• Use silvicultural practices, where applicable, to accomplish widlife habitat objectives.

The purpose of this Environmental Assessment (EA) is to implement Goals and Objectives of the Forest Plan and Standards and Guides as identified in the Proposed Action.

The EA will describe the environmental impacts of proposed rehabilitation projects to comply with the procedural requirements of NEPA regulations. Analysis and public comment of the EA will be used to determine a Finding of No Significant Impact (FONSI) or initiate preparation an Environmental Impact Statement (EIS). If the EA indicates that the proposed action constitutes a major federal action significantly affecting the quality of the human environment, then an EIS will be required.

Detailed background and conditions relating to historic use and watershed processes in the Harris River is presented in the Environment and Effects section of this document.

ALTERNATIVES

This chapter describes and compares the alternatives considered for the Harris River Rehabilitation project. Maps of each alternative considered are located in Appendix C. This section also presents the alternatives in comparative form, sharply defining the differences between each alternative and providing a clear basis for choice among options by the decision maker and the public. This environmental assessment will compare the impacts of the no action alternative to the proposed basin-wide restoration activities.

Alternative Development

Two alternatives have been developed to address issues and meet the purpose and need of this project: Alternative 1 — No Action and Alternative 2 — Proposed Action. No alternatives to the Proposed Action were identified that would meet the purpose and need of the project and have meaningful differences in environmental effects. Due to fish timing windows (see Timing of Project Action), the sequence of project implementation of the proposed action meets a reasonable range of alternatives. Therefore, this EA will analyze the effects of the "Proposed Action" and the "No Action Alternative".

Public participation in the NEPA process has been, and will continue to be, solicited and welcomed. Compliance with state and federal laws and regulations, as well as Best Management Practices and Standards and Guidelines in the Forest Plan will be carried out as detailed.

Based upon the effects of the alternatives, the responsible official will decide whether or not to authorize projects developed to address the goals and objectives stated herein and further presented in this document. The decision will enable managers to seek funding and contract work to complete individual projects. The decision will formally commit the Forest Service to the long-term goal of holistic watershed rehabilitation in the Harris River.

Alternatives Considered but Not Analyzed in Detail

An alternative approach to watershed rehabilitation was considered based on case by case basis through sporadic projects responding to natural processes over time rather than the integrated method in the proposed action. A determination was made that such an approach would not meet

the underlying need for action in the project area; this determination is discussed in the proposed action section of this document under Project Timing.

Alternative 1: No Action

Under the No Action alternative, current management policies with regard to National Environmental Policy Act (NEPA) compliance would continue, providing compliance on a project by project basis requiring independent analysis for each project. Individual project type, size and number would be expected to remain unchanged. Overall ecological function would be less than the optimal potential for this watershed since it would not be addressed holistically.

The environmental impacts of the individual projects would likely be the same as similar projects conducted under a large scale EA. The primary difference would be that the amount of time dedicated towards completing the NEPA process for individual projects would remain high, especially when compared with a large scale approach, resulting in decreasing administrative efficiency. The ability to analyze the cumulative effects of these projects would be diminished. Map 2 (Appendix C) shows all harvest units, highlights harvested riparian areas, and landslide activity in the basin.

Alternative 2: Proposed Action

The second alternative is the Proposed Alternative. Through a comprehensive program of ecosystem rehabilitation, promoting projects in both riparian areas and in upland habitats, the Proposed Alternative would meet or exceed the Purpose and Need. This alternative would address disrupted watershed processes for short and long-term health of aquatic and terrestrial ecosystems. Watershed improvement activities in the Proposed Action (Table 1, Table 2, and Appendix A) would address undesired watershed processes through controlling sediment sources and reducing sites with active or high potential for erosion, controlling active stream diversions or high potential for stream diversion. Roads with high potential for fill failure, culvert failure, and hydrologic connectivity would be addressed with the Proposed Action. connectivity is essential to the ecological integrity of the landscape, and altering this property can have major negative environmental effects. Some of the effects of the actions would be immediate and localized. For example, with respect to migratory fish, a stream diversion caused by a plugged pipe or a stream purposely diverted to another drainage may act to reduce hydrologic connectivity (by preventing or impeding migration up or downstream). Projects would also address plugged or diverted streams at road crossings. Culverts on fish streams that do not allow fish migration are termed "Red" pipes. Six Red pipes are listed in the Harris River Basin (Table 2). While reducing sedimentation in the watershed through restoration projects, we also intend to actively improve fish habitat by increasing channel complexity using large wood inputs into selected stream reaches.

