream and helps predict the probable responses to natural and human influences. Channel types incorporate other aspects such as gradient, pattern, stream bank incision and containment and riparian area vegetation communities. See the Forest Plan, Figure D-1 (page D-4) for a visual representation of the typical distribution of channel process groups. The following table shows the Forest Plan codes used on the unit card narratives. Each unit card summarizes the protection. Only the channel types found in the units in the Selected Alternative are listed.

Table B-1. Channel Types in the Selected Harvest Units

Process Group	Channel Type Code	Channel Type Description
Alluvial Fan	AF1	Moderate Gradient Alluvial Fan Channel
	AF2	High Gradient Alluvial Cone Channel
Flood Plain	FP3	Narrow Low Gradient Flood Plain Channel
	HC1	Shallowly Incised Muskeg Channel
High Gradient Contained	HC2	Shallowly to Moderately Incised Footslope Channel
	НС3	Deeply Incised Upper Valley Channel
	HC5	Shallowly Incised Very High Gradient Channel
	HC6	Deeply Incised Mountain Slope Channel
Moderate Gradient	MC1	Narrow Shallow Contained Channel
Contained	MC2	Moderate Width and Incision Contained Channel
Moderate Gradient, Mixed Control	MM1	Narrow Mixed Control Channel

#### Scenery

The standards and guidelines for the scenery management of an area are determined by the number of viewers, distance from the viewer (Distance Zones), and the ability of the landscape to absorb change (Visual Absorption Capability, or VAC).

#### **Distance Zones**

- Foreground  $(0 \frac{1}{2})$  mile
- Middleground ( $\frac{1}{2}$  3 to 5 miles)
- Background (3 to 5 miles and greater)

#### Visual Absorption Capability

- Low VAC Steep slopes and uniform vegetation
- Intermediate VAC Gentle slopes, some variation in vegetation
- High VAC Flat muskeg and forest mosaics

#### **Visual Quality Objectives**

The following Visual Quality Objectives from the Forest Plan provide standards for management based on the landscape's scenic characteristics and public viewing concern.

**Retention:** Changes in the landscape must not be visually evident to the casual forest observer.

**Partial Retention:** Changes in the landscape may be visually evident, but must be integrated into and visually subordinate to the surrounding landscape and should not attract attention.

**Modification:** Changes in the landscape may visually dominate the surrounding natural landscape, however they should be compatible with the surrounding natural landscape.

**Maximum Modification:** Management activities may visually dominate the characteristic or surrounding natural landscape.

# Scenery Standards and Guidelines by Land Use Designation

The guidelines for scenery differ between the two Land Use Designations (LUDs) for units in the Selected Alternative. The selected units are in the Scenic Viewshed and Modified Landscape LUDs. The primary scenic objective for the Scenic Viewshed LUD is to retain a natural-appearing landscape over time, if viewed from Visual Priority Travel Routes and Use Areas. For the Modified Landscape LUD, the primary scenic objective is to minimize development in the near viewing area while allowing a sustained yield of timber and mix of other resource activities in other viewing areas over time.

#### Visual Quality Objectives for Units in the Scenic Viewshed LUD

Retention/Partial Retention - Units 148a, 150

Partial Retention - Units 34, 67, 73, 75, 77, 78a, 121, 122, 148, 149, 161a

Modification - Unit 105

All units are in areas of low to intermediate VAC.

#### Visual Quality Objectives for Units in the Modified Landscape LUD:

Partial Retention - Unit 141 Modification - Units 92, 93, 98, 102, 103, 104b, 104c, 166a, 174, 187

Units 141, 166a, 174, and 187 are in areas of low to intermediate VAC. All other units are in areas of high VAC.

# Selected Alternative Unit Card Narratives and Maps

34 Unit #: Unit Size: 32 acres

Aerial Photo: 1998 1798-233 Volume strata: 18 acres high

VCU: 448 13 acres medium Land Use Designation: Scenic Viewshed acre low 1

Within Inventoried Roadless Area? No Estimated timber volume: 500 mbf

Harvest Treatment: 50-66% retention, remove trees in 2-acre or less corridors

**Logging/Transportation Systems:** Cable yarding / two temporary roads

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Stream 1 is Class IV, Channel Type MC1 Concern:

> Stream 2 is Class IV, Channel Type HC5 Stream 3 is Class IV, Channel Type HC1 Stream 4 is Class III/IV, Channel Type AF2 Stream 5 is Class III, Channel Type AF1/HC5

Mitigation: Streams 1 and 2: Apply BMP 13.16 (Stream Channel Protection).

Stream 3: Apply BMP 13.16. Recommend leaving reserve trees along stream bank in the

east corner of unit.

Streams 4 and 5: No commercial timber harvest within the 140' Riparian Management Area, or within the active portion of the alluvial fan. Apply BMPs 12.6 (Riparian Area

Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16.

Two temporary roads provide continuous landings within the unit. Concern:

Mitigation: Remove all drainage structures from the temporary roads to restore natural drainage

patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

Soils

Concern: The southern boundary of the unit is adjacent to an area of steep unstable slopes.

The unit boundary was modified to avoid the steep slopes. Mitigation:

Wildlife

Concern: The unit contains high value marten habitat.

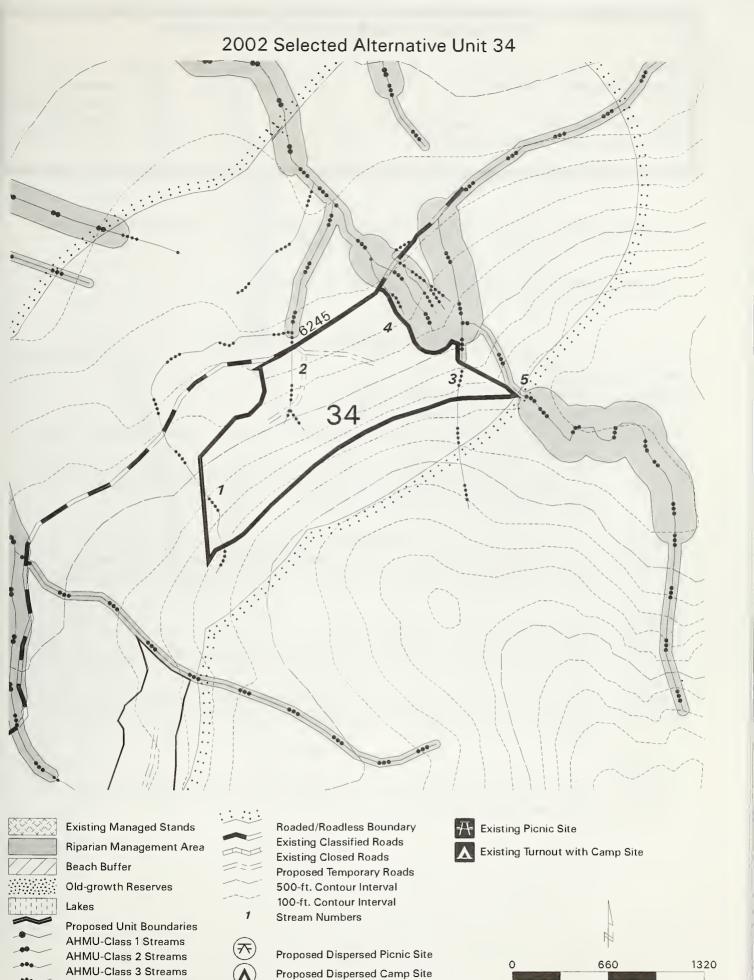
Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

**Scenery** 

Concern: A portion of the unit is visible from Wrangell Narrows and Crystal Mountain.

Mitigation: Unit size and green tree retention specified for the stand will meet the Partial Retention

VQO.



Scale is 1 inch = 660 feet

AHMU-Class 4 Streams

67 19 acres Unit #: Unit Size:

Aerial Photo: 1998 1798-234 Volume strata: 7 acres high

VCU: 448 7 acres medium Land Use Designation: Scenic Viewshed 5 acres low

Within Inventoried Roadless Area? No Estimated timber volume: 400 mbf

Harvest Treatment: 20-30% retention, leave trees in clumps east of the road; leave trees either in

clumps or scattered to the west of the road

**Logging/Transportation Systems:** Cable yarding / one temporary road

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: Stream 1 is Class IV, Channel Type HC5

Stream 2 is Class III, Channel Type HC5

Mitigation: Stream 1: Apply BMP 13.16 (Stream Channel Protection). Use partial suspension and

split line yarding where feasible.

Stream 2: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a

(Buffer Design and Layout), and 13.16.

Concern: A temporary road from existing Road 6245 provides continuous landings through the unit.

Mitigation: Remove all drainage structures from the temporary road to restore natural drainage

patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

#### Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

Concern: A portion of the unit is visible from Wrangell Narrows and Crystal Mountain.

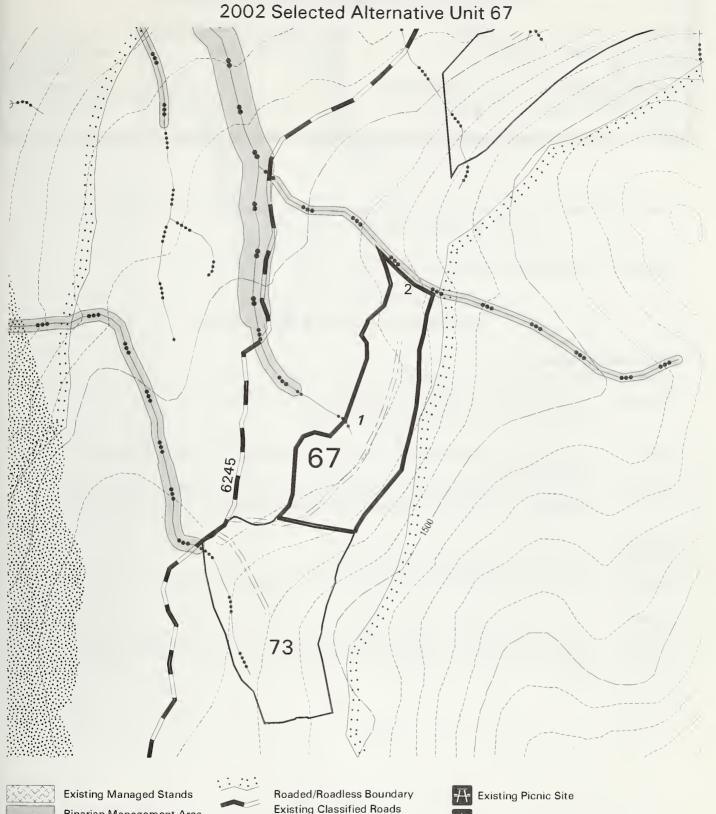
Mitigation: Unit size and green tree retention specified for the stand will meet the Partial Retention

VQO.

#### Wetlands

Concern: There are 5 acres of muskeg/forested wetland mosaic along the southern boundary.

Mitigation: Design boundary to avoid muskeg areas.





Existing Managed Stands Riparian Management Area Beach Buffer Old-growth Reserves Lakes

Proposed Unit Boundaries AHMU-Class 1 Streams AHMU-Class 2 Streams AHMU-Class 3 Streams AHMU-Class 4 Streams



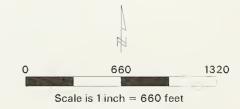
Roaded/Roadless Boundary Existing Classified Roads Existing Closed Roads Proposed Temporary Roads 500-ft. Contour Interval 100-ft. Contour Interval Stream Numbers



Proposed Dispersed Picnic Site Proposed Dispersed Camp Site



Existing Turnout with Camp Site



Unit #: 73 Unit Size : 22 acres

Aerial Photo: 1998 1798-234 Volume strata: 12 acres high VCU: 448 8 acres medium

Land Use Designation: Scenic Viewshed 3 acres low

Within Inventoried Roadless Area? No Estimated timber volume: 470 mbf

Harvest Treatment: 20-30% retention, leave trees in clumps east of the road; leave trees either in

clumps or scattered to the west of the road

**Logging/Transportation Systems:** Cable yarding / one temporary road

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: Stream 1 is Class IV, Channel Type HC1

Mitigation: Apply BMP 13.16 (Stream Channel Protection). Use partial suspension and splitline

yarding and leave reserve trees where feasible.

Concern: A temporary road from existing Road 6245 provides continuous landings along the lower

portion of the unit.

Mitigation: Remove all drainage structures from the temporary road to restore natural drainage

patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

#### Wildlife

Concern: The unit contains high value marten habitat.

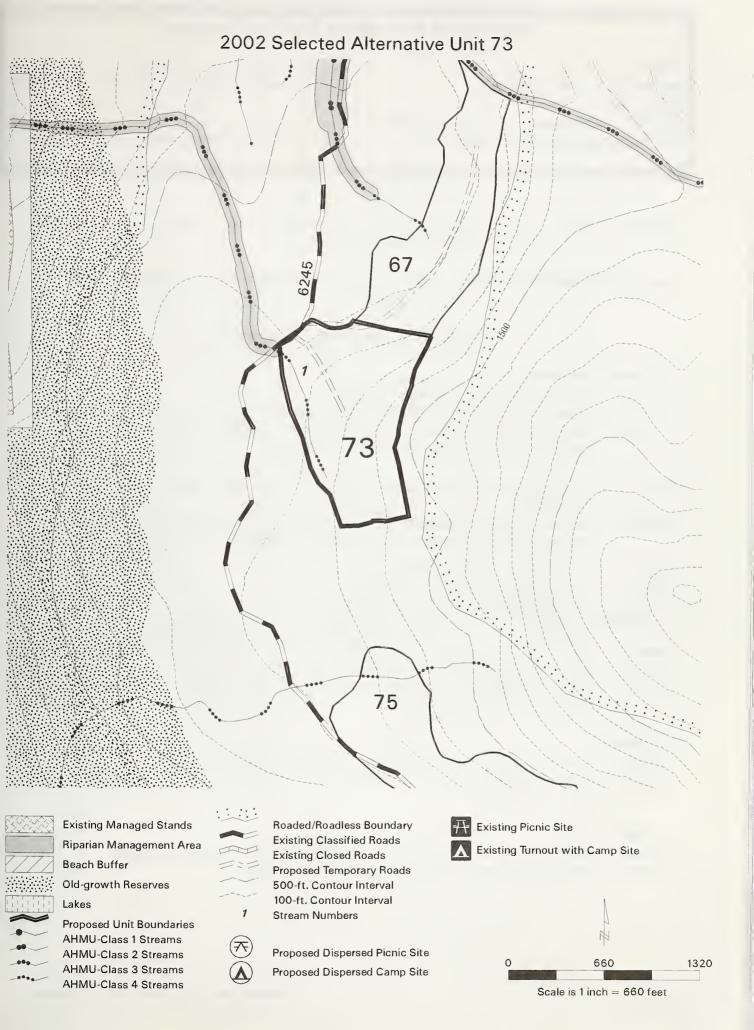
Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

#### Scenery

Concern: A portion of the unit is visible from Wrangell Narrows and Crystal Mountain.

Mitigation: Unit size and green tree retention specified for the stand will meet the Partial Retention

VQO.



Unit #: 75 Unit Size: 22 acres

Aerial Photo: 1998 1798-235 Volume strata: 18 acres medium VCU: 448 5 acres low

Land Use Designation: Scenic Viewshed

Within Inventoried Roadless Area? No Estimated timber volume: 180 mbf

Harvest Treatment: 50-66% retention, remove trees in 3-acre or less corridors, leave some clumps

along Road 6245 where feasible

**Logging/Transportation Systems:** Cable yarding / one temporary road and existing Road 6245

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: Stream 1 is Class IV, Channel Type HC5

Streams 2, 3, and 4 are Class IV, Channel Type HC2

Mitigation: Apply BMP 13.16 (Stream Channel Protection). Use partial suspension and split line

yarding and leave reserve trees where feasible.

Concern: A temporary road in the southern half of the unit and existing Road 6245 provide landings

for this unit.

Mitigation: Remove all drainage structures from the temporary road to restore natural drainage

patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

#### Soils

Concern: Unstable slopes occur northeast of the unit.

Mitigation: The unit was modified to exclude the area of unstable slopes.

#### Scenery

Concern: A portion of the unit may be visible from the Wrangell Narrows.

Mitigation: Unit size and green tree retention specified for the stand will meet the Partial Retention

VQO.

#### Vegetation

Concern: Location makes the stand susceptible to potential windthrow.

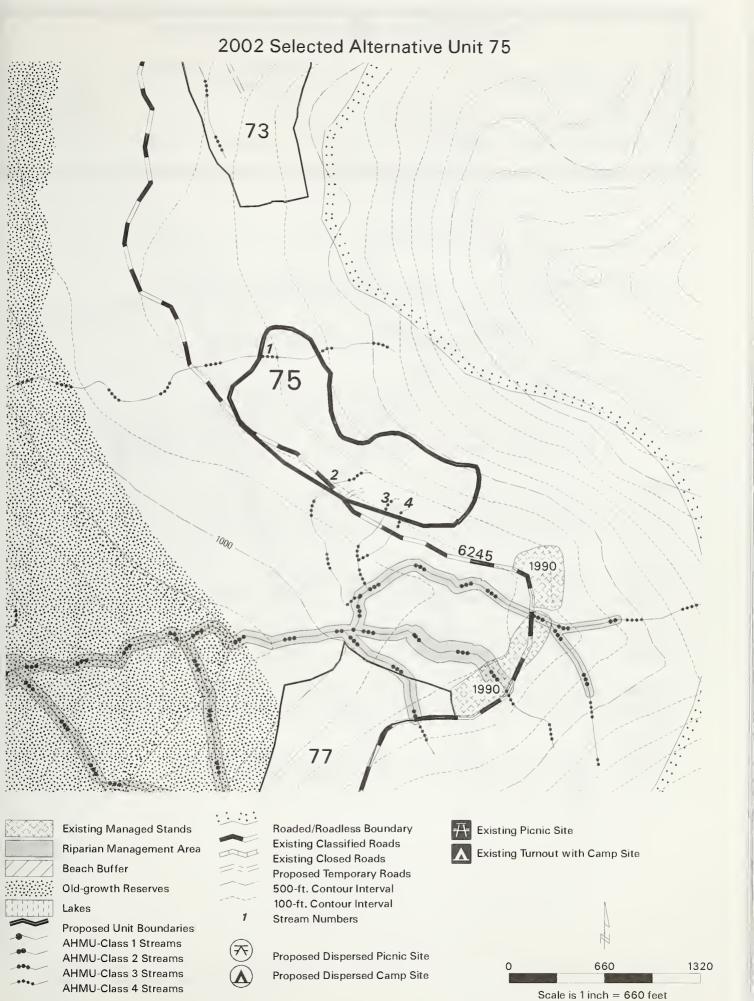
Mitigation: Trees displaying windfirm characteristics will be favored for retention and corridor width

will be minimized.

#### Wetlands

Concern: There are 5 acres of muskeg/forested wetland along the southern boundary.

Mitigation: Design boundary during layout to avoid muskeg areas.



Unit #: 77

Aerial Photo: 1998 1798-236

VCU: 448

Land Use Designation:

Scenic Viewshed

Within Inventoried Roadless Area? No

Unit Size: 23 acres

Volume strata: 19

9 acres high3 acres medium

1 acre low

Estimated timber volume:

170 mbf

Harvest Treatment: 50-66% retention, remove trees dispersed throughout the unit or in corridors

Logging/Transportation Systems: Cable yarding / existing Road 6245

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: Streams 1 and 2 are Class III and Channel Type HC6

Mitigation: No commercial timber harvest within the Riparian Management Area, defined as the V-

notch or side-slope break. Apply BMPs 12.6 (Riparian Area Designation and Protection),

12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection).

#### Soils

Concern: The southern unit boundary is adjacent to steep slopes > 72%. Mitigation: The unit boundary was modified to avoid any unstable slopes.

#### Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Concern: Red-tailed hawk nest north of the unit.

Mitigation: A 600-foot no-harvest buffer will be maintained around the nest.

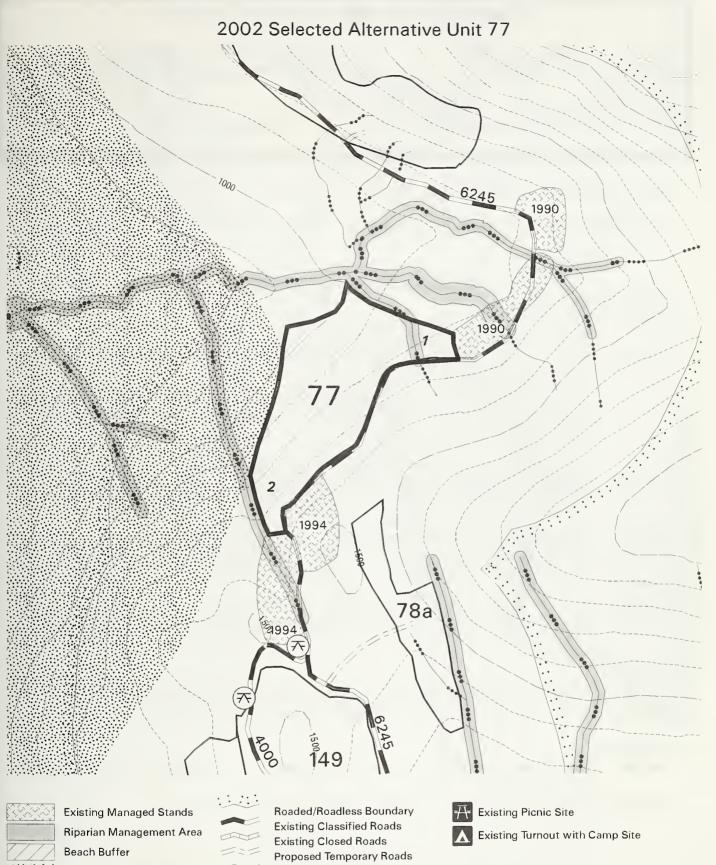
Concern: The unit is adjacent to the Wrangell Narrows Old-growth Habitat Reserve. Mitigation: The unit boundary was modified to avoid the Old-growth Habitat Reserve.

#### Scenery

Concern: A portion of the unit may be visible from the Wrangell Narrows.

Mitigation: Unit size and green tree retention specified for the stand will meet the Partial Retention

VQO.