Best Management Practices and Forest Plan Standards and Guidelines would be utilized to ensure that these projects minimize any potential adverse impacts to the environment. During the evaluation and approval process for each project, separate clearance procedures required by the Clean Water Act and National Historic Preservation Act (NHPA) will be undertaken, in consultation with the Army Corps of Engineers specialists and the State Historic Preservation

Office, respectively. All state and federal regulations and permits will be acquired as necessary and appropriate.

A large scale rehabilitation approach to analyze the effects of this project allows for a comprehensive, ecosystem wide evaluation of the proposed rehabilitation activities, recognizing the connection and inherent relationship between differing segments of the environment. A large scale approach also provides for more efficient paperwork processing for these projects, since individual NEPA assessments will not be necessary under this alternative.

Projects proposed in this alternative can be grouped into one or more broad categories as listed below:

- Road or Trail Projects: Road storage and decommissioning; road drainage improvements and storm proofing; road cut and fillslope stabilization (Map 3); culvert/stream crossing upgrades including "Red" (Table 3) fish crossing pipes, improving hydrologic connectivity, and designating new trail.
- Riparian Projects erosion control; wildlife and riparian habitat improvement; improved floodplain function (Map 4).
- Instream projects habitat complexity and diversity improvements; floodplain function improvements; hydrologic regime improvements; bank stabilization; coarse woody debris supplementation; artificial fish passage barrier removals
- Recreation Projects Visitor access improvements and additional interpretation and education opportunities.

Appendix A lists all projects with project descriptions that explains all actions.

Some short-term negative impacts could occur because of the projects authorized by Alternative 2, but these would be offset by the expected long-term beneficial results to water quality and habitat conditions. Alternative 2 is not expected to have a significant impact when compared to the loss of riparian, wetland, and upland habitat functionality that has occurred in the watershed to date. Impacts that do occur would be of a cumulatively beneficial nature.

Decision Framework

This EA is not a decision document. It is a document disclosing the environmental consequences of implementing the different alternatives, including the No Action alternative. After completion of the EA, there will be a 30-day public review and comment period. Following the public comment period, a decision will be made. Based on the information in the analysis and a consideration of the public comments, the Deciding Officer will document the decision in a Record of Decision.

The responsible Federal official is the Craig District Ranger. The decision will consider whether or not to implement proposed watershed rehabilitation projects to the Harris River Basin, and if so, what areas to treat, and what treatment methods and monitoring would be implemented.

- This includes whether or not to:
 - 1. Put Road 2000220 into storage with the use of heavy equipment to reduce high failure potential and protect Fubar Creek Rehabilitation investment.

- 2. Improve Harris River Trail (2024050 North) by relocating section of trail and rehabilitating an anadromous stream segment impacted by the trail and highway.
- 3. Decommission closed road 2024050 (South) and designate and improve as Fubar Creek Trail.
- 4. Apply storage treatments to non-system Road 2024060_0.048L.
- 5. Apply storage treatments to non-system Road 2024080_Harris Peak.
- 6. Work with the State to apply closure treatments to non-system State road 2024080_0.06R&RA.
- 7. Work with the State to apply closure treatments to non-system State Road 924_25.94.
- 8. Work with the State to improve trail access to the State owned Harris-Indian Creek estuary (2024100_RR1).
- 9. Decommission Restore hydrologic connectivity and drainage on the system Road 2024110.
- 10. Apply storage treatments to non-drivable system Road 2024185.
- 11. Improve road by restore hydrologic connectivity and drainage, and resurface drivable system portion of the Road 2025000.
- 12. Improve the Twenty-Mile Trail by improving drainage and hydrologic connectivity, upgrading stream crossings, and addressing stream/road interactions.
- 13. Apply storage treatments to non-drivable system closed portion Road 2025100.
- 14. Apply decommission and storage treatments to portions of system Road 2026000 and 2026200 respectively.
- 15. Provide tributary large wood modifications and enhancements.
- 16. Proceed with Fubar Creek rehabilitation phase II; ~0.5 miles instream rehabilitation from mainstem confluence upstream.
- 17. Plan and implement Harris River mainstem bank stabilization, floodplain roughening, manage stream diversions, sediment routing, and riparian zone protection using large woody debris and heavy equipment.
- 18. Continue to plan and implement mainstem and tributary riparian thinning.