Old-growth Reserves

Lakes

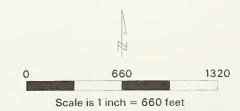
Proposed Unit Boundaries AHMU-Class 1 Streams AHMU-Class 2 Streams AHMU-Class 3 Streams AHMU-Class 4 Streams



500-ft. Contour Interval 100-ft. Contour Interval Stream Numbers



Proposed Dispersed Picnic Site Proposed Dispersed Camp Site



Unit #: 78a Unit Size: 9 acres

Aerial Photo: 1998 1798-237 Volume strata: 7 acres high 2 acres medium

VCU: 452

Land Use Designation: Scenic Viewshed

Within Inventoried Roadless Area? No. Estimated timber volume: 190 mbf

**Harvest Treatment:** 20-30% retention, leave trees in clumps

**Logging/Transportation Systems:** Cable yarding / one temporary road

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: Stream 1 is Class IV, Channel Type HC6

Stream 2 is Class III, Channel Type HC6

Mitigation: Stream 1: Apply BMP 13.16 (Stream Channel Protection). Use partial suspension and

split line yarding where feasible.

Stream 2: No commercial timber harvest within the Riparian Management Area, defined as the V-notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a

(Buffer Design and Layout), and 13.16.

Concern: A temporary road provides access to the middle of the unit.

Remove all drainage structures from the temporary road to restore natural drainage Mitigation:

patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil.

Wildlife

The unit contains high value marten habitat. Concern:

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

Concern: A portion of the unit is visible from Wrangell Narrows.

Mitigation: Unit size and green tree retention specified for the stand will meet the Partial Retention

VOO.

Wetlands

Entire unit is classed as muskeg/forested wetland or forested upland/wetland mosaic. Concern:

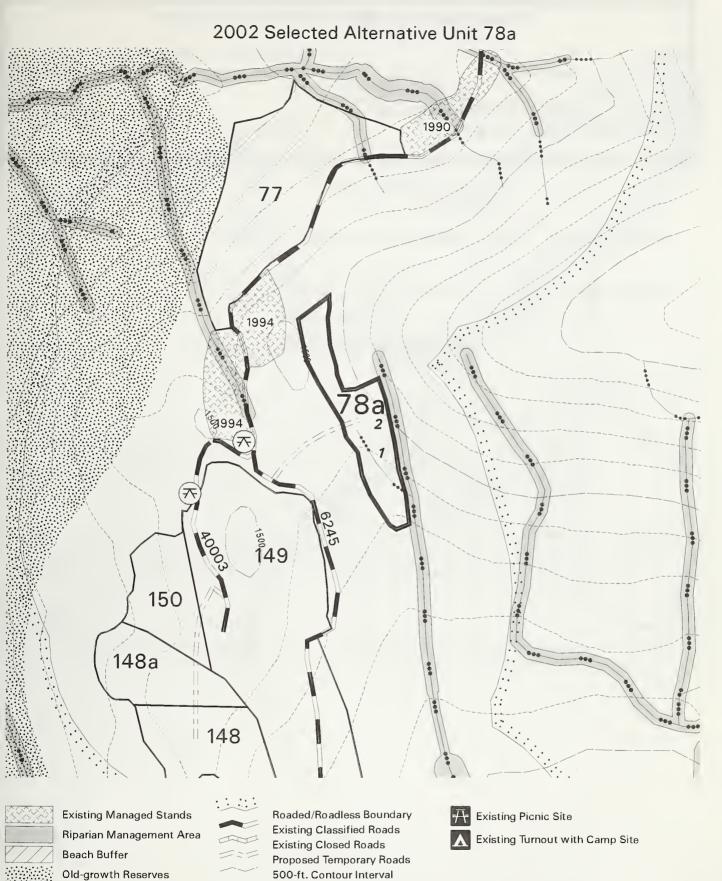
Mitigation: Avoid areas of muskeg, where practicable. Achieve suspension to minimize damage.

Recreation

This unit would be visible from the proposed picnic site at the junction of existing Roads Concern:

6245 and 40003.

Mitigation: The high amount of tree retention will lessen the visual impacts.





Lakes

Proposed Unit Boundaries AHMU-Class 1 Streams AHMU-Class 2 Streams AHMU-Class 3 Streams AHMU-Class 4 Streams

100-ft. Contour Interval Stream Numbers

Proposed Dispersed Picnic Site Proposed Dispersed Camp Site



Unit #: 92 Unit Size: 14 acres

Aerial Photo: 1999 2398-98 Volume strata: 2 acres high VCU: 452 2 acres medium

Land Use Designation: Modified Landscape 10 acres low

Within Inventoried Roadless Area? No Estimated timber volume: 240 mbf

**Harvest Treatment:** 20-30% retention, leave trees scattered or in clumps

Logging/Transportation Systems: Shovel yarding / one temporary road

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: Stream 1 is Class II, Channel Type HC1

Stream 2 is Class II, Channel Type HC2

Mitigation: No commercial timber harvest within 100'. No programmed commercial timber harvest

within the Riparian Management Area, or 100'. Apply BMPs 12.6 (Riparian Area

Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel

Protection).

Concern: A temporary road from existing Road 6282 provides access to the unit for shovel yarding.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.

#### Wetlands

Concern: There are 10 acres of forested wetland within the northern two-thirds of the unit.

Mitigation: Avoid harvesting trees on areas that are unsuitable for timber production.



Unit #: 93 Unit Size: 24 acres

Aerial Photo: 1999 2398-99

VCU: 452

Volume strata: 10 acres medium acres low

Land Use Designation: Modified Landscape

Within Inventoried Roadless Area? No Estimated timber volume: 390 mbf

Harvest Treatment: 20-30% retention, leave trees scattered or in clumps

Logging/Transportation Systems: Shovel yarding / one temporary road

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: Stream 1 is Class II, Channel Type MC2

Stream 2 is Class III, Channel Type HC3 Stream 3 is Class III, Channel Type MC1

Mitigation: Stream 1: No commercial timber harvest within 100'. No programmed commercial timber

harvest within the remainder of the Riparian Management Area, defined as the side slope break. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer

Design and Layout), and 13.16 (Stream Channel Protection).

Stream 2: No commercial timber harvest within the Riparian Management Area, defined

as the V-notch. Apply BMPs 12.6, 12.6a, and 13.16.

Stream 3: No programmed commercial timber harvest within the Riparian Management

Area, defined as the side slope break. Apply BMPs 12.6, 12.6a, and 13.

Concern: A temporary road from existing Road 6282 provides access to the unit for shovel yarding. Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

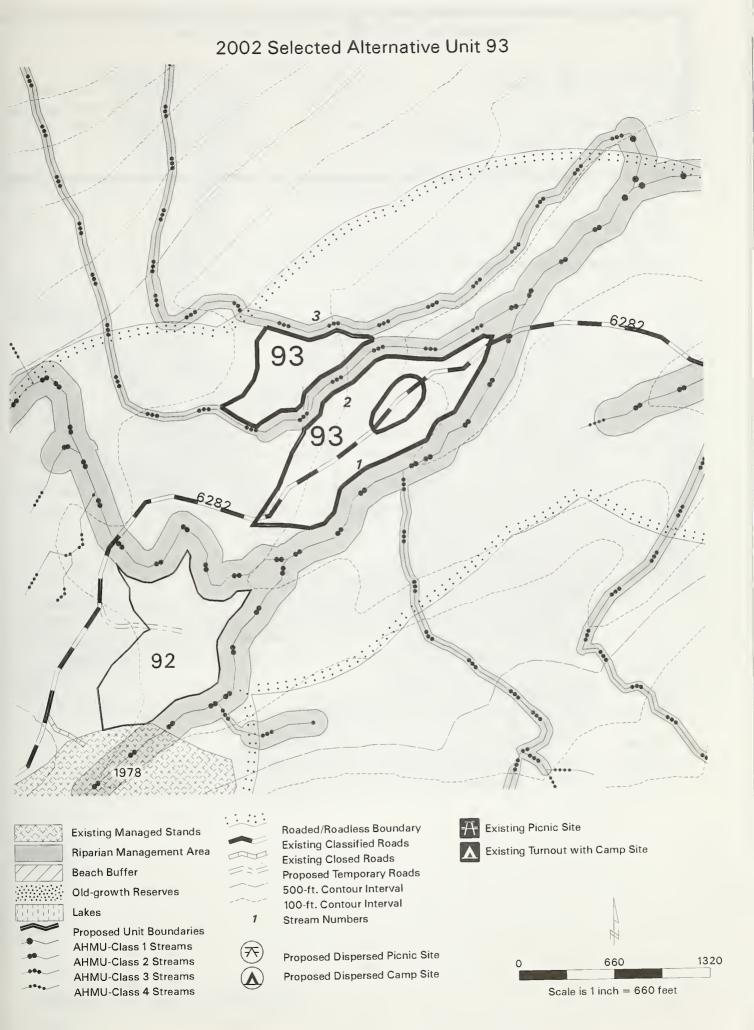
drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.

Wetlands

Concern: There are 20 acres of forested wetland within the unit.

Mitigation: Avoid harvesting trees on areas that are unsuitable for timber production.



Unit #: 98 Unit Size: 16 acres

Aerial Photo: 1999 2398-155 Volume strata: 8 acres high VCU: 452 4 acres medium

Land Use Designation: Modified Landscape 6 acres low

Within Inventoried Roadless Area? No Estimated timber volume: 275 mbf

**Harvest Treatment:** 50-66% retention, remove trees dispersed throughout the unit

Logging/Transportation Systems: Cable yarding / one temporary road and existing Road 6281

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: Stream 1 is Class II, Channel Type HC1/MM1

Stream 2 is Class I, Channel Type HC1

Mitigation: Stream 1: No commercial timber harvest within 100'. No programmed commercial timber

harvest within the Riparian Management Area, or 120'. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel

Protection).

Stream 2: No commercial timber harvest within 100'. No programmed commercial timber

harvest within the Riparian Management Area, or 100'. Apply BMPs 12.6, 12.6a, and

13.16.

Concern: A temporary road provides access to this unit from existing Road 6281. Road 6281 is

presently closed to traffic due to alder growth on the roadway.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil. After harvest, close Road 6281 beyond the proposed recreation parking area at MP 0.5, remove all drainage structures past the parking site, and add waterbars as needed.

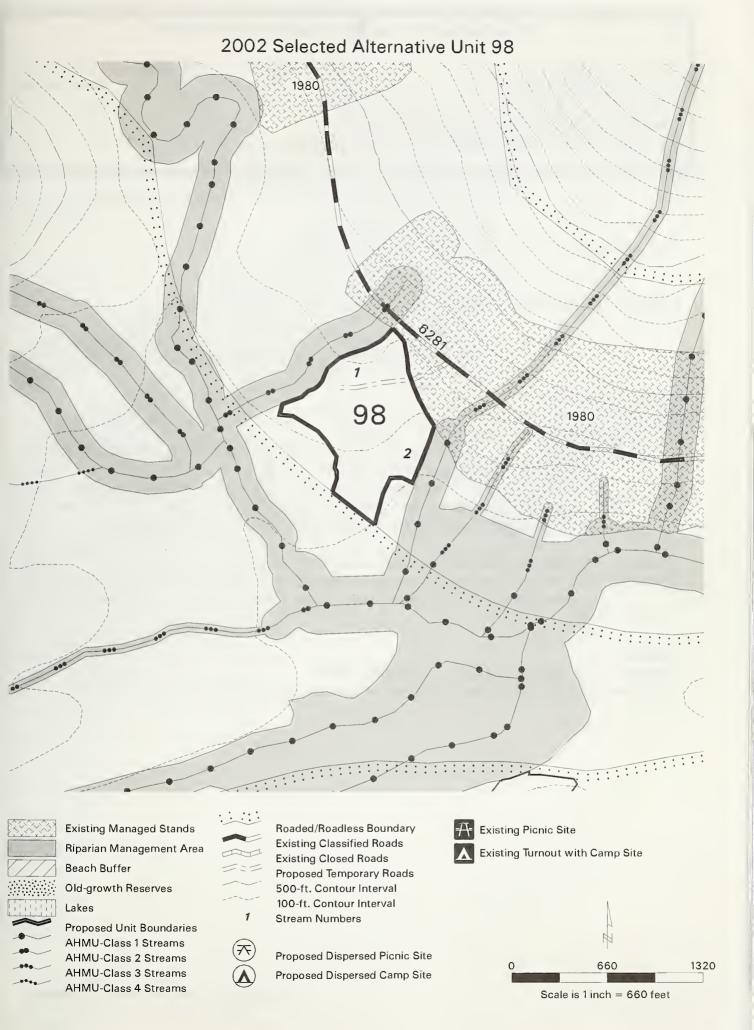
Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

#### Wetlands

Concern: There are 7 acres of forested wetland within the southern half of the unit. Mitigation: Avoid harvesting trees on areas that are unsuitable for timber production.



Unit #: 102 Unit Size: 14 acres

Aerial Photo: 1999 2398-156 Volume strata: 11 acres medium

VCU: 452

Land Use Designation: Modified Landscape

Within Inventoried Roadless Area? No Estimated timber volume: 220 mbf

**Harvest Treatment:** 20-30% retention, leave trees scattered or in clumps

**Logging/Transportation Systems:** Shovel yarding / one temporary road

# **Resource Concerns & Mitigations**

## Watershed/Fisheries

Concern: Stream 1 is a Class IV, Channel Type HC1

Stream 2 is a Class I, Channel Type MM1

Mitigation: Stream 1: Apply BMP 13.16 (Stream Channel Protection). Use partial suspension and

split line yarding and leave reserve trees where feasible.

Stream 2: No commercial timber harvest within 100'. No programmed commercial timber harvest within the Riparian Management Area, or 120'. Apply BMPs 12.6 (Riparian Area

Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16.

Concern: A temporary road provides access to this unit from existing Road 6282.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

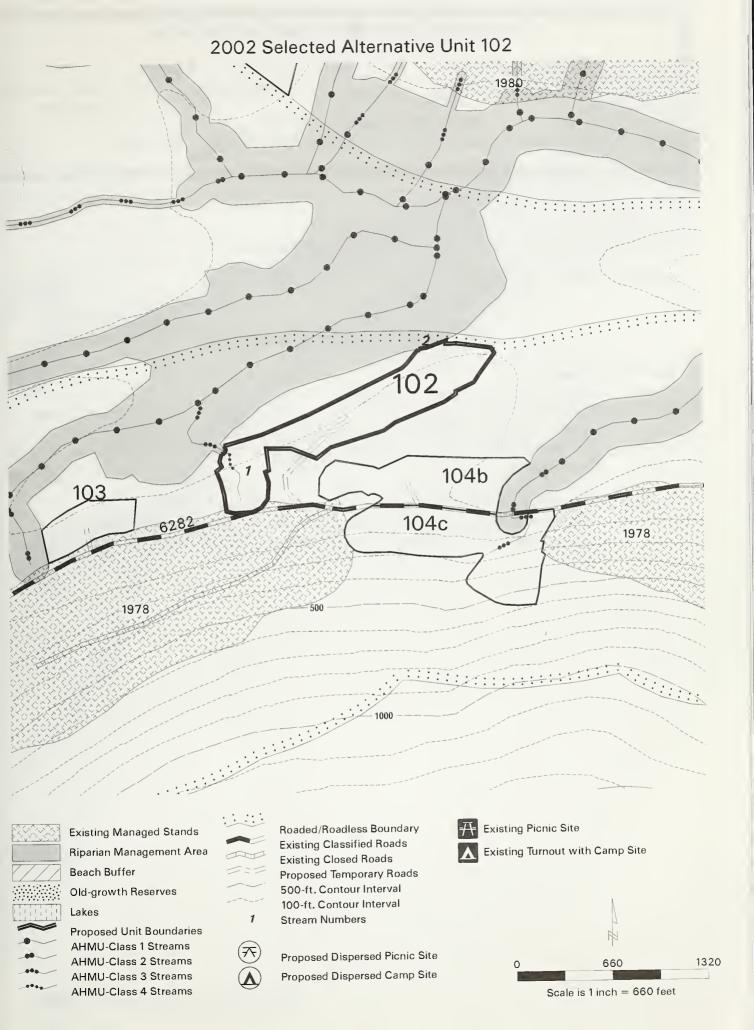
drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.

## Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.



Unit #: 103 Unit Size: 4 acres

Aerial Photo: 1998 2198-37 Volume strata: 2 acres medium VCU: 452

Land Use Designation: Modified Landscape

Within Inventoried Roadless Area? No Estimated timber volume: 70 mbf

**Harvest Treatment:** 20-30% retention, leave trees scattered or in clumps

Logging/Transportation Systems: Shovel yarding / one temporary road

# **Resource Concerns & Mitigations**

## Watershed/Fisheries

Concern: Stream 1 is Class II, Channel Type MM1.

Mitigation: No commercial timber harvest within 100'. No programmed commercial timber harvest

within the Riparian Management Area, or 120'. Apply BMPs 12.6 (Riparian Area

Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel

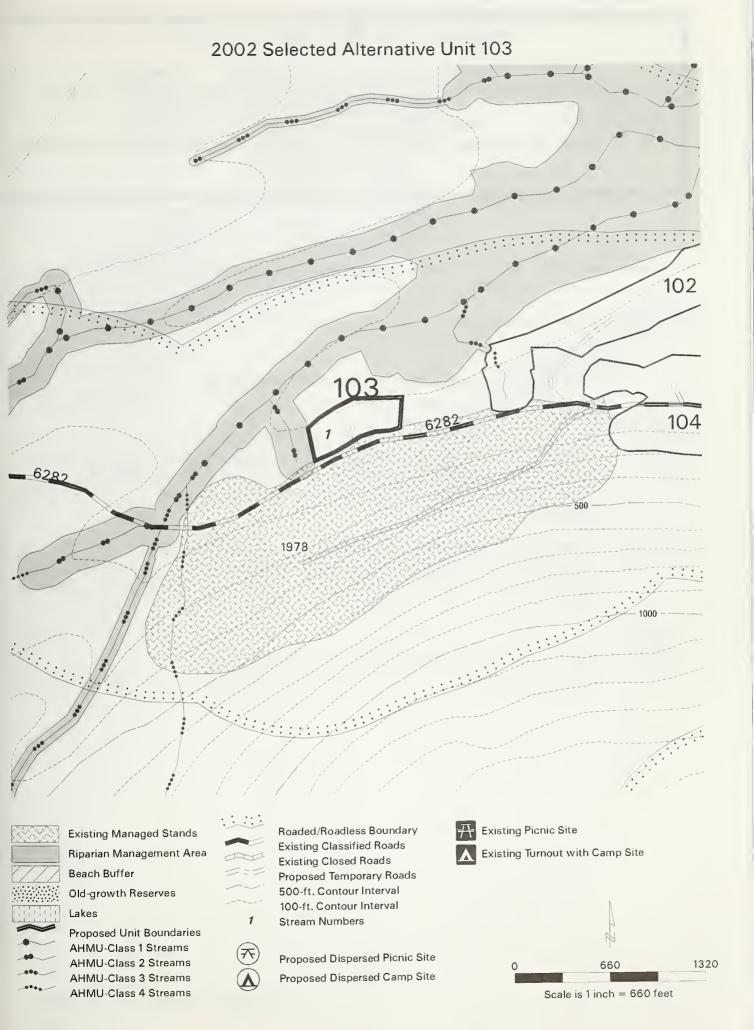
Protection).

Concern: A temporary road provides access to this unit from existing Road 6282.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.



104b Unit #:

Unit Size: 11 acres

Aerial Photo: 1999 2398-156

Volume strata:

VCU: 452

Land Use Designation:

**Modified Landscape** 

Within Inventoried Roadless Area? No.

Estimated timber volume:

180 mbf

acres low

**Harvest Treatment:** 

50-66% retention, remove trees 2-acre or less openings or dispersed throughout

the unit

Logging/Transportation Systems: Shovel yarding /one temporary road

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Stream 1 is Class II, Channel Type MC1 that flows into a Class I, Channel Type FP3 Concern:

Mitigation: No commercial timber harvest within 100'. No programmed commercial timber harvest

within the Riparian Management Area, or 130'. Apply BMPs 12.6 (Riparian Area

Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel

Protection).

Concern:

A temporary road provides access to this unit from existing Road 6282.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.

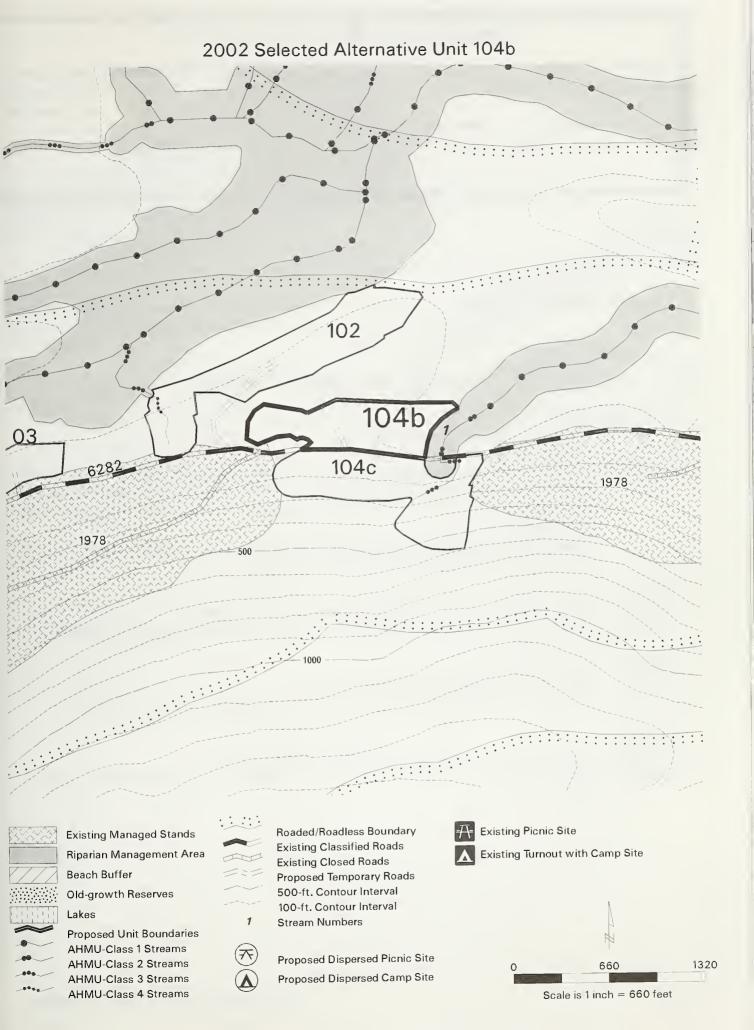
#### Wetlands

Concern:

There are 9 acres of muskeg/forested wetland within the unit.

Mitigation: Avoid muskeg areas when shovel yarding. Do not harvest trees on areas that are unsuitable

for timber production.



104c Unit #

Aerial Photo: 1999 2398-156

VCU: 452

Land Use Designation:

**Modified Landscape** 

Within Inventoried Roadless Area? No.

Unit Size · 13 acres

Volume strata: 7

acres high 2 acres medium

3 acres low

Estimated timber volume:

210 mbf

**Harvest Treatment:** 50-66% retention, remove trees in 2-acre or less corridors

Logging/Transportation Systems: Cable yarding / existing Road 6282 serves as the lower boundary

of the unit. The road will provide a continuous landing.

# **Resource Concerns & Mitigations**

## Watershed/Fisheries

Concern:

Stream 1 is Class II, Channel Type MC1 Stream 2 is Class III, Channel Type HC5

Mitigation: Stream 1: No commercial timber harvest within 100'. No programmed commercial timber

harvest within the Riparian Management Area, or 130'. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel

Protection).

Stream 2: No commercial timber harvest within the Riparian Management Area, defined

as the V-notch. Apply BMPs 12.6, 12.6a, and 13.16.

Soils

Concern: Steep slopes occur in the vicinity of the southern unit boundary.

Mitigation: The steep slopes along the southern unit boundary were avoided during unit design.

Wildlife

The unit contains high value marten habitat. Concern:

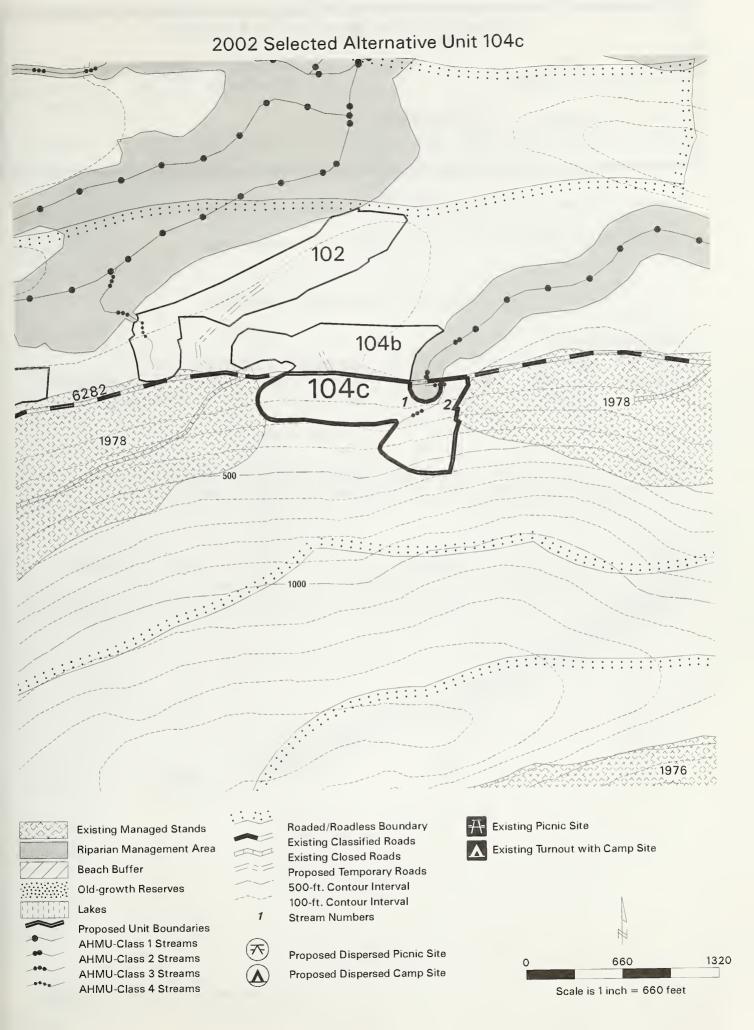
Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

Concern: The unit is visible in the background from Crystal Mountain.

Unit size and green tree retention specified for the stand will meet the Partial Retention Mitigation:

VQO.



105 Unit #: Unit Size: 17 acres

Aerial Photo: 1998 2198-26 Volume strata: 9 acres medium

VCU: 452 Land Use Designation: Scenic Viewshed

Within Inventoried Roadless Area? No. Estimated timber volume: 70

mbf

Harvest Treatment: 75% retention, remove trees in clumps or dispersed throughout the unit

Logging/Transportation Systems: Shovel yarding / one temporary road

# **Resource Concerns & Mitigations**

## Watershed/Fisheries

Concern: A temporary road provides access to this unit from existing Road 6282.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.

#### Wetlands

There are 5 acres of muskeg/forested wetland mosaic on eastern side of the unit. Concern:

Mitigation: Avoid muskeg areas where practicable and do not harvest trees on areas that are unsuitable

for timber production.

#### Scenery

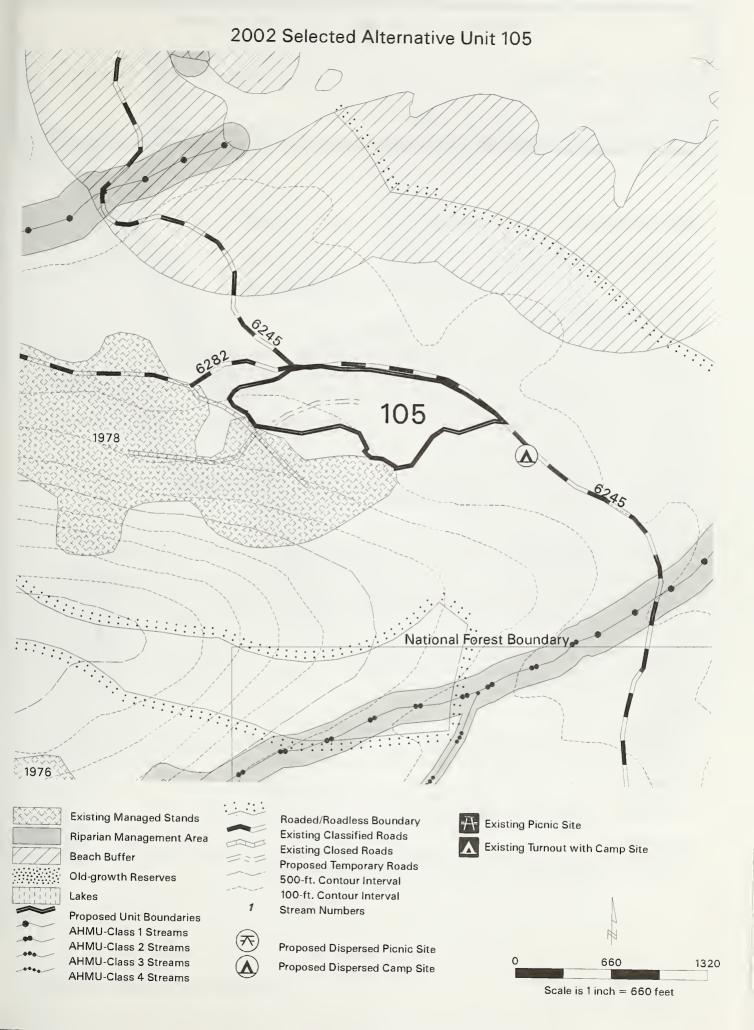
Concern: Unit is adjacent to existing Road 6245. Unit is within the foreground distance zone from

South Blind Slough, but is screened from view by vegetation.

Mitigation: Unit size and green tree retention specified for the stand will meet the Modification VQO.

2

acres low



Unit #: 121 Unit Size: 33 acres

Aerial Photo: 1999 2398-26 Volume strata: 25 acres high

VCU: 452

Land Use Designation: Scenic Viewshed

Within Inventoried Roadless Area? No Estimated timber volume: 340 mbf

**Harvest Treatment:** 75% retention, remove trees in 2-acre or less corridors

**Logging/Transportation Systems:** Cable yarding / one temporary road

## **Resource Concerns & Mitigations**

Watershed/Fisheries

Concern: Stream 1 is Class I, Channel Type MC2

Stream 2 is Class III, Channel Type HC5

Mitigation: Stream 1: No commercial timber harvest within 100'. No programmed commercial timber harvest

within the remainder of the Riparian Management Area, defined as the channel side-slope break. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout),

and 13.16 (Stream Channel Protection).

Stream 2: No commercial timber harvest within the Riparian Management Area, defined as the V-

notch. Apply BMPs 12.6, 12.6a, and 13.16.

Concern: A temporary road accesses the unit.

Mitigation: Close the temporary road and remove all drainage structures after harvest.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The proposed harvest treatment meets marten standards and guidelines throughout the unit.

Concern: The unit is adjacent to a beach buffer and the Woodpecker Cove Old-growth Habitat Reserve.

Mitigation: The unit boundary was adjusted to maintain a 1000ft beach buffer. The retention specified for the

unit will mitigate any effects along the Old-growth Habitat Reserve boundary.

Concern: The unit contains high value deer winter habitat.

Mitigation: Retention of 75% of the stand will maintain winter habitat of a slightly lower quality. The stand

will recover to full value in 40 years.

Scenery

Concern: A portion of the unit is visible from Sumner Strait.

Mitigation: Unit size and green tree retention specified for the stand will meet the Partial Retention VQO.

Avoid creating corridors perpendicular to existing Road 6245.

Vegetation

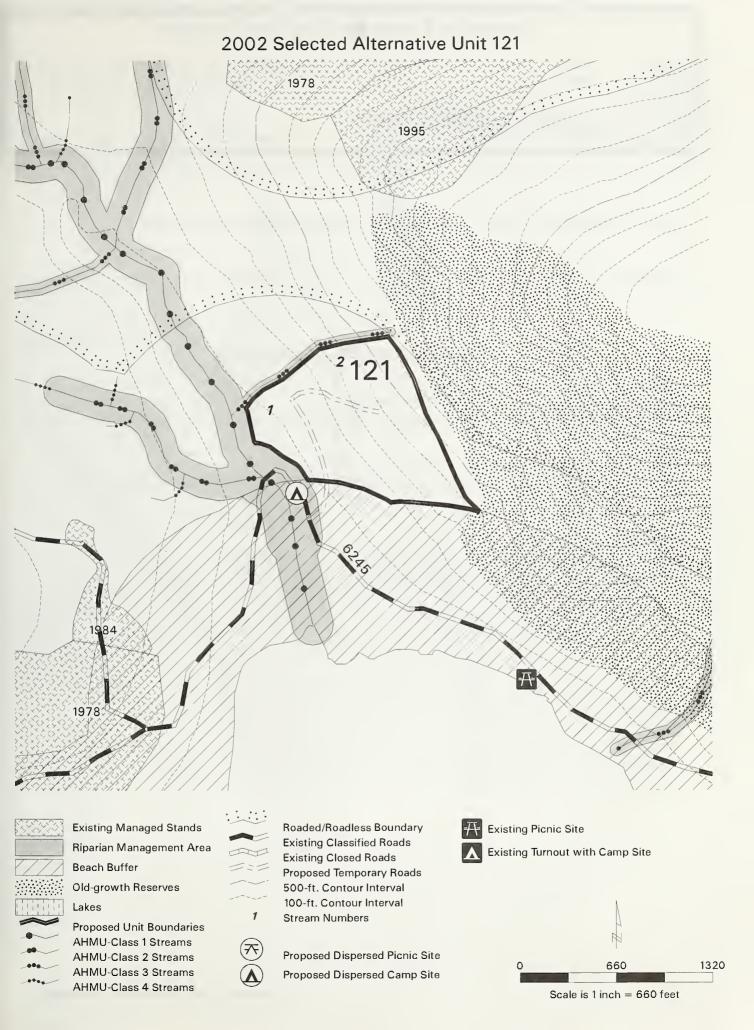
Concern: Location makes the stand susceptible to potential windthrow.

Mitigation: Trees displaying windfirm characteristics will be favored for retention.

Recreation

Concern: This unit may be partially visible from the proposed dispersed campsite/picnic area.

Mitigation: Retention of trees in the unit will lessen the visual impacts.



Unit #: 141 Unit Size: 7 acres

Aerial Photo: 1998 1798-238 Volume strata: 7 acres high

VCU: 448

Land Use Designation: Modified Landscape

Within Inventoried Roadless Area? No Estimated timber volume: 110 mbf

Harvest Treatment: 50-66% retention, remove trees dispersed throughout the unit

Logging/Transportation Systems: Cable yarding / Existing Road 6286 runs through the west part of

the unit.

# **Resource Concerns & Mitigations**

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Scenery

Concern: A portion of the unit is visible from Sumner Strait.

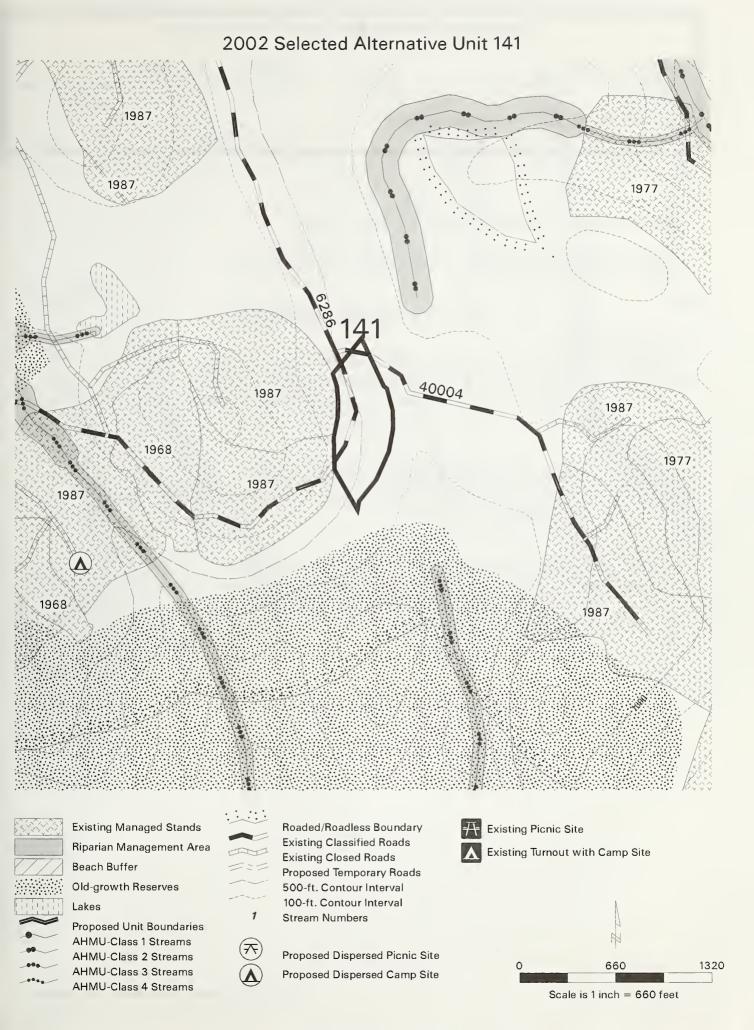
Mitigation: Unit size and green tree retention specified for the stand will meet the Partial Retention

VQO.

Vegetation

Concern: Location makes the stand susceptible to potential windthrow.

Mitigation: Trees displaying windfirm characteristics will be favored for retention.



Unit #: 148 12 acres Unit Size:

Aerial Photo: 1998 1798-237 Volume strata: 11 acres medium VCU: 452 1

Land Use Designation: Scenic Viewshed

Within Inventoried Roadless Area? No Estimated timber volume: 90 mbf

Harvest Treatment: 20-30% retention, leave trees scattered

Logging/Transportation Systems: Cable yarding /one temporary road

# **Resource Concerns & Mitigations**

### Watershed/Fisheries

Concern: A temporary road provides access to this unit from existing Road 40003.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.

## Scenery

Concern: A portion of the unit is visible from Wrangell Narrows.

Mitigation: Unit size (when combined with Unit 150) and green tree retention specified for the stand

will meet the Partial Retention VOO.

#### Vegetation

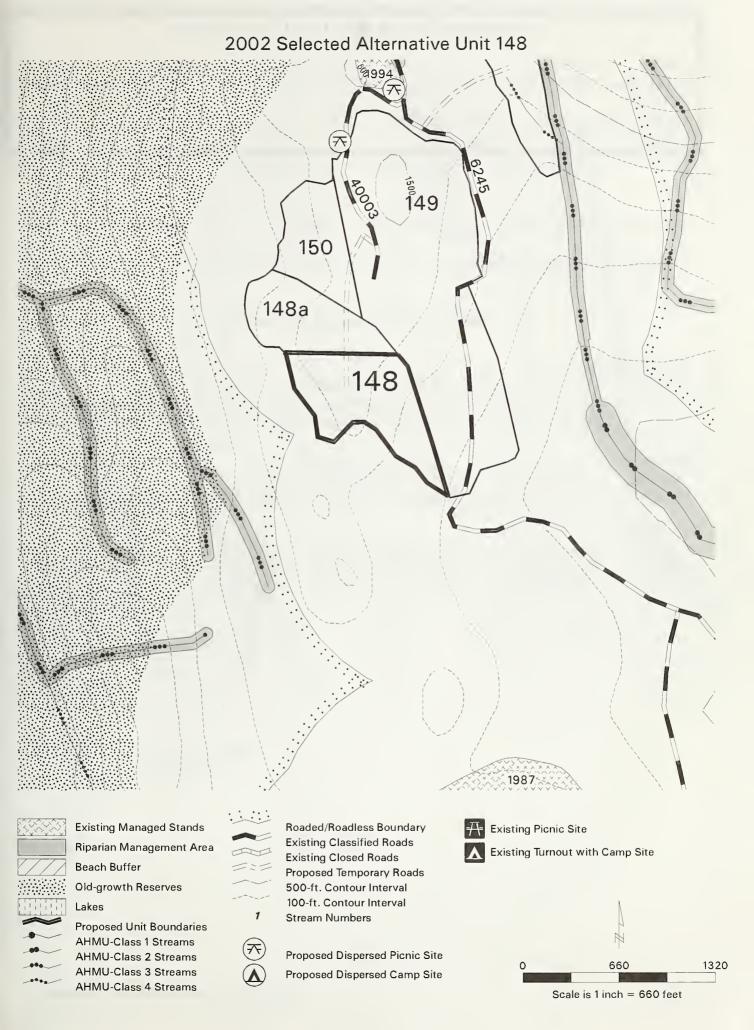
Concern: Location makes the stand susceptible to potential windthrow.

Retain a 100-foot windfirm buffer of approximately 25 dispersed small diameter trees on Mitigation:

> the eastern half of the northern boundary. Select trees with windfirm characteristics and make the unit boundary irregular in shape. The western boundary will be adjacent to a

muskeg.

acre low



Unit #: 148a Unit Size: 8 acres

Aerial Photo: 1998 1798-237 Volume strata: 7 acres medium

VCU: **452**Land Use Designation: Scenic Viewshed

Within Inventoried Roadless Area? No Estimated timber volume: 40 mbf

Harvest Treatment: 75% retention, remove trees in clumps or dispersed throughout the unit

Logging/Transportation Systems: Shovel yarding / one temporary road

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: A temporary road provides access to this unit from existing Road 40003.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.

Scenery

Concern: A portion of the unit is visible from Wrangell Narrows.

Mitigation: Unit size and green tree retention specified for the stand will meet the Retention VQO.

Vegetation

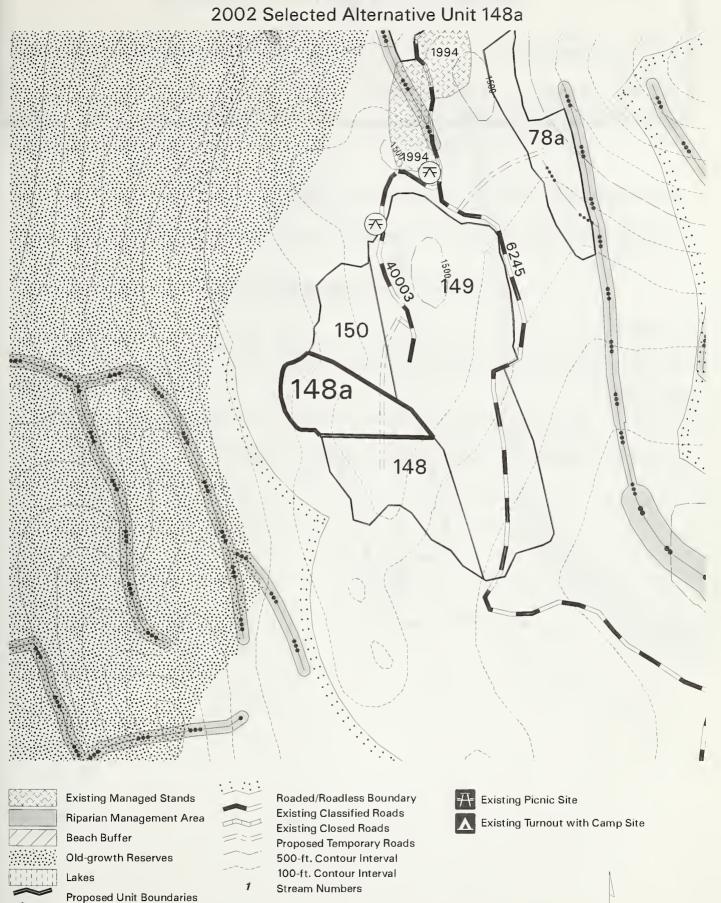
Concern: Location makes the stand susceptible to potential windthrow.

Mitigation: Trees displaying windfirm characteristics will be favored for retention. A windfirm buffer

will be retained in Unit 148 along the boundary shared with Unit 148a.