Agencies and Persons Consulted

The project proposal has been listed on the Tongass National Forest Schedule of Proposed Actions since October 1, 2006. This document is available on the internet. A scoping letter was sent on January 5, 2007 to approximately 60 individuals, organizations and federal and state agencies that had previously shown interest in USDA Forest Service projects within the vicinity of Prince of Wales Island, Alaska, summarizing the purpose of the project and soliciting comments. Two responses to this mailing were received. Using the comments from the public, other agencies, and tribal organizations above (see *Issues* section), the interdisciplinary team developed a list of issues to address.

This EA will be advertised in the *Ketchikan Daily News* and *The Island News*; and the EA will be made available for a 30 day comment period, after which a decision will be made by the Forest Service. Copies of the mailing list, scoping letter, and any correspondence received regarding this EA will be available at the Craig Ranger District.

Tribal Consultation

As part of ongoing government to government tribal relations and collaborative management of resources on Prince of Wales Island, the Craig Community Association (CCA), Klawock Cooperative Association (KCA), Hydaburg Cooperative Association (HCA), and the Organized Village of Kasaan (OVK) were provided an overview of District projects including this project in writing on December 15, 2006 as well as during tribal consultation meetings, attended by the District Ranger or his representative, which took place with CCA on January 24, 2007, and with KCA and HCA on January 9, 2007.

Issues

The Forest Service separated the project issues into two groups: significant and non-significant issues. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality (CEQ) NEPA regulations require this delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..."

Non-significant issues may be found in the project record. One of the two issues from the two responses was regarding acquisition of appropriate State Department of Natural Resources permits. Law and regulation already require this. The second comment was asking the type of monitoring we were to undertake and offered assistance to that end. This is irrelevant to the decision as it simply requested information and offered assistance. An issue which maybe considered key to this project is sediment produced during project implementation; the relevancy of this topic is discussed thoroughly in this document.

No significant issues, were raised during scoping by the public.

Federal and State Permits, Licenses, and Certificates

To proceed with the projects as addressed in Alternative 2 in this EA, various permits, licenses, or certifications will be obtained from federal and state agencies. The following permits would be obtained for the reconstruction and use of the area:

 Approval of discharge of dredged or fill material into the waters of the United States under Section 404 of the Clean Water Act from the U.S. Army Corps of Engineers

- Certification of compliance with Alaska Water Quality Standards (Section 401 Certification) from the State of Alaska, Department of Environmental Conservation.
- Title 41 concurrence for instream work from the State of Alaska, Department of Natural Resources Office of Project Management and Permitting

In addition to the above permits, the Forest Service is required to obtain concurrence from the State of Alaska, Office of Project Management & Permitting (in the Department of Natural Resources) on a coastal zone consistency determination to proceed with the proposed action.

Mitigation and Monitoring Common to All Alternatives

Mitigation measures necessary for this project would implement Forest Plan Standards and Guidelines and the Alaska Region Best Management Practices (BMPs). See the Forest Service's Soil and Water Conservation Handbook (FSH 2509.22) for Best Management Practices and Forest Plan Standards and Guidelines to be used during project implementation. FSH 2509.22 may be found at http://www.fs.fed.us/r10/ro/policy-reports/bmp/index.shtml. Information and documents regarding the Tongass Land and Resource Management Plan may be accessed at http://www.fs.fed.us/r10/tongass/projects/tlmp/index.shtml. Monitoring of BMPs on the Tongass demonstrates that BMPs are effective at maintaining Alaska Water Quality Standards for suspended sediments and turbidity (USDA Forest Service 2002).

The Forest Service must apply BMPs that are consistent with the Alaska Forest Resources and Practices Regulations to achieve Alaska Water Quality Standards. 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). In 1997, the State approved the BMPs in the Forest Service's Soil and Water Conservation Handbook (FSH 2509.22), October 1996) as consistent with the Alaska Forest Resources and Practices Regulations. This Handbook is incorporated into the Tongass Land Management Plan.