1

acre low



Proposed Dispersed Picnic Site

Proposed Dispersed Camp Site

AHMU-Class 1 Streams AHMU-Class 2 Streams

AHMU-Class 3 Streams

AHMU-Class 4 Streams



Unit #: 149 Unit Size: 42 acres

Aerial Photo: 1998 1798-237 Volume strata: 38 acres medium

VCU: 448
Land Use Designation: Scenic Viewshed

Within Inventoried Roadless Area? No Estimated timber volume: 480 mbf

Harvest Treatment: 50-66% retention, remove trees in 3-acre or less corridors

**Logging/Transportation Systems:** Cable yarding / existing Roads 6245 and 40003.

# **Resource Concerns & Mitigations**

Vegetation

Concern: Location makes the stand susceptible to potential windthrow.

Mitigation: Trees displaying windfirm characteristics will be favored for retention.

Recreation

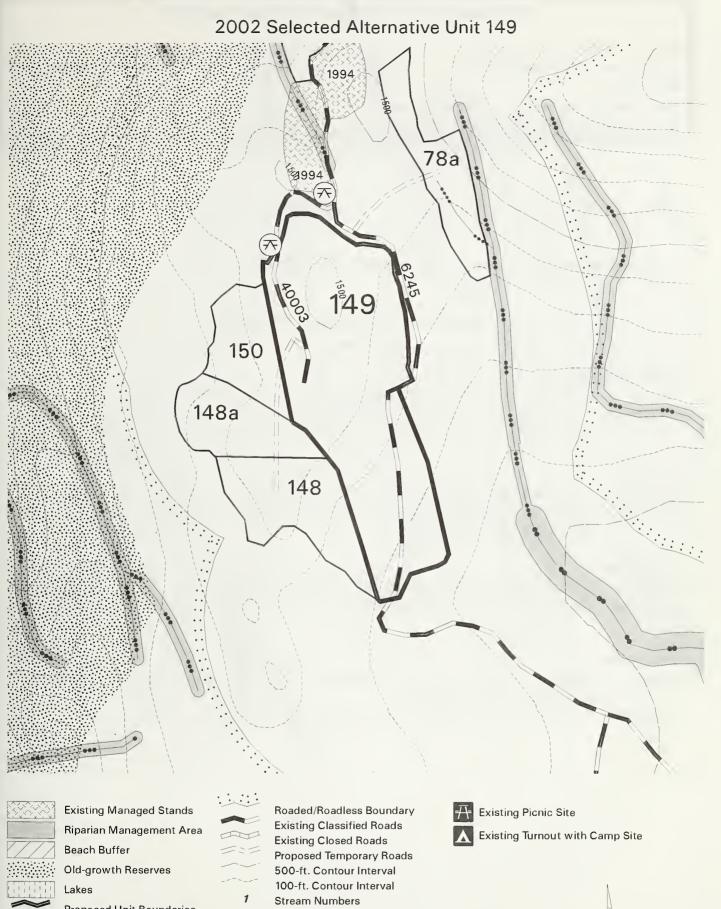
Concern: This unit may be partially visible from the future picnic/dispersed campsites along Road

40003 (Recreation Project #1).

Mitigation: Retention of trees in the unit will lessen the visual impacts.

1

acre low





Unit #: 150 Unit Size: 8 acres

Aerial Photo: 1998 1798-237 Volume strata: 5 acres medium VCU: 448 2

Land Use Designation: Scenic Viewshed

Within Inventoried Roadless Area? No. Estimated timber volume: 20 mbf

**Harvest Treatment:** 75% retention, remove trees dispersed throughout the unit

**Logging/Transportation Systems:** Shovel yarding / one temporary road

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

A temporary road provides access to this unit from existing Road 40003. Concern:

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.

## Scenery

Concern: A portion of the unit is visible from Wrangell Narrows.

Mitigation: Unit size (when combined with Unit 148a) and green tree retention specified for the stand

will meet the Retention VQO.

## Vegetation

Concern: Location makes the stand susceptible to potential windthrow. Mitigation: Trees with decay or dwarf mistletoe will be favored for removal.

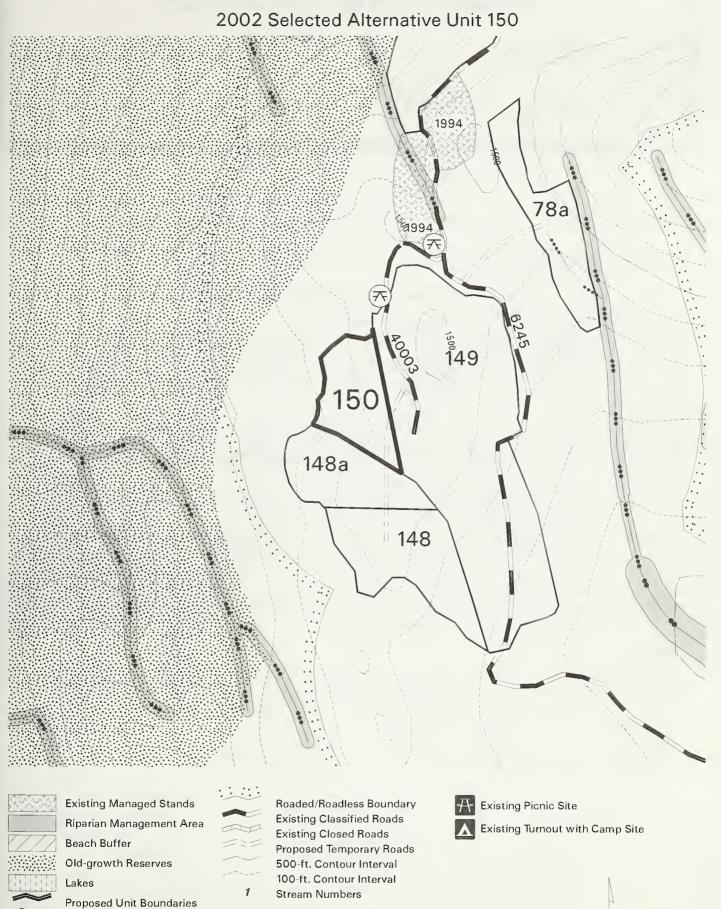
## Recreation

Concern: This unit may be partially visible from the future picnic/dispersed campsites along Road

40003 (Recreation Project #1).

Mitigation: Retention of trees in the unit will lessen the visual impacts.

acres low





Unit #: 161a Unit Size: 21 acres

Aerial Photo: 1998 2198-25 Volume strata: 20 acres high

VCU: 452

Land Use Designation: Scenic Viewshed

Within Inventoried Roadless Area? No Estimated timber volume: 150 mbf

Harvest Treatment: 75% retention, remove trees in clumps or dispersed throughout the unit

Logging/Transportation Systems: Shovel yarding / one temporary road

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: A temporary road provides access to this unit from existing Road 6245.

Mitigation: After harvest, remove all drainage structures from the temporary road to restore natural

drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed

soil.

Wildlife

Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment meets marten standards and guidelines throughout the unit.

Concern: The unit is adjacent to a beach buffer and the Forest Plan South Blind Slough Old-growth

Habitat Reserve.

Mitigation: The unit boundary was adjusted to maintain a 1000ft beach buffer. The Old-growth

Habitat Reserve has been adjusted and is no longer adjacent to the unit (see Appendix 1).

Concern: The unit contains high value deer winter habitat.

Mitigation: Retention of 75% of the stand will maintain winter habitat of a slightly lower quality. The

stand will recover to full value in 40 years.

Scenery

Concern: Most of the unit is visible from South Blind Slough.

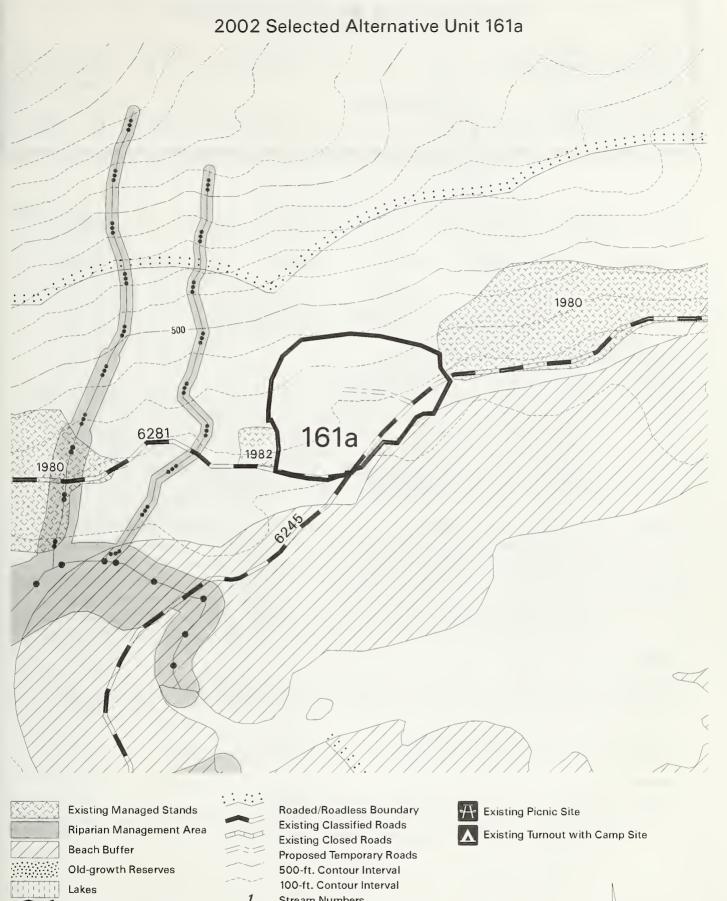
Mitigation: Green tree retention specified for the stand, the size of the unit, and screening from the

small island in South Blind Slough will meet the Partial Retention VQO.

Vegetation

Concern: Location makes the stand susceptible to potential windthrow.

Mitigation: Trees with decay or dwarf mistletoe will be favored for removal.





Unit #: 166a Unit Size: 14 acres

Aerial Photo: 1998 2198-23 Volume strata: 6 acres high

VCU: 452 6 acres medium

Land Use Designation: Modified Landscape

Within Inventoried Roadless Area? No Estimated timber volume: 160 mbf

Harvest Treatment: 50-66% retention, remove trees in clumps or dispersed throughout the unit

Logging/Transportation Systems: Shovel yarding / one temporary road and existing Road 6280

# **Resource Concerns & Mitigations**

#### Watershed/Fisheries

Concern: Stream 1 is Class II, Channel Type MC2

Mitigation: No commercial timber harvest within 100'. No programmed commercial timber harvest

within the remainder of the Riparian Management Area, defined as the channel side-slope break. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16 (Stream Channel Protection). Prevent in-stream

disturbance from road construction over stream. Apply BMP 14.6 (Timing Restrictions for

Construction Activities) for road construction over fish streams.

Concern: A temporary road provides access to this unit from existing Road 6280. Road 6280 is

presently closed to traffic due to alder growth on the roadway, and will be reopened for

timber harvest. The temporary road crosses a Class II stream.

Mitigation: After harvest, put Road 6280 into storage, remove drainage structures and add waterbars as

needed. Remove all drainage structures from the temporary road to restore natural

drainage patterns. Add additional waterbars as needed, and grass seed all areas of exposed soil. Apply BMP 14.6 for in-stream construction (installation and removal of culvert).

Wildlife

Concern: The south block of the unit contains high value marten habitat.

Mitigation: The harvest treatment will meet marten standards and guidelines throughout the unit.

Concern: The unit is adjacent to a beach buffer.

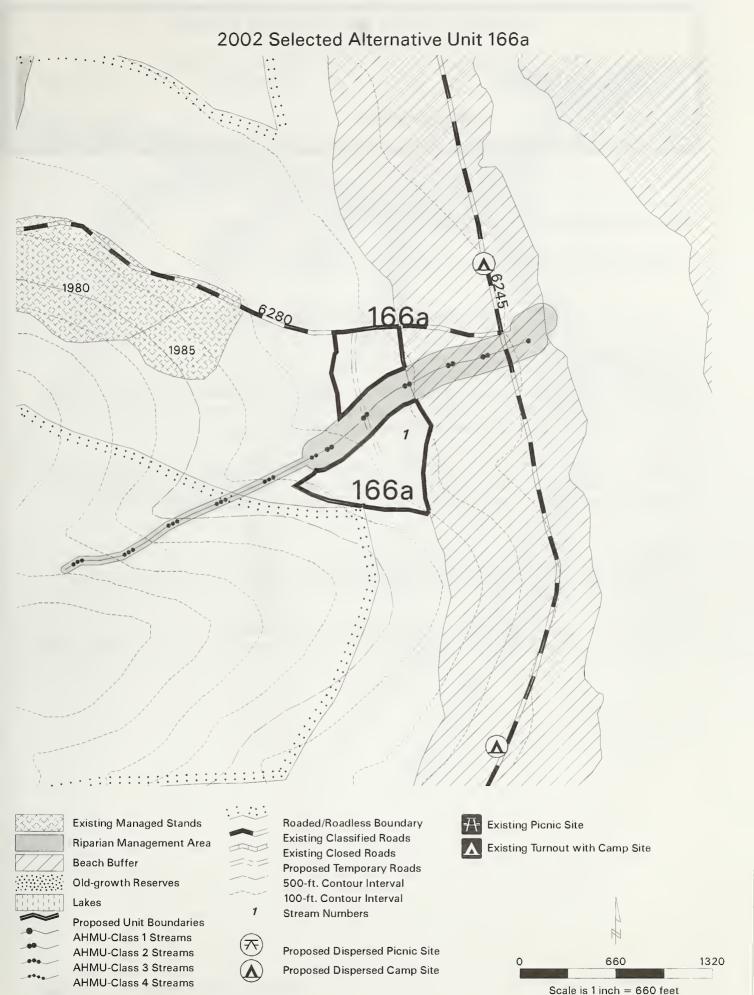
Mitigation: The unit boundaries were adjusted to maintain a 1000' beach buffer.

Scenery

Concern: Most of the unit is visible from South Blind Slough.

Mitigation: Green tree retention specified for the stand, the unit size, and screening from the small

island in the foreground will meet the Modification VQO.



Unit #: 174 Unit Size: 13 acres

Aerial Photo: 1999 2398-154 Volume strata: 13 acres high

VCU: **452** 

Land Use Designation: Modified Landscape

Within Inventoried Roadless Area? No Estimated timber volume: 300 mbf

Harvest Treatment: 20-30% retention, leave trees in clumps or corridors

**Logging/Transportation Systems:** Cable yarding / existing Road 6280

# **Resource Concerns & Mitigations**

## Watershed/Fisheries

Concern: Stream 1 is Class III, Channel Type HC1.

Mitigation: No commercial timber harvest within the Riparian Management Area, defined as the V-

notch. Apply BMPs 12.6 (Riparian Area Designation and Protection), 12.6a (Buffer

Design and Layout), and 13.16 (Stream Channel Protection).

Concern: Existing Road 6280 serves as the northern unit boundary. Road 6280 is presently closed to

traffic due to alder growth on the roadway, and will be reopened for timber harvest.

Mitigation: After harvest, put Road 6280 into storage, remove all drainage structures, and add

waterbars as needed.

Wildlife

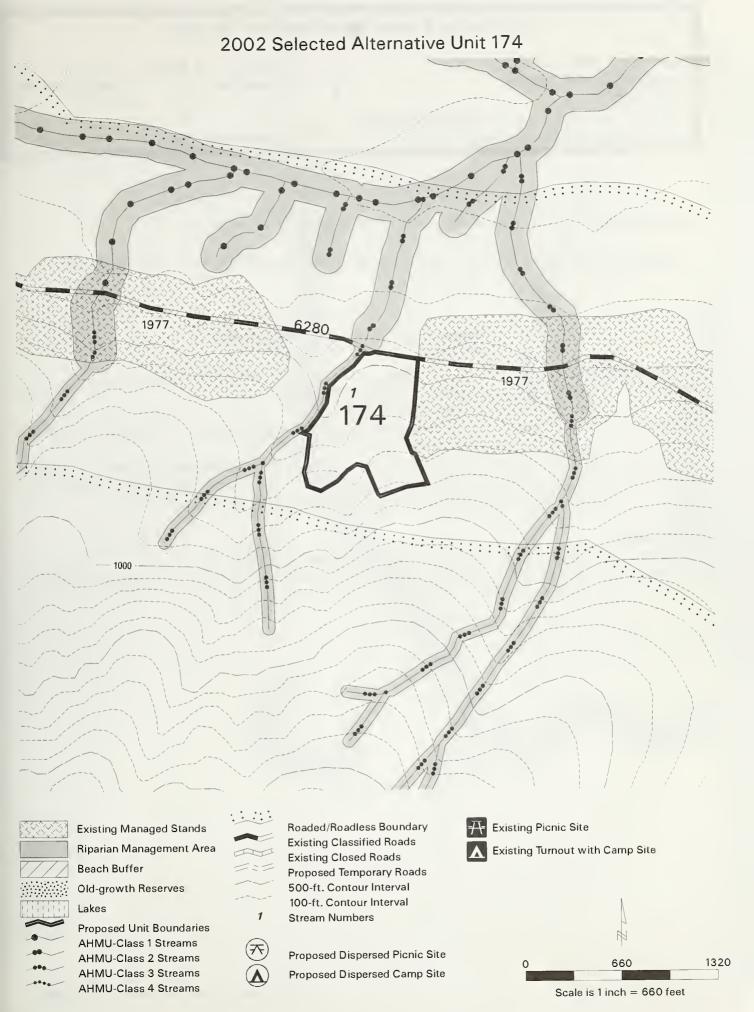
Concern: The unit contains high value marten habitat.

Mitigation: The harvest treatment will meet marten standards and guidelines throughout the unit.

Scenery

Concern: The unit is visible in the background from Crystal Mountain.

Mitigation: Unit size and green tree retention specified for the stand will meet the Modification VQO.



Unit #: 187 Unit Size: 5 acres

Aerial Photo: 1999 2398-152 Volume strata: 4 acres medium

VCU: **452** 

Land Use Designation: Modified Landscape

Within Inventoried Roadless Area? No Estimated timber volume: 70 mbf

Harvest Treatment: 20-30% retention, leave trees scattered or in clumps

Logging/Transportation Systems: Cable yarding / Existing Road 6246 serves as the upper unit

boundary.

# **Resource Concerns & Mitigations**

## Watershed/Fisheries

Concern: Streams 1 and 2 are Class IV, Channel Type HC2.

Stream 3 is Class II, Channel Type HC6

Mitigation: Streams 1 and 2: Apply BMP 13.16 (Stream Channel Protection). Use partial suspension

and split line yarding where feasible.

Stream 3: No commercial timber harvest within 100'. No programmed commercial timber harvest within the Riparian Management Area, or 100'. Apply BMPs 12.6 (Riparian Area

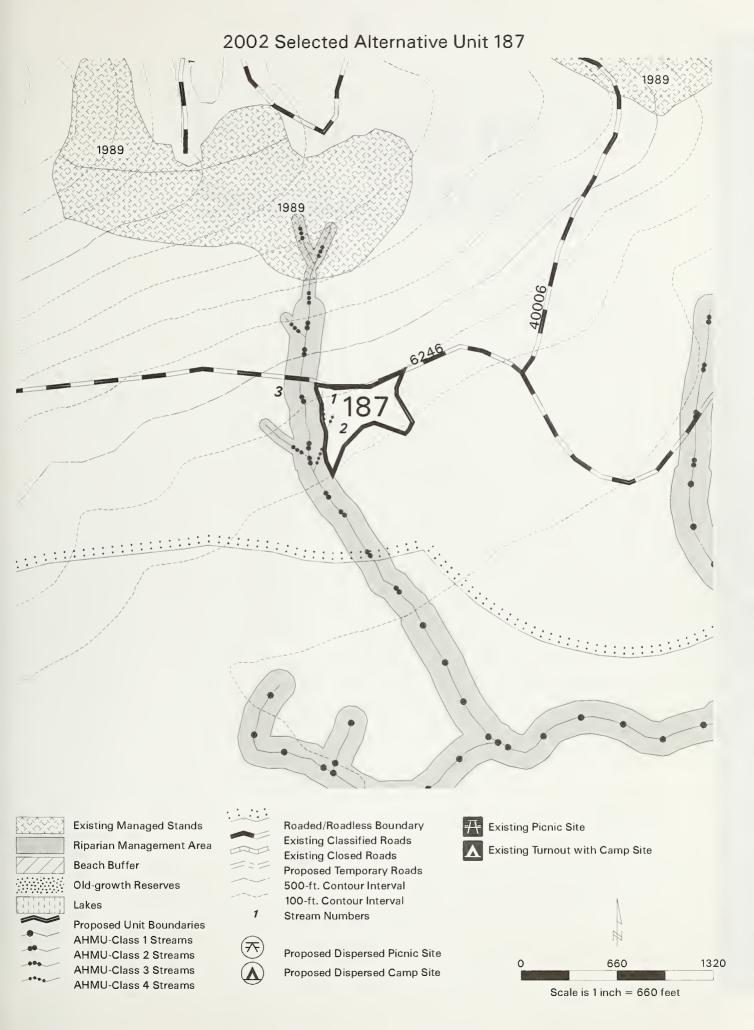
Designation and Protection), 12.6a (Buffer Design and Layout), and 13.16.

## Vegetation

Concern: Location makes the stand susceptible to potential windthrow.

Mitigation: Trees with decay or dwarf mistletoe will be selected for removal. A windfirm buffer will

be located along the Class II stream on the western boundary.





# Road Cards for Selected Alternative



## Purpose and Use

The road management objectives (RMOs) presented in this appendix establish the intended purpose, and display design, maintenance, and operation criteria (as per FSH 7709.55), for each National Forest System road in the Woodpecker Project Area. The information on the RMO form is part of a permanent database that can be updated periodically as access needs, issues, and budgets change. Existing roads with planned reconstruction or maintenance have a second section with site specific design criteria that will be used during design, construction, and initial monitoring of any road work proposed in this document. The map that follows this discussion (Figure ROD-5) shows existing classified roads and proposed temporary road locations for the Woodpecker Project Area.

## General Design Criteria

The general design criteria provide various descriptions of the type of road, and the intended purpose and future use of the road. From this information, the maintenance and operation criteria can be developed. This information is critical for determining whether a Corps of Engineer's permit will be required for segments of road crossing wetlands. Roads built solely for silvicultural purposes do not require these permits.

## Maintenance Criteria

The maintenance criteria include a discussion of how the road is to be maintained, centering on three strategies:

- Active: provide frequent cleanout of ditches and catch basins to assure controlled drainage. Control roadside brush to maintain sight distance. Grade as needed to maintain crown and running surface.
- **Storm Proof:** provide water bars, rolling dips, out sloping, etc., to assure controlled runoff until any needed maintenance can be performed on the primary drainage system. Control roadside brush to maintain passage.
- **Storage:** remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, revegetate.

The active maintenance strategy is applied to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. These roads are assigned Maintenance Level 3. The active maintenance strategy will also at times be applied to roads intended only for use by high clearance vehicles, or Maintenance Level 2 roads. This will usually be the case when log haul is expected in the near future.

An intermediate maintenance strategy is to **storm proof**, or stabilize, the road by providing roadway features such as drivable water bars, and out sloping to control runoff in case the primary drainage system of culverts and ditches is overwhelmed during a storm event. Each culvert will be evaluated as to where the water would go if the culvert were to fail to carry the high flow. A water bar or out slope at this location will minimize the potential of erosion of long stretches of ditch line or roadway. This is intended to be the primary maintenance strategy applied to roads assigned Maintenance Level 2.

Storage is intended to be the primary maintenance strategy on intermittent use roads during their closure cycle. Road Storage is defined in FSH 5409.17 as "the process/action of closing a road to vehicle traffic and placing it in a condition that requires minimum maintenance to protect the environment and preserve the facility for future use". In this strategy, bridges and culverts on live streams are completely removed to restore natural drainage patterns. Cross drains and ditch relief culverts will be bypassed with deep water bars but may be left in place to minimize the cost of re-using these roads in the future. Roads in storage are left in a self-maintaining state in order to use more road maintenance funds on the open drivable roads on the island. Maintenance Level 1, closure and basic custodial maintenance, is assigned.

The interdisciplinary team went through a process to define road management considerations, leading to a maintenance strategy to be applied to each road in the Woodpecker Project Area. The map on the facing page shows the desired future condition of each road in the project area as a result of the process. The work needed to meet the objectives can be accomplished on the roads along the haul route in these timber sales. Work needed on other roads to meet the desired objective will be scheduled as funding allows.

## Operation Criteria

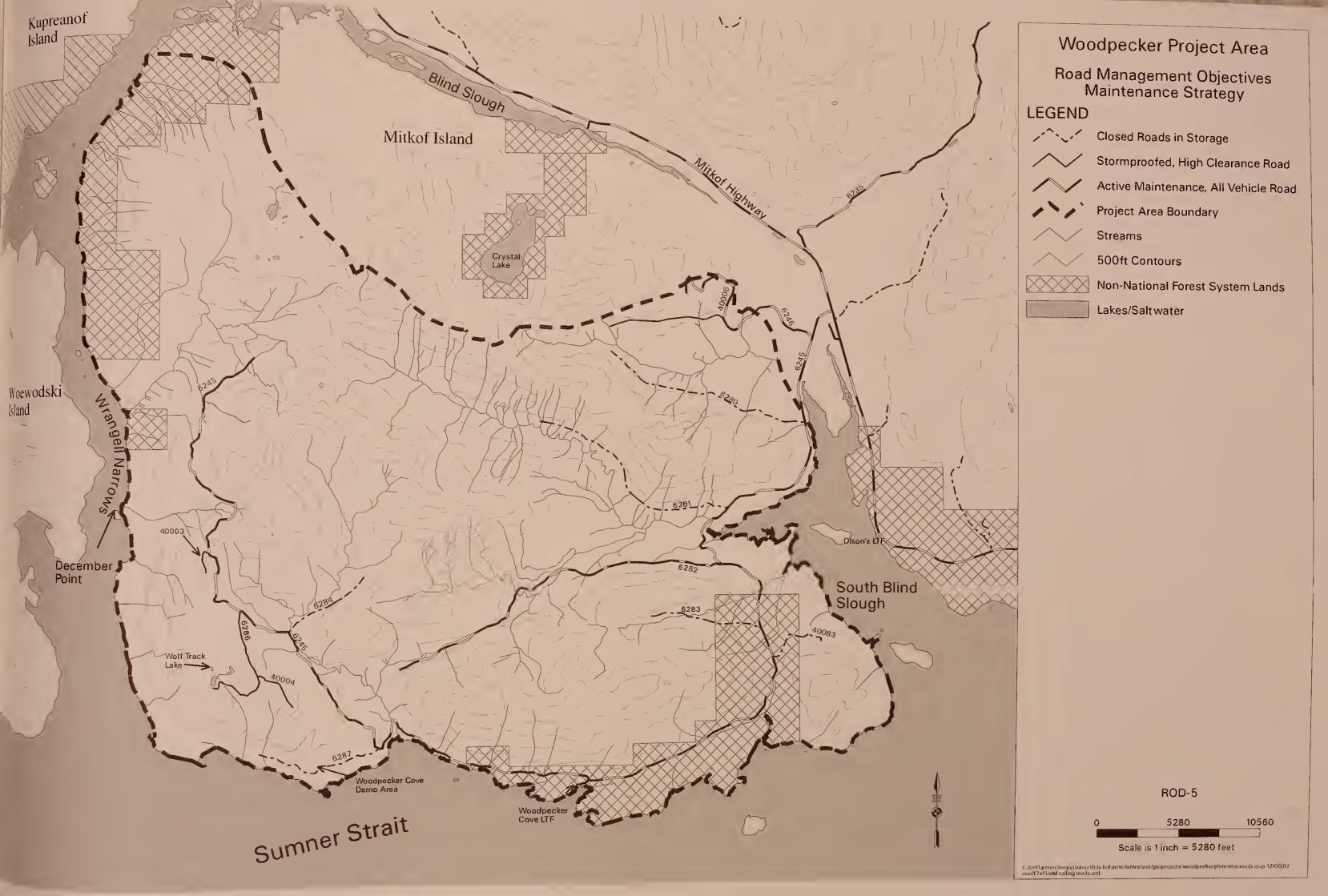
The operation criteria include a presentation of each of the five traffic management strategies identified in FSM 7731 (encourage, accept, discourage, prohibit, and eliminate) to be applied to different traffic classes on each road. The traffic management narrative describes what actions will be taken in order to apply each strategy. For example, if the strategy "eliminate" is prescribed for standard passenger and high clearance vehicles, the narrative describes the method to accomplish this, such as removal of stream crossing structures, gating, etc.

# Site Specific Design Criteria

The site-specific design criteria include road location objectives, wetland information, erosion control, proposed rock borrow sources and all streams within the project area with proposed construction or rehabilitation of stream crossing structures. The road location discussion

## Road Cards

documents why the road is proposed in a specific location, control points, and alternative routes considered (if any). A main location objective is to avoid crossing wetlands. At times, however, it is necessary to cross wetlands in order to minimize the total impact of a road. These areas are discussed, documenting areas of mapped wetlands and why the road is located across these areas. All fish streams are identified, as well as non-fish streams with sufficient flow to require a 48" or larger culvert. The stream crossing information describes the stream in enough detail to lead to a preliminary crossing structure recommendation and to evaluate the adequacy of the proposed structure.





## **GLOSSARY for RMO FORM VALUES:**

	SART III RIVIO FORIVI VALUES.
Project	The name of the project or NEPA document that addresses the environmental impacts of this road.
Land Use Designation	SV = Scenic Viewshed; ML = Modified Landscape
	SA = Special Interest Area; OG = Old-growth Habitat Reserve
	TP = Timber Production; NNF = Non-National Forest
Route Number	Normally only long-term Forest Development Roads are assigned road numbers.
Route Name	All long-term roads assigned numbers will be given names.
Termini	The beginning and ending location of the road. (MP = milepost)
Length (miles)	Best estimate of the length of road.
Functional Class	Arterial (A) = primary; Collector (C) = secondary; or Local (L) = tertiary.
Service Life	Short-term (less than 10 years) or Long-term. Long-term used in conjunction with Entry Cycle to be Long-term Constant (LC) or Long-term Intermittent (LI).
Width (ft)	Travelway width of road. Normal values are 14 feet and 16 feet.
Design Speed (mph)	10, 20, or 30 mph.
Critical Vehicle	The largest vehicle (by weight, size or unique shape) whose limited use on the road is necessary to complete the planned activity.
Design Vehicle	The vehicle frequently using the road that determines the minimum standard for a particular design element - passenger car, pick-up, logging truck, lowboy, rock truck, or yarding equipment.
Intended Purpose	Brief description of why this road is needed.
Maintenance Levels	Levels 1 through 5:
• Operational (Current	Level 1 - Closed, basic drainage maintenance
Condition)	Level 2 - High Clearance Vehicles
<ul> <li>Objective (Desired</li> </ul>	Level 3 - All Vehicles, low user comfort
<b>Future Condition)</b>	Level 4 - All Vehicles, moderate user comfort
	Level 5 - All Vehicles, high user comfort
Alaska Forest Practices Act	Road status as specified by the Alaska Forest Resources and Practices Regulations, 1993; either Active, Inactive, or Closed.
Highway Safety Act	Road open to general public without restrictive gates, prohibitive signs, or regulation other than restrictions based on size, weight, or class of registration; Yes or No.
Travel Management Strategy	Several values apply; see the Travelway Classification/Operation Guide. Lists classes of traffic which will be encouraged, accepted, discouraged, prohibited, or eliminated.

Project			System	Land Use Designation
Woodpeck	er		Mitkof	SA, OG, ML, SV
Route No.	Route Name		Begin Termini	End Termini
6245	Woodpeck	er	MP 20.5 Mitkof Hwy	vy MP 18.4
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos
0.0	18.4	Existing	PSG C-3	'98 1798-233, 235, 237, 2198-14-27,33, 2098- 153, '99 2398-25-27, 2398-92, 2398-96
Functional	Service	Genera	l Design Criteria	a and Elements Design
Ciass	Life	Surface		Width Speed Critical Vehicle Design Vehicle
Collector	LC	Crushed (	gravel/shot rock	16' 20 Lowboy Logging Truck

#### Intended Purpose/Future Use

Public access, recreation, general forest management and administration. Road will remain open to all traffic. Provides access to Ohmer Creek Loop Trail at milepost 0.1.

#### Maintenance Criteria

		***************************************		
Bmp	Emp	Operational Maintenance Levei (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	18.4	3 (open to standard passenger vehicles)	3	Active

#### Maintenance Narrative

Active: Provide frequent cleanout of ditches and catch basins to assure controlled drainage. Control roadside brush, grade as needed to maintain crown and running surface.

#### **Operation Criteria**

Jurisdiction: **National Forest Ownership** Highway Safety Act: Yes N/A Encourage: Travel All vehicles, ATVs Accept: Management N/A Discourage: **Strategies** N/A Prohibit: N/A Eliminate:

**Travel Management Narrative** 

Public travel on this road occurs year round when snow conditions permit. Receives high use during deer and moose hunting seasons in the fall, used for firewood access, berry picking, sightseeing from May through November. Crushed gravel surfacing currently to milepost 7, continue crushed gravel to junction of Road 40003 at milepost 15.3.

Approved

strict Ranger

Date

## Site Specific Design Criteria Road 6245

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8). A small roadside slide occurred in October 1999 on this road near milepost 15. The slide has since been repaired.

ROCK PITS: During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6).

STREAM CROSSINGS: There are five sites that were identified in the road condition survey where AHMU Class II fish passage was identified as a concern. Refer to the Mitkof Island Road Analysis for further information on individual sites. The locations, existing structures, possible barriers at each site, amount of upstream fish habitat, and fish presence are listed below:

Location	Existing Structures	Fish and Fish Habitat
MP <u>1.256</u> AHMU <u>II</u>	36" CMP (corrugated metal	210 m <sup>2</sup> habitat, cutthroat
Channel Type <u>HC</u>	pipe), 2.8' perch, 4.6% culvert	upstream and downstream
	gradient, no timing required	
MP <u>1.503</u> AHMU <u>II</u>	2-36" CMPs, 2' perch, 4.6%	555 m <sup>2</sup> habitat, cutthroat
Channel Type <u>HC</u>	culvert gradient, no timing	and Dolly Varden upstream
	required	and downstream
MP <u>4.962</u> AHMU <u>II</u>	36" CMP, 2.9' perch, 4.6%	555 m <sup>2</sup> habitat, cutthroat
Channel Type <u>HC</u>	culvert gradient, no timing	and Dolly Varden upstream
	required	and downstream
MP <u>7.052</u> AHMU <u>II</u>	48" CMP 3.3% culvert gradient,	30 m <sup>2</sup> habitat, cutthroat
Channel Type HC	no timing required	upstream and downstream
MP <u>8.562</u> AHMU <u>II</u>	48" CMP 2.8' perch, 6.7% culvert	251 m <sup>2</sup> habitat, cutthroat
Channel Type <u>HC</u>	gradient, no timing required	upstream and downstream

The sites listed above are included in a contract to replace or repair the structures to provide fish passage, with the exception of the site at milepost 7.052. This site was given a lower priority than other sites on the island that have more upstream habitat. At this time, available funding will be used to repair the higher priority sites.

Project			System		La	and Use Designation	on
Woodpecke	er		Mitkof		S	A, OG, ML	
Route No.	Route Nam	е	Begin 1	ermini	Eı	nd Termini	
6246	West For	k Ohmer Creek	MP 0.	8 Rd 624	5 N	IP 2.81	
Begin MP	Length	Status	Map Qu	arter Quad	l Pl	noto year, roll, pho	otos
0.0	2.81	Existing	PSG (	D-3	'9	8 2098-154, 21	198-19-20
		General Design	n Criter	ia and	Elemen	ts	
Functional Class	Service Life	Surface		Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LC	Crushed gravel/shot	rock	14'	10	Lowboy	Logging Truck

#### Intended Purpose/Future Use

Public access, recreation, general forest management and administration. Road will remain open to all vehicles to MP 1.50. Beyond this point the road will be open to high clearance vehicles. Provides access to Ohmer Creek Loop Trail at milepost 0.33. Currently road has crushed gravel to milepost 0.3, desired future condition is to place crushed gravel to junction of Road 40006 at milepost 1.5.

#### Maintenance Criteria

	,,,,,,,,,			
Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	1.50	3 (open to standard passenger vehicles)	3	Active
1.50	2.81	2 (open to high clearance vehicles)	2	Inactive

#### Maintenance Narrative

Active: Provide frequent cleanout of ditches and catch basins to assure controlled drainage. Control roadside brush, grade as needed to maintain crown and running surface.

Storm proof: provide waterbars, rolling dips to assure controlled runoff until any needed maintenance can be performed on the primary drainage system, control roadside brush.

## **Operation Criteria**

Highway Safety Act: Yes to milepost 1.5 Jurisdiction: **National Forest Ownership** All licensed high clearance vehicles, bicycles, and hikers Encourage: Travel Off highway vehicles Accept: Management Standard passenger vehicles beyond MP 0.33 Discourage: **Strategies** Prohibit: N/A N/A Eliminate:

**Travel Management Narrative** 

Public travel on this road occurs year round when snow conditions permit. Receives high use during deer and moose hunting seasons in the fall, used for firewood and free use timber access, berry picking, and sightseeing from May through November. Access to unimproved trail to Crystal Mountain provided by this road.

Approved

12.17.02

Date

Project		System	Land Use Designation
Woodpeck	er .	Mitkof	ML
Route No.	Route Name	Begin Termini	End Termini
6280	Crystal Lake	MP 1.4 Rd. 6245	MP 2.58
Begin MP	Length Status	Map Quarter Quad	Photo year, roll, photos
0.0	2.58 Existing	PSG C-3	'98 2098-153, 2198-23

#### **General Design Criteria and Elements**

Functional Class	Service Life	Surface	Wldth	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Logging truck	Logging Truck

intended Purpose/Future Use

Public access, recreation, general forest management and administration. Road will remain closed to licensed vehicles to reduce maintenance needs.

#### Maintenance Criteria

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	2.58	1 (closed)	1	Closed

#### **Maintenance Narrative**

Storage: remove or bypass problem drainage structures to restore natural drainage patterns, add waterbars as needed to control runoff, re-vegetate.

#### **Operation Criteria**

Jurisdiction: **Highway Safety Act:** No **National Forest Ownership** N/A Encourage: Travel Hikers Accept: Management Motorized vehicles Discourage: **Strategies** Prohlbit: Standard passenger and high clearance vehicles Ellminate:

**Travel Management Narrative** 

This road is currently closed with alder growth. It may be periodically opened for timber access, however desired future condition of this road is storage.

Approved Atticion Sauthan 12.17.02

District Range Date

### Site Specific Design Criteria Road 6280

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

ROCK PITS: During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6).

STREAM CROSSINGS: There is some bedload movement in the stream. A 23-foot long log stringer bridge currently at this site is not safe for traffic. Verify fish presence prior to establishing timing restraints for construction. This road is proposed for short-term entry for timber removal, followed by storage, using temporary bridge structure.

Location	Description	Structure
MP <u>1.2</u> AHMU <u>II</u> Channel Type <u>HC3</u>	Bank Full Depth <u>1.5 ft</u> Incision <u>6 ft</u> Substrate <u>cobble</u> Bank Full Width <u>10 ft</u>	Gradient <u>14%</u> Structure <u>bridge</u>

Road	Management	Objective
		,

Project Woodpeck	er		System Mitkof	11	Land Use Designation SV, ML
Route No.	Route Name		Begin Termini		End Termini
6281	East Sumn	er Mountain	MP 3.1 Rd. 6245		MP 2.7
Begin MP	Length	Status	Map Quarter Quad		Photo year, roll, photos
0.0	2.7	Existing	PSG C-3		'98 2198-25, '99 2398-154-155

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Logging truck	Logging Truck

Intended Purpose/Future Use

Public access, recreation, general forest management and administration. Road will remain closed to licensed vehicles beyond proposed camping area to reduce maintenance needs.

#### Maintenance Criteria

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.0	0.5	1 (closed)	. 2	Closed
0.5	2.7	1	1	

**Maintenance Narrative** 

Storage beyond milepost 0.5, remove or bypass problem drainage structures to restore natural drainage patterns, add waterbars as needed to control runoff, revegetate.

#### **Operation Criteria**

Highway Safety Act:	No	Jurisdiction:	National Forest Ownership
Fravel Management Strategies	Encourage: Accept: Discourage: Prohibit: Eliminate:	N/A Hikers Motorized vehicles N/A Standard passenger	and high clearance vehicles
	Prohibit:	N/A	and high clearance vehic

**Travel Management Narrative** 

Accessible from the city of Petersburg, public travel on this road is currently limited due to roadside alder growth. The road is used by hunters in the fall. The road may be periodically opened for timber access, however the desired future condition of this road is storage beyond the proposed camping area at milepost 0.5.

## Site Specific Design Criteria Road 6281

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

ROCK PITS: During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6).

#### STREAM CROSSINGS:

MP <u>0.4</u> AHMU <u>II</u>	Bank Full Depth 0.5 ft	Gradient 8%
Channel Type HC3	Incision 2 ft	Structure CMPA
Bank Full Width 2 ft	Substrate cobble	(corrugated metal pipe,
		arch)

Narrative: Verify fish presence prior to establishing timing restraints for construction.

MP <u>0.8</u> AHMU <u>I</u>	Bank Full Depth 0.5 ft	Gradient 6%
Channel Type <u>HC1</u>	Incision 2 ft	Structure CMPA
Bank Full Width 2 ft	Substrate cobble	

Narrative: Verify fish presence prior to establishing timing restraints for construction. This road is proposed for short-term entry for timber removal, followed by storage.

Project			System	Land Use Designation
Woodpeck	er		Mitkof	SV, ML
Route No.	Route Name		Begin Termini	End Termini
6282	282 Sumner Pass		MP 4.1 Rd. 6245	MP 4.36
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos
0.0	4.36	Existing	PSG C-3	'98 2198-26, 2198-37 '99 2398-98-99, 2398-90-91

### **General Design Criteria and Elements**

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LC	Shot rock	14'	10	Logging truck	Logging Truck

intended Purpose/Future Use

Public access, recreation, general forest management and administration. Road will remain open to standard passenger vehicles.

#### Maintenance Criteria

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	4.36	3 (open to standard passenger vehicles)	3	Active

#### **Maintenance Narrative**

Active: Provide frequent cleanout of ditches and catch basins to assure controlled drainage. Control roadside brush, grade as needed to maintain crown and running surface.

#### **Operation Criteria**

Highway Safety Act:	Yes	Jurisdiction:	National Forest Ownership
Travel Management Strategies	Encourage: Accept: Discourage: Prohibit:	N/A Standard passen N/A N/A	ger vehicles
	Eilminate:	N/A	

**Travel Management Narrative** 

Public travel on this road occurs year round when snow conditions permit. Receives high use during deer and moose bunting seasons

and moose hunting seasons.

District Range

12.17.02 Date

## Site Specific Design Criteria Road 6282

Three road fill failures occurred near milepost 3.7 in the fall of 1999 and 2000. The road is currently closed to traffic beyond the site due to the failures. A geotechnical investigation of the site was completed in 2002.

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

ROCK PITS: During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6).

#### STREAM CROSSINGS:

MP <u>2.0</u> AHMU <u>II</u>	BF Depth 3.0 ft	Gradient 6%
Channel Type MC2	Incision 20 ft	Structure bridge
BF Width 30 ft	Substrate bedrock, cobble	

Narrative: A 61-foot long log stringer bridge currently at this site will be replaced with a permanent bridge. No in-stream work will be allowed from March 1 through July 18.

Project			 System		Land Use Designation
Woodpecker		Mitkof		SV, ML	
Route No. Route Name		Begin Termini		End Termini	
6283	South Sumner Mountain		MP 5.2 Rd. 6245		MP 1.35
Begin MP	Length	Status	Map Quarter Quad		Photo year, roll, photos
0.0	1.35	Existing	PSG C-3		'98 2198-26-27

#### **General Design Criteria and Elements**

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Logging truck	Logging Truck

Intended Purpose/Future Use

Public access, recreation, general forest management and administration. Road will remain closed to licensed vehicles after use to reduce maintenance needs.

#### **Maintenance Criteria**

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	1.35	1 (closed)	1	Closed

#### **Maintenance Narrative**

Storage: remove or bypass problem drainage structures to restore natural drainage patterns, add waterbars as needed to control runoff, revegetate.

#### **Operation Criteria**

National Forest Ownership **Highway Safety Act:** No Jurisdiction:

Travel Management **Strategies** 

N/A Encourage: Accept:

Hikers

Discourage:

Motorized vehicles

Prohibit:

N/A

Eliminate:

Standard passenger and high clearance vehicles

**Travel Management Narrative** 

Public travel on this road is currently limited to a few high clearance vehicles due to rough surface conditions. May be periodically opened for timber access, however desired future condition for this road is storage.

## Site Specific Design Criteria Road 6283

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

ROCK PITS: During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6).

#### STREAM CROSSINGS:

MP 0.9 AHMU 2	Bank Full Depth 1.5 ft	Gradient 10%
Channel Type HC1	Incision 6 ft	Structure bridge
Bank Full Width 10 ft	Substrate bedrock, cobble	

Narrative: Log stringer bridge at this site was removed after past timber harvest. This road is proposed for short-term entry for timber removal, and then will be placed into storage category. Use a temporary bridge structure. No in-stream work will be allowed from March 1 through July 18.

Project		System Land Use De	signation
Woodpeck	er	Mitkof SV, ML, Tr	
Route No.	Route Name	Begin Termini End Termini	
6284	West Sumner Mountain	MP 13.3 Rd. 6245 MP 1.1	
Begin MP	Length Status	Map Quarter Quad Photo year, r	oll, photos
0.0	1.1 Existing	PSG C-3 '99 2398-	27-28

## **General Design Criteria and Elements**

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Logging truck	Logging Truck

Intended Purpose/Future Use

Public access, recreation, general forest management and administration. Road will remain closed to licensed vehicles beyond the removed bridge at MP 0.05 to reduce maintenance needs.

#### Maintenance Criteria

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	1.1	1 (closed)	1	Closed

#### **Maintenance Narrative**

Storage: remove or bypass problem drainage structures to restore natural drainage patterns, add waterbars as needed to control runoff, re-vegetate.

## **Operation Criteria**

Highway Safety Act:	No	Jurisdiction:	National Forest Ownership
Travel Management Strategies	Encourage: Accept: Discourage:	N/A Hikers Motorized vehicles	

Prohibit: N/A

Eliminate: Standard passenger and high clearance vehicles

**Travel Management Narrative** 

Public travel on this road is currently limited to hikers and occasional off road vehicles due to bridge removal at MP 0.05. May be periodically opened for timber access, however desired future condition of this road is storage.

Approved Strict Ranger Date

# Road Management Objective Site Specific Design Criteria Road 6284

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

ROCK PITS: During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6).

#### STREAM CROSSINGS:

MP <u>0.05</u> AHMU <u>II</u>	Bank Full Depth 2.5 ft	Gradient 3 to 10%	
Channel Type HC2	Incision 6 ft	Structure bridge	
Bank Full Width 30 ft	Substrate bedrock, cobble		

Narrative: Log stringer bridge at this site was removed after past timber harvest. This road is proposed for short-term entry for timber removal, and then will be placed into storage category. Use a temporary bridge structure. No in-stream timing is required.

Project			System	 Land Use Designation
Woodpecker			Mitkof	NNF
Route No.	Route Name		Begin Termini	End Termini
6285	Woodpecker Cove		MP 8.5 Rd. 6245	MP 0.23 Woodpecker Cove
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos
0.0	0.23	Existing	PSG C-3	'99 2398-95

### **General Design Criteria and Elements**

Functional Class	Service Life	Surface .	Width	Design Speed	Critical Vehicle	Design Vehicle	i
Collector	LC	Shot rock	16'	10	Lowboy	Logging Truck	

Intended Purpose/Future Use

This is the access road to the Woodpecker Cove LTF. It is used for public access, recreation, general forest management and administration. Road will remain open to all licensed vehicles.

#### **Maintenance Criteria**

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	0.23	3 (open to standard passenger vehicles)	3	Active

#### Maintenance Narrative

Active: Provide frequent cleanout of ditches and catch basins to assure controlled drainage. Control roadside brush, grade as needed to maintain crown and running surface.

## **Operation Criteria**

Highway Safety Act:	Yes	Jurisdiction:	National Forest Ownership
Travel Management Strategies	Encourage: Accept: Discourage: Prohibit: Eliminate:	All licensed vehicles Hikers, bicycles N/A N/A N/A	

**Travel Management Narrative** 

Public travel on this road occurs year round when snow conditions permit.

Approved Satura, Sauthan 12.17.02

District Ranger Date

Road	Management	Ob	jective
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Project				System	Land Use Designation
Woodpecker			Mitkof	SV, ML	
Route No.	Route Name			Begin Termini	End Termini
6286	Riva Ridg	е	$\ $	MP 14 Rd. 6245	MP 1.6
Begin MP	Length	Status		Map Quarter Quad	Photo year, roll, photos
0.0	1.6	Existing		PSG C-3	'98 1798-238 '99 2398-27-28

#### **General Design Criteria and Elements**

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LC	Shot rock	14'	10	Logging Truck	Logging Truck

intended Purpose/Future Use

This road is used for public access, recreation, general forest management and administration. The road will remain open to all high clearance vehicles. The road provides access to a possible future site of dispersed camping/picnic area(s).

#### **Maintenance Criteria**

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	1.6	2 (open to high clearance vehicles)	2	Inactive

#### Maintenance Narrative

Storm proof: provide waterbars, rolling dips to assure controlled runoff. Control roadside brush to maintain passage.

#### **Operation Criteria**

Highway Safety Act: No Jurisdiction: **National Forest Ownership** All licensed high clearance vehicles, bicycles, and hikers Encourage: Travel Off highway vehicles Accept: Management Standard passenger vehicles Discourage: **Strategies** Prohibit: N/A. N/A Eilminate:

Travel Management Narrative

Public travel on this road occurs year round when snow conditions permit. The road receives high use during deer hunting season and offers good views of Sumner Strait and Zarembo Island.

Approved

District Ranger

Date

Date

# Road Management Objective Site Specific Design Criteria Road 6286

EROSION CONTROL: A small road fill failure occurred on this road in late 1999 near milepost 1.1. The road has been repaired. An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8).

ROCK PITS: During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6).

		Ro	ad Mana	gement	Obje	ctive		
Project				ystem		Land Use Des	Ignation	
Woodped	ker		N	/litkof		SV		
Route No.	Rout	e Name		egin Termini		End Termini		
6287	Poir	nt Alexander		/IP 11.5 Rd. 6	6245	MP 1.53		
Begin MP	Leng	th Status	N	lap Quarter Qua	ad	Photo year, ro	oli, photos	
0.0	1.5	Existing	F	SG C-3		'99 2398-2	5, '98 1	798-240
Functional		Service Surface	Design C	riteria and		<b>ents</b>	0	Design Vehicle
Local		Life Shot roo	k 14'	Speed 10	Logg	ing Truck		ogging Truck
	L							
		maintenance needs	Maintena	nce Criter		o Level	Alaska l	Forest Practices Act
Bmp E	mp	Operational Maintenand (Current Conditio		(Desired Fut			Alaska I	
0.00 1	.53	1 (closed)			ı			Closed
Maintenance Storage: Ro		urrently barricaded a		Alder growt		closed road to	standa	rd vehicles.
			- por succession					
Highway Sa	afety Act:	No	Jurisdiction:		Nationa	i Forest Owner	ship	
Management Discourage: Off hig		Hikers Off highwa Standard p	•	d high	clearance vei	hicles		
Travel Manag	jement N	arrative I to vehicles and is b	porrioaded at	the heginnin	oα Δtr	ee thinning d	emonetr	ation project

This road is closed to vehicles and is barricaded at the beginning. A tree thinning demonstration project is located along the first mile of the road. Foot traffic will continue.

Approved

District Ranger

Date

12.17.02

Project Woodpecke	ər		71	System Mitkof	Г	Land Use Designation
Route No. 40003	Route Name Endhaul		 7 [	Begin Terminl MP 15.3 Rd. 6245	F	End Termini MP 0.33
Begin MP		tatus Existing	][	Map Quarter Quad PSG C-3	[	Photo year, roll, photos 1998, 1798-237

#### **General Design Criteria and Elements**

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LC	Shot rock	14'	10	Mobile Yarder	Logging Truck

Intended Purpose/Future Use

Public access, recreation, general forest management and administration. The road will remain open to high clearance vehicles. The road provides access to possible future site of a dispersed picnic area.

#### **Maintenance Criteria**

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	0.33	2 (open to high clearance vehicles)	2	Inactive

**Maintenance Narrative** 

Storm proof: provide waterbars, rolling dips to assure controlled runoff. Control roadside brush to maintain passage.

#### **Operation Criteria**

Jurisdiction: **National Forest Ownership Highway Safety Act:** No N/A Encourage: Travel All licensed high clearance vehicles, bicycles, and hikers Accept: Management Standard passenger vehicle Discourage: **Strategies** N/A Prohibit: Eliminate: N/A

Travel Management Narrative

Keep open to high clearance vehicles. Construct and maintain a parking turnout for dispersed picnic area with sufficient space for turning vehicles around on this dead end road.

Approved Actic U. Sauthan 12.17.02

District Ranger Date

Project		System	Land Use Designation
Woodpeck	er	Mitkof	ML
Route No.	Route Name	Begin Termini	End Termini
40004	Ridge Run	MP 0.8 Rd. 6286	MP 0.54
Begin MP	Length Status	Map Quarter Quad	Photo year, roll, photos
0.0	0.54 Existing	PSG C-3	1998, 1798-239

#### **General Design Criteria and Elements**

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle	
Local	LC	Shot rock	14'	10	Mobile Yarder	Logging Truck	

Intended Purpose/Future Use

Public access, recreation, general forest management and administration.

#### Maintenance Criteria

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	0.54	2 (open to high clearance vehicles)	2	Inactive

Maintenance Narrative

Storm proof, install drivable waterbars to aid in controlled drainage, and control brush.

### **Operation Criteria**

Highway Safety Act: No Jurisdiction: **National Forest Ownership** N/A Encourage: Travel High clearance vehicles and hikers Accept: Management Standard passenger vehicle Discourage: **Strategies** N/A Prohibit: Eliminate: N/A

**Travel Management Narrative** 

Keep open to high clearance vehicles.

Approved District Ranger Date 12.17.02

Project		System	Land Use Designation				
Woodpeck	er	Mitkof	ML, SA				
Route No.	Route Name	Begin Termini	End Termini				
40006	Snake Ridge	MP 1.5 Rd 6246	MP 1.40 Crystal Mtn. trailhead				
Begin MP	Length Status	Map Quarter Quad	Photo year, roll, photo				
0.0	1.40 Existing	PSG C-3	1998, 2198-21				
	General Design Criteria and Elements						

Design

Speed

10

**Critical Vehicle** 

Mobile Yarder

Design Vehicle

Logging Truck

Intended Purpose/Future Use

Service

Life

LC

Surface

Shot rock

**Functional** 

Class

Local

This road is used for public access, recreation, general forest management and administration. Provides access to an unimproved trail to the Crystal Mountain alpine area. The current road surface is shot rock. The desired future condition is a crushed rock surface.

Width

14'

#### Maintenance Criteria

Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act
0.00	1.40	2 (open to high clearance vehicles)	3 (open to standard passenger vehicles)	Active

Maintenance Narrative

Active: Provide frequent cleanout of ditches and catch basins to assure controlled drainage. Control roadside brush, grade as needed to maintain crown and running surface.

### **Operation Criteria**

Highway Safety Act:	Yes	Jurisdiction:	National Forest Ownership
Travel Management Strategies	Encourage: Accept: Discourage: Prohibit: Eliminate:	N/A All licensed high clearance vehicles, bicycles, and hikers Standard passenger vehicle N/A N/A	
Travel Management Narrat		er elevations on the	e island; provide access to all standard

One of the few roads that access higher elevations on the island; provide access to all standard passenger vehicles.

Approved

trict Ranger Date

Road	Management	<b>Objective</b>
------	------------	------------------

Project	System	Land Use Designation
Woodpecker	Mitkof	OG
Route No. Route Name	Begin Termini	End Termini
40083 Muck	MP 5.6 Rd. 6245	MP 0.8
Begin MP Length Status	Map Quarter Quad	Photo year, roll, photos
0.0 0.8 Existing	PSG C-3	1998, 2098-149

## **General Design Criteria and Elements**

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Logging Truck	Logging Truck

Intended Purpose/Future Use

Constructed in 1975/76 for timber access and general forest management, the road has since grown closed with alder making all but narrow off-road vehicle use difficult. The road will remain closed to licensed vehicles to reduce maintenance needs.

#### **Maintenance Criteria**

mantonal of the first of the fi							
Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act			
0.00	0.8	1 (closed)	1	Closed			

Maintenance Narrative

Highway Safety Act:

Storage: remove drainage structures to restore natural drainage patterns, add waterbars as needed to control runoff, revegetate.

Jurisdiction:

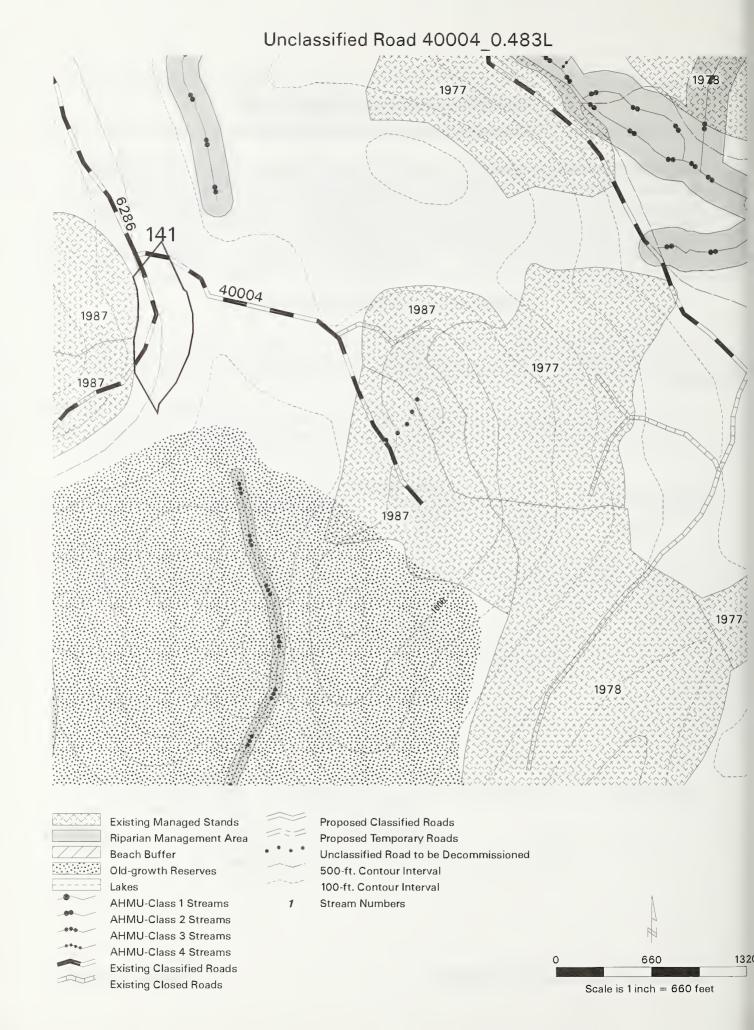
### **Operation Criteria**

**National Forest Ownership** 

Travel Management Strategies	Encourage: Accept: Discourage: Prohibit: Eliminate:	N/A Hikers N/A N/A Motorized vehicles		
	alder growth. R	emove drainage structures, buth Blind Slough OGR.	keep road closed to motor vehicles. This	s
Approved	Cetico C	J. Sauthan	12.17.02	
	District Ran	ger 🔾	Date	

# Road Management Objectives Unclassified Road 40004\_0.483L

This road was constructed as a temporary road that was used to access timber in 1987. It is located at milepost 0.483 on Road 40004. This road is not needed for the long term road management system and is within a previously harvested stand. This road is located on a ridge with no drainage structures and is 300 feet (0.057 miles) long. It will be closed by installing a ditch at the entrance that will be impassable to motorized vehicles.



# Recreation Cards For Selected Alternative

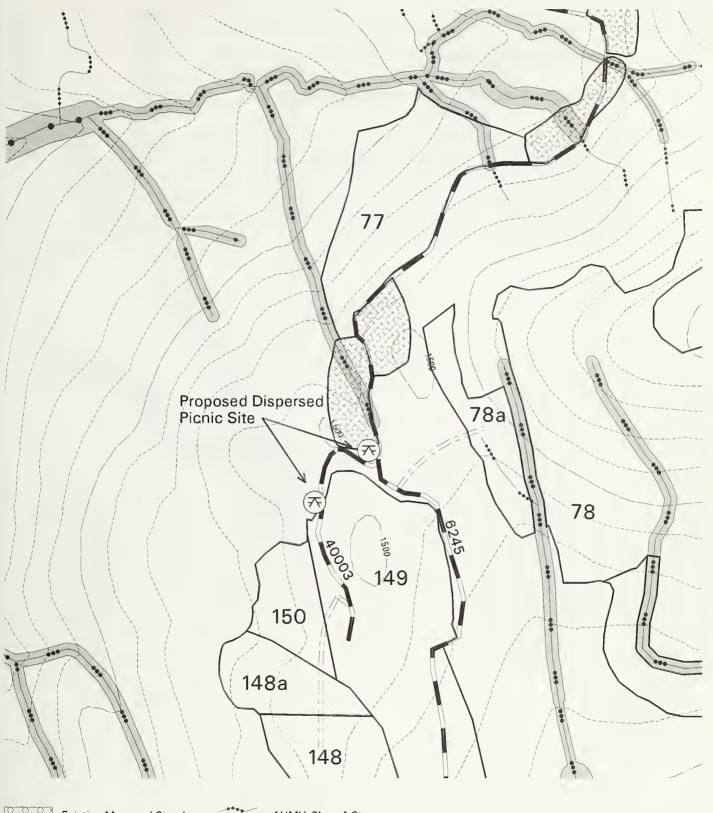
## **Recreation Project #1**

#### Picnic/Dispersed Campsites on Road 40003 (Endhaul Road)

One site is located in a small muskeg meadow on the west side of Road 40003. The site has views to the west and southwest towards the southern end of Wrangell Narrows. The project includes a short access trail through the muskeg or through forest on the edge of the muskeg. Platforms for a tent and picnic table will be developed. Any necessary wetlands permits will be obtained from the Corps of Engineers before construction begins.

A second picnic site will be developed at the junction of Road 40003 and Road 6245. This site has good views to the north.

## Woodpecker Recreation Project #1





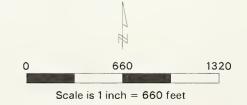
Existing Managed Stands Riparian Management Area Beach Buffer Lakes



**Proposed Unit Boundaries** AHMU-Class 1 Streams AHMU-Class 2 Streams AHMU-Class 3 Streams



AHMU-Class 4 Streams **Existing Classified Roads Existing Closed Roads Proposed Temporary Roads** 500-ft. Contour Interval 100-ft. Contour Interval

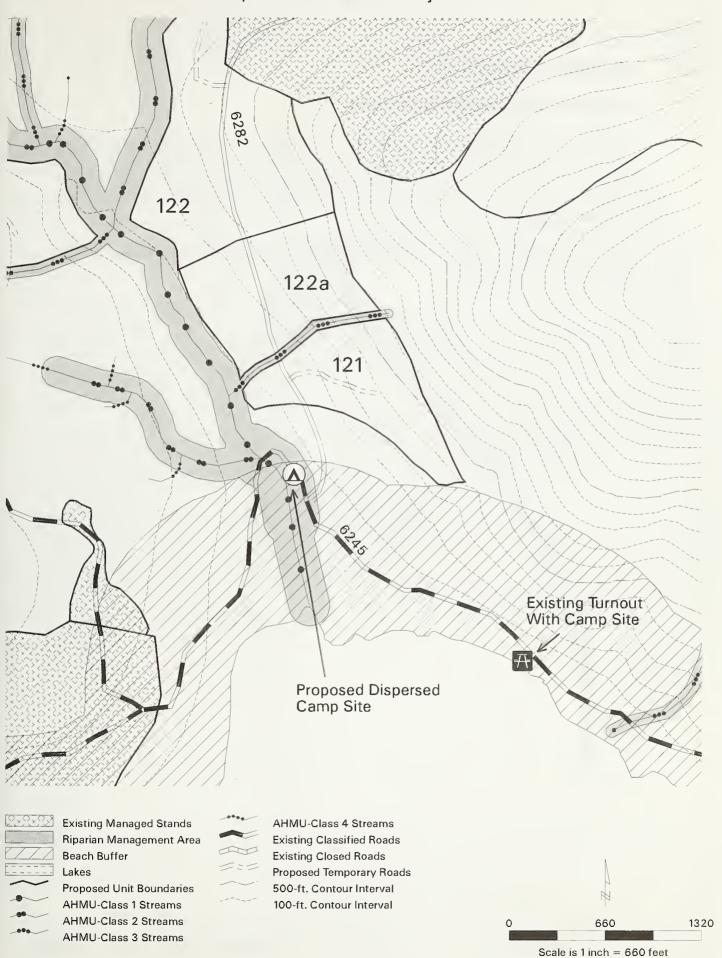


## **Recreation Project #2**

#### Woodpecker Cove Dispersed Campsite/ Picnic Area

This development will be located near the bridge over Michael Creek on Road 6245. It is intended as an alternative to the small, undeveloped site located adjacent to the beach at milepost 10.5 on Road 6245. The development will include off-road parking, a picnic table and at least one tent site. This site will be located on the former roadbed of Road 6245, which was left after the realignment for the bridge approach. The development will also include a path to the creek and beach.

## Woodpecker Recreation Project #2



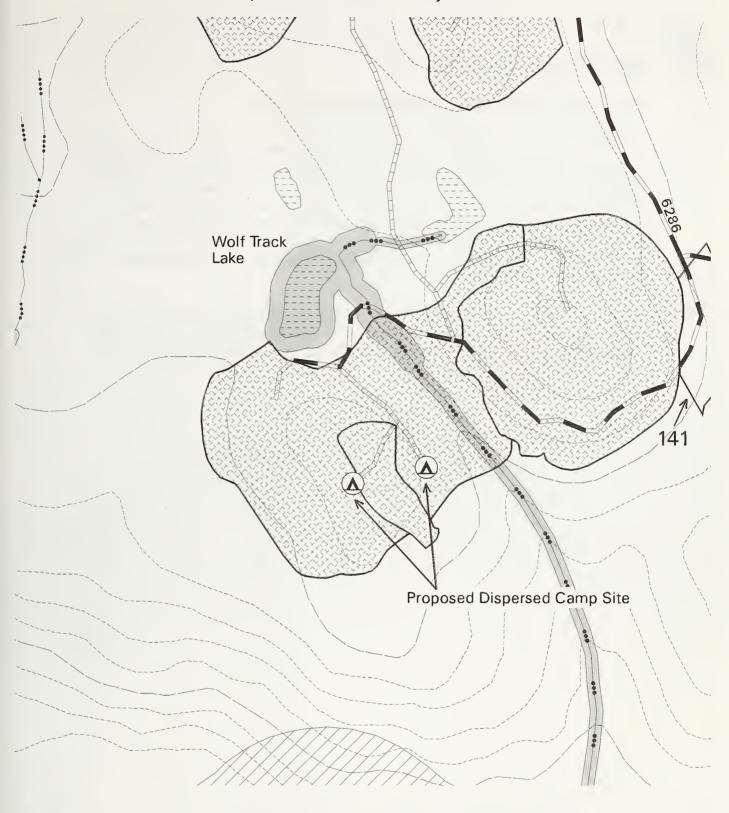
## **Recreation Project #3**

#### **Wolf Track Lake Dispersed Campsites**

Two dispersed campsites will be developed at landings in a previously harvested unit south of Wolf Track Lake. These two landings are located at the end of a temporary road that is currently closed at its junction with Road 6286. It is about a ¼-mile walk from the road closure to the sites. The western site shows evidence of recent use, with a makeshift tarp shelter. Both sites have views to the south across Sumner Strait.

The Selected Alternative includes ground clearing and leveling to accommodate a picnic table and tent pad at each site.

# Woodpecker Recreation Project #3





Beach Buffer Lakes Proposed Unit Boundaries AHMU-Class 1 Streams AHMU-Class 2 Streams AHMU-Class 3 Streams

**Existing Managed Stands** 

Riparian Management Area



AHMU-Class 4 Streams Existing Classified Roads Existing Closed Roads Proposed Temporary Roads 500-ft. Contour Interval 100-ft. Contour Interval



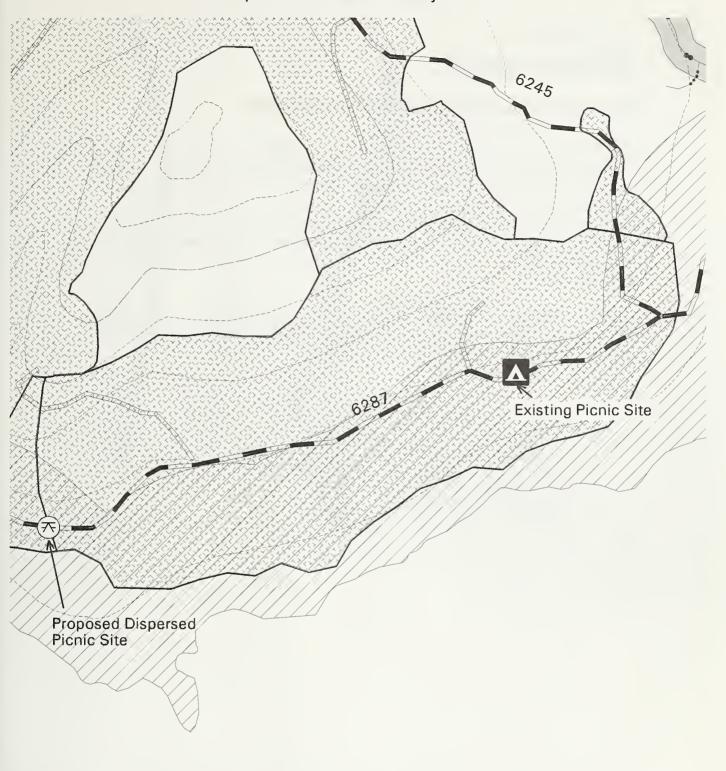
#### **Recreation Project #4**

#### **Woodpecker Cove Demonstration Area Picnic Sites**

The Woodpecker Cove Demonstration Area was established in 1993 to demonstrate the effects of various degrees of tree thinning on wildlife and plant diversity in a stand of young second-growth. It is located along Road 6287, which is closed to motorized traffic. The first ½-mile of the Demonstration Area consists of an alder-lined path, several markers identifying the different thinning units adjacent to the path, and two viewpoints with picnic tables. In the past few years, alder has regenerated along the path and at the picnic sites to the point where foot and bicycle travel is hindered and the views of Sumner Strait are obscured.

This project will enhance the recreation opportunities in the area by clearing the alder from the path and picnic sites. In addition, it will clear an additional ¾ mile of Road 6287, starting at the end of the existing path. A third picnic table will be placed at a viewpoint overlooking Sumner Strait.

#### Woodpecker Recreation Project #4





Existing Managed Stands Riparian Management Area Beach Buffer Lakes Proposed Unit Boundaries AHMU-Class 1 Streams AHMU-Class 2 Streams

AHMU-Class 3 Streams



AHMU-Class 4 Streams Existing Classified Roads Existing Closed Roads Proposed Classified Roads Proposed Temporary Roads 500-ft. Contour Interval 100-ft. Contour Interval



#### **Recreation Project #5**

#### **Woodpecker Cove Demonstration Area Picnic Sites**

The Woodpecker Cove Demonstration Area was established in 1993 to demonstrate the effects of various degrees of tree thinning on wildlife and plant diversity in a stand of young second-growth. It is located along Road 6287, which is closed to motorized traffic. The first ½-mile of the Demonstration Area consists of an alder-lined path, several markers identifying the different thinning units adjacent to the path, and two viewpoints with picnic tables. In the past few years, alder has regenerated along the path and at the picnic sites to the point where foot and bicycle travel is hindered and the views of Sumner Strait are obscured.

After implementation of Recreation Project #4, the Selected Alternative will clear the path to the end of the road (about 1 mile beyond the existing path) and set up a fourth picnic table at a viewpoint at the end of the road.

# Woodpecker Recreation Project #5





Riparian Management Area Beach Buffer Lakes Proposed Unit Boundaries AHMU-Class 1 Streams AHMU-Class 2 Streams AHMU-Class 3 Streams

Existing Managed Stands



AHMU-Class 4 Streams Existing Classified Roads Existing Closed Roads Proposed Temporary Roads 500-ft. Contour Interval 100-ft. Contour Interval

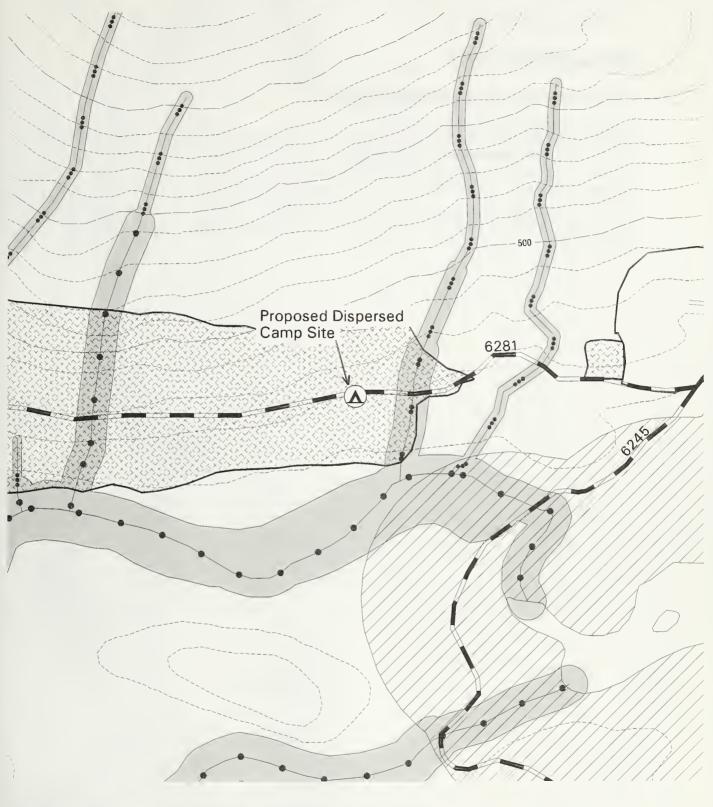


#### **Recreation Project #6**

#### **Dispersed Campsite on Road 6281**

A landing located on Road 6281, ½ mile from the junction with the Woodpecker Road, shows evidence of its use as a temporary campsite. The site has good views to the south and east towards south Blind Slough. This project will prepare the area for a picnic table and tent pad.

# Woodpecker Recreation Project #6





Beach Buffer Lakes Proposed Unit Boundaries AHMU-Class 1 Streams AHMU-Class 2 Streams AHMU-Class 3 Streams

**Existing Managed Stands** 

Riparian Management Area



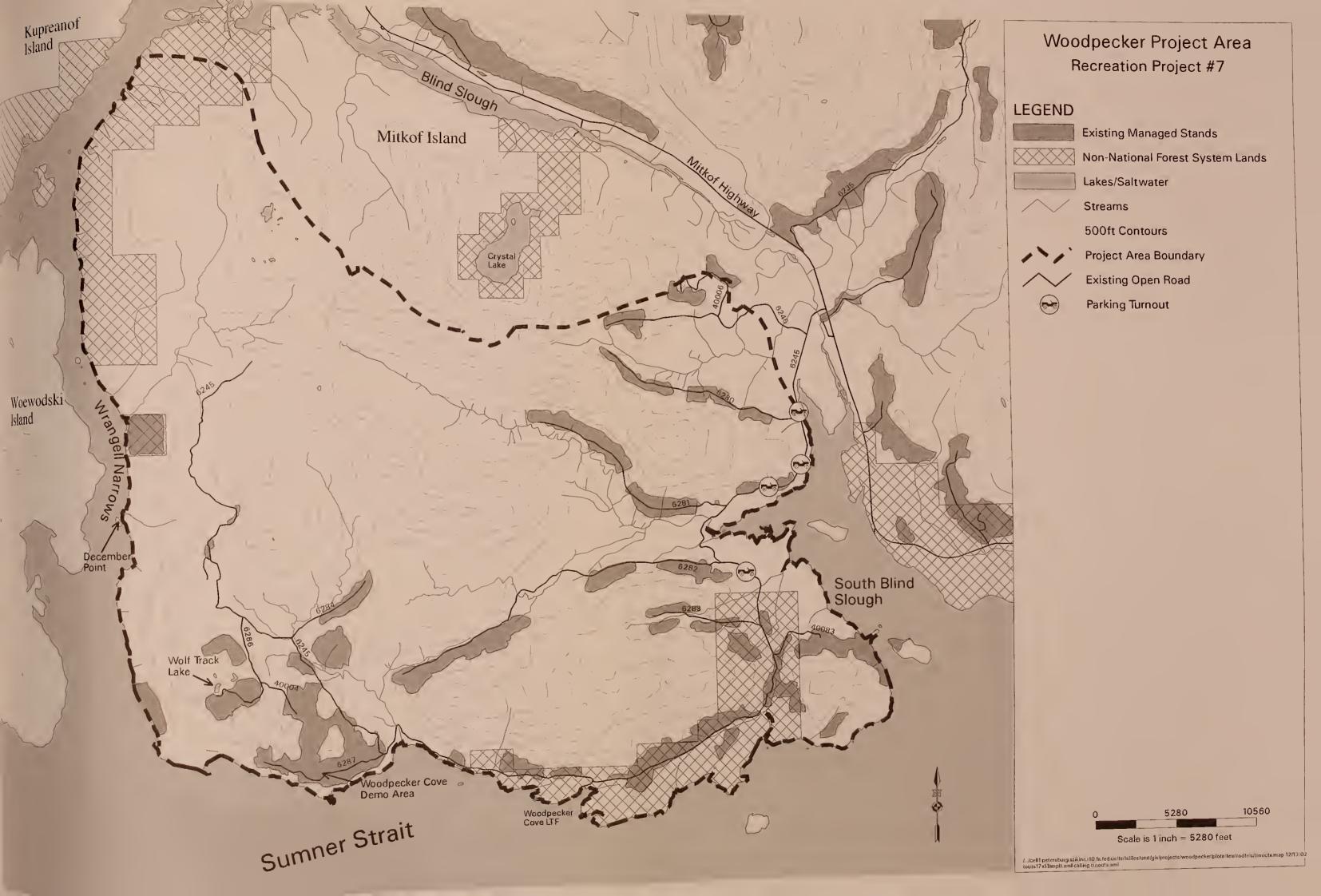
AHMU-Class 4 Streams Existing Classified Roads Existing Closed Roads Proposed Temporary Roads 500-ft. Contour Interval 100-ft. Contour Interval



#### **Recreation Project #7**

#### Parking Turnouts along Woodpecker Road

The Woodpecker Road (Road 6245) currently has safety turnouts, which are designed to allow converging vehicles to pass more easily and safely. Hunters and recreationists regularly use some of these turnouts as parking areas. This project will build more turnouts and enlarge some of the existing turnouts along the Woodpecker Road. Each turnout will be designed to accommodate one to two cars. The turnouts will be located to provide convenient access to areas that people use for hunting, fishing, berry-picking or sightseeing.









# FEIS Errata and Summary



# **Preface**

The Forest Service prepared the Final Environmental Impact Statement (Final EIS) for the Woodpecker Project Area in August 2001. The information and analysis found in the Final EIS was subject to review during the appeal on the Record of Decision signed August 13, 2001. This appeal was upheld because of discrepancies in the volume strata information. A review of the analysis in question was conducted. The review confirmed that the analysis of environmental effects presented in the Final EIS is valid and that a supplemental environmental impact statement is not needed. This information is documented in a supplemental information report. The correct volume strata information for Tables 3-28 and 3-29 and Figure 3-14 of the Final EIS and for the Unit Card narratives (Appendix B of the Final EIS) are listed on the following errata sheets.

The summary of the Final EIS follows the errata sheets. This is the original summary which was published with the August 2001 Record of Decision. Copies of the complete Final EIS can be obtained from the Petersburg Ranger District.



#### **Errata**

# Woodpecker Project Area Final Environmental Impact Statement

1. Replace Tables 3-28 and 3-29 (Final EIS, Page 3-123), with the following tables:

Table 3-28. Average Volume and Acreage by Volume Strata in the Woodpecker Project Area

Volume Strata <sup>1</sup>	Average Volume per Acre <sup>2</sup> (Board Feet)	Productive Forest Acres <sup>3</sup>	Suitable Acres <sup>4</sup>
Low	16,900	1,920	640
Medium	24,100	6,970	4,170
High	29,300	7,800	4,670

Includes managed stands. Volume strata is estimated using site productivity index.

Table 3-29. Total Proposed Unit Acres by Volume Strata and Alternative

Volume	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Strata	(acres)	(acres)	(acres)	(acres)	(acres)
Low	140	80	240	230	170
Medium	460	210	820	750	440
High	500	180	710	670	650
Other <sup>1</sup>	40	30	80	80	40

<sup>&</sup>lt;sup>1</sup> Scattered inclusions of non-forest or low productive forest within units

2. Replace Figure 3-14 (Final EIS, page 3-121) with the attached Figure 3-14 (Forest Land Classification).

<sup>&</sup>lt;sup>2</sup> Volume per acre is from the Forest Plan FEIS, Part 1, page 3-255.

<sup>&</sup>lt;sup>3</sup> National Forest System lands only

<sup>&</sup>lt;sup>4</sup> Productive forest lands where commercial timber production is allowed by the Forest Plan. Productive acres within non-development LUDs, riparian buffers, beach buffers, or on extreme mass movement soils are not included.

# **FEIS Errata**

3. Replace the Volume Strata acres in the unit card narratives (Final EIS, Pages Appendix B-22 through B-136) with the following information:

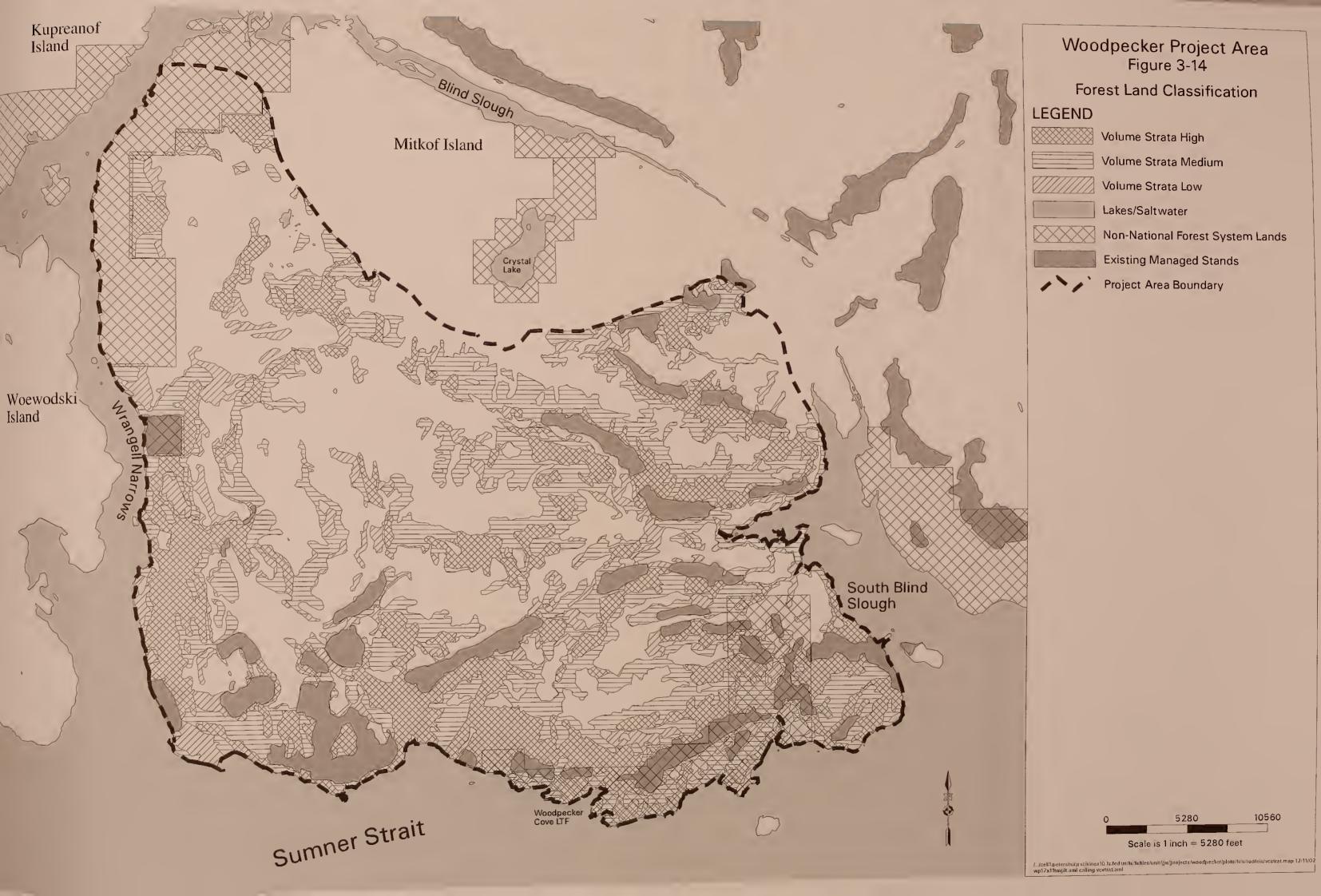
IInit #		Acres by Volume Strata	
Unit #	High	Medium	Low
34	18	13	1
35a	14	7	0
67	7	7	5
73	12	8	3
75	0	18	5
77	19	3	1
78	26	37	16
78a	7	2	0
80	0	3	0
81	21	13	0
81a	0	45	7
82	0	50	23
85	10	48	6
85a	5	62	4
87	9	15	2
88	45	0	0
88b	40	2	0
90	35	23	0
90a	38	63	0
90b	0	15	5
90c	26	10	1
90d	20	24	5
90e	15	16	0
90f	14	5	1
92	2	2	10
93	0	10	10
98	8	4	6
102	0	. 11	0
103	0	2	2
104b	0	0	4
104c	7	2	3
105	0	9	2
109	38	15	9
110	7	17	24
117a	0	6	2
117b	0	8	6
117c	21	18	31
117d	0	12	7
118	30	18	10
119	46	11	0

# **FEIS Errata**

## (Continued from previous page)

TI:4 #		Acres by Volume Strat	ta	
Unit #	High	Medium	Low	
119a	71	27	13	
119b	8	62	3	
121	25	0	0	
122	33	0	0	
122a	19	0	0	
123	31	19	4	
125	8	60	0	
128	37	3	0	
129	0	27	16	
141	7	0	0	
148	0	11	1	
148a	0	7	1	
149	0	38	1	
150	0	5	2	
161a	20	0	0	
166a	6	6	0	
174	13	0	0	
187	0	4	0	







#### Introduction

The Forest Service has prepared this environmental impact statement (EIS) to analyze the potential effects of timber harvest, recreation projects, and watershed improvements in the Woodpecker Project Area in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations.

# Changes Between the Draft and Final Environmental Impact Statements

The decision from AFA v. USDA, the U.S. District Court, District of Alaska, which vacated the 1999 Forest Plan Record of Decision and upheld the 1997 Record of Decision, were incorporated. This resulted in minor changes in documentation but no changes in the analyzed effects.

New information about the Roadless Area Conservation Rule and the Forest Service Transportation; Final Administrative Policy (Roads Rule) was incorporated.

A new alternative (Alternative 6) was developed by modifying the Preferred Alternative in the Draft EIS (Alternative 2) to respond to concerns expressed in public comments on the Draft EIS. See Chapter 2.

Information was added to the Unit Card Narratives in response to requests in comments on the DEIS. Road Management Objectives were changed to include new information. See Appendix B.

Updates concerning information on the State of Alaska proposals (Southeast Alaska Transportation Plan and the Central/Southern Southeast Area Plan) were made.

Any new field information was incorporated and requests for information received from comments to the Draft EIS were incorporated when appropriate.

The District Ranger, Petersburg Ranger District, has made a separate project decision to approve the watershed improvement projects, which includes the revegetation projects and the reconstruction of stream crossing structures to improve fish passage so that implementation could begin during the 2001 field season.

#### Location

The Woodpecker Project Area is located on the southwest part of Mitkof Island, approximately 27 miles south of Petersburg, Alaska. Petersburg is located approximately 120 miles south of Juneau and 110 miles north of Ketchikan. The project area is approximately 33,000 acres in size.

#### **Proposed Action**

The Proposed Action (Alternative 2) for this environmental analysis includes timber harvest, the development of dispersed recreation opportunities, and watershed improvement projects. The proposed timber harvest will provide for multiple timber sale opportunities for approximately 12 million board feet (mmbf) of timber. Recreation opportunity enhancements include developing dispersed sites for camping and picnicking, improving access to recreation use areas, and improving turnouts for parking. Watershed improvement projects include revegetating exposed roadside slopes and restoring fish passage where stream crossing structures have the potential to restrict fish passage. Road use within the Woodpecker Project Area is examined, and objectives for road management are proposed. As part of the analysis for this proposed action, the small old-growth habitat reserves within the Woodpecker Project Area are analyzed to see if any boundary changes should be made as a non-significant amendment to the Forest Plan.

#### **Decision to be Made**

Based on the environmental analysis in this EIS, the Forest Supervisor will decide whether and how to implement activities within the Woodpecker Project Area in accordance with Forest Plan goals, objectives and desired future conditions. This decision may include the following:

- the location and method of timber harvest, road construction and reconstruction, log-transfer facilities, and silvicultural practices,
- road management objectives,
- recreation projects,
- watershed improvement projects (see below),
- mitigation measures and monitoring requirements,
- whether there may be a significant restriction on subsistence uses, and
- whether any changes in small old-growth habitat reserves should be made, and approved as a non-significant amendment to the Forest Plan.

The District Ranger, Petersburg Ranger District, has made a separate project decision to approve the watershed projects displayed in the Draft Environmental Impact Statement, which includes the revegetation projects and the reconstruction of stream crossing structures to improve fish passage so that implementation could begin in the 2001 field season.

#### **Purpose and Need**

The purpose and need for the proposed action is to respond to the goals and objectives identified by the Forest Plan and to move toward the desired future condition. The Forest Plan goals and objectives applicable to the Woodpecker Project Area are:

- Manage the timber resource for production of sawtimber and other wood products from suitable lands made available for timber harvest on an even-flow, long-term sustained yield basis and in an economically efficient manner.
- Seek to provide a timber supply sufficient to meet the annual market demand for the Tongass National Forest and the demand for the planning cycle.
- Provide Forest visitors with visually appealing scenery in areas along the Alaska Marine Highway, State highways, major forest roads, and from popular recreation places; recognize that in other areas where landscape is altered by management activities, the activity may visually dominate the characteristic landscape.
- Provide a range of recreation opportunities consistent with public demand, emphasizing locally popular recreation places and those important to the tourism industry.
- Maintain a Forest-wide system of old-growth forest habitat to sustain old-growth associated species and resources and ensure that the reserve system meets the minimum size, spacing, and composition criteria.
- Provide a diversity of opportunities for resource uses that contribute to the local and regional economies of Southeast Alaska to support a wide range of natural resource employment opportunities within Southeast Alaska's communities.
- Develop and manage roads to support resource management activities and provide access for forest users.

#### **Forest Plan Management Direction**

The Woodpecker Project Area EIS is a project-level analysis. Its scope is confined to addressing the significant issues and possible environmental consequences of the project. It does not attempt to address decisions made at higher levels of planning, such as national or forest-wide. It does however, implement direction provided at those higher levels. Where appropriate, the Woodpecker Project Area EIS tiers to the Forest Plan.

The Forest Plan uses management prescriptions called land use designations (LUD) to focus the management of the National Forest System lands within areas of the Tongass National Forest. Each land use designation provides for a combination of goals and objectives, activities, practices and uses. Chapter 3 of the Forest Plan contains a detailed description of each land use designation. The Woodpecker Project Area includes four of these land use designations - Timber Production, Modified Landscape, Scenic Viewshed, and Old-growth Habitat.

#### **Public Scoping**

The Woodpecker Project has had extensive public involvement. The following is a summary of the public involvement for the Woodpecker Project Area analysis:

- The project was first developed during the Mitkof Landscape Design Analysis, 1995.
- Schedule of Proposed Actions The Woodpecker Project Area EIS has been listed on the Schedule of Proposed Actions for pre-project analysis since the Summer of 1998. It has been listed as an environmental analysis project since the fall of 1998.
- Open Houses and Public Meetings held in Kake and Petersburg summer 1999, spring 1999, fall 1999, February 2000
- Public Scoping Documents June 1999, January 2000
- Notice of Intent (NOI) A Notice of Intent was published in the Federal Register on January 18, 2000
- Subsistence Hearing A subsistence hearing was held in Petersburg, Alaska on October 4, 2000.
- Notice of Availability Availability of the Draft EIS was announced in the Federal Register on August 18, 2000, with a due date for public comments listed as October 15, 2000. The letters received during the comment period were responded to in the Final EIS (Appendix C).

#### **Prior Management of Project Area**

The Woodpecker Project Area has previously been used for timber production. Evidence of logging in the early 1900s exists in several locations. Most of the timber harvesting (about 2300 acres) was done under the 25-year contract with Pacific Northern Timber, which started in the late 1960s and was closed in 1981. Smaller sales occurred throughout the 1980s and 1990s. The most recent harvest was the Sumner Salvage Sale, which was helicopter-logged in 1995. All harvested stands have regenerated successfully.

The road system within the Woodpecker Project Area was constructed for timber harvest in the 1960s and 1970s. This road system was connected with the Mitkof Highway in 1979, which allowed road access from the City of Petersburg.

Recreation developments in the Woodpecker Project Area include two viewpoints and picnic sites on Road 6287, and a picnic site on the Snake Ridge Road (Road 40006).

The Woodpecker Project Area has also been used extensively for hunting, especially deer hunting. Berry-picking in the clearcuts along the roads is a popular recreation and subsistence activity. A small area at milepost 10.5 on Road 6245 near the beach has been used for camping and picnicking. In 1993, this camping area was analyzed for improvement but it was decided not to improve the site.

#### Significant Issues

Significant issues for the Woodpecker Project Area were identified through public and internal scoping. Similar issues were combined where appropriate. Measures of the significance of an issue are based on the extent of the geographic distribution or duration of the related effects, or the intensity of interest or resource conflict surrounding the issue.

The following four issues were determined to be significant and within the scope of the project decision. These issues are addressed through the proposed action and alternatives.

Issue 1: Deer Hunting
Issue 2: Recreation
Issue 3: Economics

Issue 4: Crystal Inventoried Roadless Area

#### Issue 1 – Deer Hunting

Mitkof Island has traditionally been used by residents of Petersburg for subsistence deer hunting. The Woodpecker Project Area is the most heavily used part of Mitkof Island for deer hunting, due to the accessibility provided by the road system that connects to Petersburg, and the higher numbers of deer inhabiting the area. The number of deer is higher in the Woodpecker Project Area because of good forage and because of the milder winters found on the southern slopes near saltwater. The area provides an opportunity for hunters to teach this traditional use of Alaska's resources to their children without a large expenditure of time or money and without the safety risks inherent in traveling to outlying areas.

#### Issue 2 – Recreation

Because of the proximity of the Woodpecker Project Area to the City of Petersburg, many residents use the area for a variety of recreational activities. Some of the residents primarily want the area kept as natural as possible for access by foot or boat. Other residents want the ability to drive to the area and want more enjoyable roaded activities.

The main recreational use of the Woodpecker Project Area is for hunting, but many people also use the area for berry-picking and recreational driving. Recent comments indicated that people would use the area more if the road was improved and if dispersed recreation sites existed. Use of the Woodpecker Road may also increase if a proposed new state of Alaska ferry terminal is built on the south end of Mitkof Island. Ferry travelers offloading from the new terminal would be arriving to the island near the project area, and would drive past the project area on their way to Petersburg and the ferry terminal on the north end of the island.

Parts of the Woodpecker Project Area can be seen from Visual Priority Travel Routes and Use Areas, such as the Alaska Marine Highway, Wrangell Narrows, and Sumner Strait. Both residents and tourists use these areas for water-based recreation. Several small cruise ships travel the Wrangell Narrows, although larger cruise ships generally do not. The concern mentioned in public comments was to maintain the value of the scenery, for the enjoyment of both residents and visitors.

# Issue 3 – Economics

This issue relates to the viability of the local economies, both on Mitkof Island and around Southeast Alaska. It concerns proposed timber sales, the potential employment and revenues generated by the project, and the ability of smaller companies to compete for timber sales in the project area. The most economical opportunities for smaller timber companies are located along the existing road system. Higher volume sales requiring extensive road construction or helicopter logging may be beyond the means of smaller timber purchasers.

Another aspect of economics is the effect of timber harvest on other local industries – fishing, tourism, and commerce, for example. These effects are not specific to the Woodpecker Project Area and are interdependent with other parts of Southeast Alaska.

# Inventoried Roadless Area (#224)

Issue 4 - Crystal Part of the Crystal Inventoried Roadless Area (#224) is within the Woodpecker Project Area. Roadless areas are identified as undeveloped lands where there are no roads maintained for travel by motorized vehicles intended for highway use and which do not have extensive timber harvest or other developments. This analysis examines the values of the Crystal Inventoried Roadless Area that may be affected by this proposed project. During the analysis for the Woodpecker project, alternatives that would affect the Crystal Inventoried Roadless Area were considered along with alternatives that would not affect the area.

> Currently, the Forest Service is reevaluating its Roadless Area Conservation Rule (Roadless Rule) and is enjoined from implementing all aspects of the Roadless Rule by the U.S. District Court, District of Idaho. The Woodpecker Draft EIS was issued prior to the deadline in the Roadless Rule, so this project could move forward regardless of the Roadless Rule status. Implementation of any alternative that would change the wilderness character of the Crystal Inventoried Roadless Area would depend upon the applicability of the Court's injunction.

#### Alternatives Considered in Detail

#### Alternative 1 -No Action

This alternative proposes no timber harvest, road construction, or other activities within the Woodpecker Project Area at this time. It does not preclude future timber harvest from this area. The Council on Environmental Quality (CEQ) regulations require that a "No- Action" alternative be analyzed in every EIS. The analysis of this alternative represents the existing condition of the Woodpecker Project Area.

#### Alternative 2 -Proposed Action

The Proposed Action for the Woodpecker Project Area would harvest timber by road access, provide new dispersed recreation opportunities, improve parking areas for hunting and recreation access, determine road management objectives, and revegetate selected road cutbanks.

An estimated 1,140 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume provided is estimated to be 12 million board feet, to be sold in multiple sales, including some sales of less than one million board feet.

Approximately 4.8 miles of new classified road would be built to access the timber. After harvest is completed, about 1.8 miles of this new classified road would remain open, and 3 miles would be placed in

storage. Approximately 6.1 miles of temporary road would also be built for timber access. All of the temporary roads would be decommissioned after harvest. About 10 miles of existing classified roads would be closed to motorized vehicles and placed in storage. Logs would be transported to an existing log transfer site or processing yard.

Several dispersed picnic/camp sites are proposed for recreation use. Improved or new road turnouts would be developed along the Woodpecker Road to provide additional safe parking areas. A segment of road would be constructed to create a loop by connecting the Woodpecker Road with another existing road to provide a new recreation opportunity. The Woodpecker Road, the Snake Ridge Road and the access to the Snake Ridge Road would be improved for standard passenger vehicle use.

Fish passage will be improved at five stream crossings on the Woodpecker Road that have the potential to restrict fish passage. This will be accomplished by either installing new structures or by modifying the existing structures to meet new design criteria. To prevent degradation of water quality, several sites would be revegetated.

#### Alternative 3

An estimated 500 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume provided is estimated to be 6 million board feet to be sold in multiple sales.

No new classified road construction is proposed. Existing roads or short temporary roads would be used to access timber. Approximately four miles of temporary road would be built to access the timber. All of the temporary roads would be decommissioned after harvest. About 10 miles of existing classified roads would be closed to motorized vehicles and placed in storage. The Woodpecker Road, the Snake Ridge Road and the access to the Snake Ridge Road would be improved for standard passenger vehicle use. Logs would be transported to an existing log transfer site or processing yard.

Fish passage will be improved at five stream crossings on the Woodpecker Road that have the potential to restrict fish passage. This will be accomplished by either installing new structures or by modifying the existing structures to meet new design criteria.

No new recreation or watershed improvement projects are proposed in Alternative 3. The loop road would not be built.

#### Alternative 4

An estimated 1,850 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume provided is estimated to be 17 million board feet, to be sold in multiple sales, including sales of less than 1 million board feet.

No new classified roads would be built. Existing roads or short temporary roads would be used to access the timber. Approximately three miles of temporary road would be built for timber access. All of the temporary roads would be decommissioned after harvest. About 10 miles of existing classified roads would be closed to motorized vehicles and placed in storage. Logs would be transported to an existing log transfer site or processing yard.

Several dispersed picnic/camp sites are proposed for recreation use. Improved or new road turnouts would be developed along the Woodpecker Road to provide additional safe parking areas. The Woodpecker Road, the Snake Ridge Road and the access to the Snake Ridge Road would be improved for standard passenger vehicle use. Fish passage will be improved at five stream crossings on the Woodpecker Road that have the potential to restrict fish passage. This will be accomplished by either installing new structures or by modifying the existing structures to meet new design criteria. To prevent degradation of water quality, several sites would be revegetated.

#### Alternative 5

An estimated 1,670 acres would be partially harvested while retaining various amounts of trees within the stands, and 60 acres would be clearcut. The amount of timber volume provided is estimated to be 27 million board feet to be sold in multiple sales, including sales less than 1 million board feet.

Alternative 5 includes both new road construction and helicopter logging from existing roads. Approximately 3.5 miles of new classified road would be built to access the timber. After harvest is completed, about 1 mile of this new classified road would remain open, and 2.5 miles would be placed in storage. Temporary road segments, which total 4.1 miles, would be built for timber access. All of the temporary roads would be decommissioned after harvest. About 10 miles of existing classified roads would be closed to motorized vehicles and placed in storage. Logs would be transported to an existing log transfer site or processing yard.

Several dispersed picnic/camp sites are proposed for recreation use. Improved or new road turnouts would be developed along the Woodpecker Road to provide additional safe parking areas. The Woodpecker Road, the Snake Ridge Road and the access to the Snake Ridge Road would be improved for standard passenger vehicle use.

Fish passage will be improved at five stream crossings on the Woodpecker Road that have the potential to restrict fish passage. This will be accomplished by either installing new structures or by modifying the existing structures to meet new design criteria. To prevent degradation of water quality, several sites would be revegetated.

# Alternative 6 - Preferred Alternative

An estimated 1,300 acres would be partially harvested while retaining various amounts of trees within the stands. The amount of timber volume provided is estimated to be 16 million board feet to be sold in multiple sales, including sales less than 1 million board feet.

Alternative 6 includes both new road construction and helicopter logging from existing roads. Approximately 4.8 miles of new classified road would be built to access the timber. After harvest is completed, about 1.8 miles of this new classified road would remain open, and 3 miles would be placed in storage. Temporary road segments, which total 3.8 miles, would be built for timber access. All of the temporary roads would be decommissioned after harvest. About 10 miles of existing road would be closed to motorized vehicles and placed in storage. A short 300-foot section of unclassified road that junctions with Road 40004 will be decommissioned and allowed to return to a more natural state with vegetation and natural drainage patterns. Logs would be transported to an existing log transfer site or processing yard.

Several recreation sites are proposed for development. Improved or new road turnouts would be developed to provide additional safe parking areas. A segment of road would be constructed to create a loop by connecting the Woodpecker Road with another existing road to provide a new recreation opportunity. The Woodpecker Road, the Snake Ridge Road and the access to the Snake Ridge Road would be improved for standard passenger vehicle use.

Fish passage would be improved at five stream crossings on the Woodpecker Road that have the potential to restrict fish passage. This will be accomplished by either installing new structures or by modifying the existing structures to meet new design criteria. To prevent possible degradation of water quality, several sites would be revegetated.

#### Mitigation Measures for All Action Alternatives

Where effects to resources were unavoidable, mitigation measures were developed to reduce those effects. The mitigation measures for all of the action alternatives are described in Chapter 2 and Appendix B.

Table S-1. Comparison of Alternatives by Proposed Activity

Proposed Activity	Alt.	Alt.	Alt.	Alt.	Alt.	Alt.
	1	2	3	4	5	6
Acres of Timber harvest by harvest treatmen	t					
75% retention	0	570	140	740	200	380
50-66% retention	0	350	200	990	530	680
20-30% retention	0	220	160	120	940	240
0% retention	0	0	0	0	60	0
Acres of Timber harvest by logging systems						
Cable	0	990	350	310	640	750
Shovel	0	150	150	150	150	150
Helicopter	0	0	0	1,390	940	400
Road construction						
Miles of new classified roads	0	4.8	0	0	3.5	4.8
Miles of new classified roads left open	0	1.8	0	0	1.0	1.8
Miles of temporary roads (closed after harvest)	0	6.1	3.9	3.1	4.1	3.8
Number of Recreation projects						
Picnic/Campsites	0	7	0	7	8	8
Turnouts	_ 0	4	0	4	4	4
Number of Watershed projects <sup>1</sup>						
Fish passage	0	5	5	5	5	5
Revegetation projects	0	5	0	5	5	5

<sup>&</sup>lt;sup>1</sup> The District Ranger, Petersburg Ranger District, has made a separate project decision to approve these watershed projects, which includes the revegetation projects and the reconstruction of stream crossing structures to improve fish passage. Implementation has begun on the revegetation projects to stabilize and mitigate effects on these areas. A contract has been awarded to begin the survey, design, and reconstruction of four of the five stream crossing structures.

Table S-2. Comparison of Alternatives by Effects

Units of Measure	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Issue 1 - Deer Hunting						
Change in deer carrying capacity year 2003 <sup>1</sup>	0%	-1.5%	-0.9%	-1.8%	-2.4%	-1.4%
Change in deer carrying capacity year 2043 <sup>2</sup>	-9.6%	-11.3%	-10.5%	-11.2%	-12.7%	-11.2%
Effect on historical levels of subsistence deer harvest?	yes	yes	yes	yes	yes	yes
Effect on current levels of deer harvest?	no	no	no	no	no	no
Issue 2 – Recreation						
Acres changed from semi-primitive to roaded settings <sup>3</sup>	0	1270	260	2280	2230	1365
% of area changed from semi-primitive to roaded settings	0	4%	<1%	8%	7%	4%
Issue 3 – Economics						
Amount of volume (mbf)	0	12,300	5,700	16,800	26,800	16,300
Amount of volume (ccf)	0	25,200	11,600	34,200	54,200	30,870
Appraised value (\$/ccf)	0	\$15.38	\$35.24	\$5.63	\$15.31	\$12.35
Issue 4 – Crystal Inventoried Roadless Area (IRA)						
Acres within the IRA affected by timber harvest	0	310 acres	0	830 acres	800 acres	370 acres
Miles of new classified road within the IRA	0	2.0 miles	0	0	1.4 miles	2.0 miles
Acres affected by timber harvest, including areas within 600	0	850 acres	140 acres	1910 acres	1860 acres	840 acres
ft of harvest units						
Remaining size of IRA excluding acres within 600 ft of	18,320	17,470	18,180	16,410	16,460	17,480
harvest units	acres	acres	acres	acres	acres	acres
Other Environmental Considerations						
Biodiversity						
Acres of old-growth habitat maintained	14,250	13,820	14,020	13,920	13,170	13,850
Effects on TES Species	None	None	None	None	None	None
Other Wildlife						
Percent change in marten carrying capacity by year 2003 <sup>1</sup>	0%	-1.8%	-1.1%	-2.4%	-3.3%	-1.9%
Percent change in marten carrying capacity by year 2043 <sup>2</sup>	-1.7%	-3.2%	-2.5%	-2.9%	-4.7%	-3.1%
Water Quality						
Number of new Class I stream crossings	0	0	0	0	0	0
Number of new Class II stream crossings	0	2	1	1	2	2
Number of new Class III stream crossings	0	. 13	1	1	11	13
Number of new Class IV stream crossings	0	2	0	0	2	2
Wetlands						
Miles of new classified road on wetlands	0	1.1	0	0	1.1	1.1
Effects on Subsistence other than deer	None	None	None	None	None	None
Effects on Heritage Resources	None	None	None	None	None	None
Effects on Land Status	None	None	None	None	None	None
Effects on Karst	None	None	None	None	None	None
Transportation						
Miles of new classified roads	0	4.8	0	0	3.5	4.8
Miles of new classified roads left open	0	1.8	0	0	1.0	1.8
Miles of temporary roads (decommissioned after harvest)	0	6.1	3.9	3.1	4.1	3.8
Road density for Mitkof Island (mi/mi <sup>2</sup> )	0.68	0.69	0.68	0.68	0.68	0.69
Effects on Wild, Scenic and Recreational Rivers	None	None	None	None	None	None

<sup>&</sup>lt;sup>1</sup> For the purposes of alternative comparison and analysis only, it was assumed that all harvest would occur by 2003, for the deer and marten models.

<sup>&</sup>lt;sup>2</sup> At year 2043, the canopies of the existing second-growth stands will completely close, reducing forage. No future thinning has been taken into account.

<sup>&</sup>lt;sup>3</sup> For total acreages in each Recreation Opportunity Spectrum class for each alternative, refer to Table 3-4 in Chapter 3.

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