Applicable Laws and Executive Orders

Many federal laws and Executive Orders pertain to project-specific planning and environmental analysis on federal lands. While most of the laws and Executive Orders listed below pertain to all federal lands, some of the laws are specific to Alaska.

Findings and Disclosures

Several of the laws and executive orders listed below require project-specific findings or other disclosures. These apply to federal land management projects and activities and are included here and in any future Decision Notice. They apply to both alternatives considered in detail in this EA.

National Forest Management Act

All project alternatives fully comply with the 1997 Tongass Forest Plan. This project incorporates all applicable Forest Plan standards and guidelines and management area

prescriptions as they apply to the project area and complies with Forest Plan goals and objectives. This includes the additional direction contained in the 1997 Record of Decision for the Forest Plan Revision. All required interagency review and coordination has been completed.

The 1997 Forest Plan complies with all resource integration and management requirements of 36 CFR 219 (219.14 through 219.27). Application of Forest Plan direction for Harris River Watershed Rehabilitation ensures compliance at the project level.

Endangered Species Act

None of the alternatives is anticipated to have a direct, indirect, or cumulative effect on any threatened or endangered species in or outside the project area. A complete Biological Evaluation (BE) is included in the planning record.

National Historic Preservation Act

Section 106 of the NHPA requires consideration of the effects of proposed action on cultural resources in the area of potential effects for the undertaking. The Alaska Region of the Forest Service, the State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation Programmatic Agreement (Agreement # 02MU-111011-176) establishes the National Historic Preservation Act Section 106 review process for certain types of projects. For Projects that are found to contain no historic properties within the area of potential effects, the Forest Service may authorize project clearance after completing and documenting the analysis process. Under the terms of the Programmatic Agreement completed reports are forwarded to the SHPO annually for programmatic review. Many actions proposed in this EA have little or no potential to affect heritage resources and may be cleared under the terms of the PA. Other will require project-specific section 106 clearance. Tribal governments and Alaska Native Corporations have been consulted. No effects on known cultural resources are anticipated.

Federal Cave Resource Protection Act

No known significant caves in the project area would be directly or indirectly affected by project activities. Forest Plan karst and caves standards and guidelines are applied to areas known or suspected to contain karst resources.

Alaska National Interest Lands Conservation Act (ANILCA)

An ANILCA Section 810 subsistence evaluation was conducted. No significant restrictions on the abundance and distribution of, access to, or competition for subsistence resources in the project area are anticipated.

Clean Water Act

Congress intended the Clean Water Act of 1972 (Public Law 92-500) as amended in 1977 (Public Law 95-217) and 1987 (Public Law 100-4) 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 January 23, 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. Compliance is to be in line with "all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution."

The Clean Water Act (Sections 208 and 319) recognized the need for control strategies for nonpoint source pollution. The National Nonpoint Source Policy (December 12, 1984), the Forest Service Nonpoint Strategy (January 29, 1985), and the USDA Nonpoint Source Water Quality Policy (December 5, 1986) provide a protection and improvement emphasis for soil and

water resources and water-related beneficial uses. Soil and water conservation practices (BMPs) were recognized as the primary control mechanisms for nonpoint source pollution on National Forest System lands. The Environmental Protection Agency supports this perspective in their guidance, "Nonpoint Source Controls and Water Quality Standards" (August 19, 1987).

The Forest Service must apply Best Management Practices that are consistent with the Alaska Forest Resources and Practices Regulations to achieve Alaska Water Quality Standards. 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). In 1997, The State approved the BMPs in the Forest Service's Soil and Water Conservation Handbook (FSH Handbook 2509.22, October 1996) as consistent with the Alaska Forest Resources and Practices Regulations. This Handbook is incorporated into the Tongass Land Management Plan.

Temporary access roads for instream project work as well as fill placed in waters including wetlands requires U.S. Army Corps of Engineers regulatory approval. The Corps of Engineers wetland permit review under Section 404(f) of the Clean Water Act will be mandatory for this project. Detailed project descriptions will be provided to Corps of Engineers standards that will quantify the amount of wetlands affected prior to implementation. The FS standard is to avoid wetlands if possible, and if not able to avoid, to minimize the effects to wetlands considering it has values and functions.

Clean Air Act

Emissions anticipated from the implementation of any project alternative would be of short duration and are not expected to exceed State of Alaska ambient air quality standards (18 AAC 50).

Coastal Zone Management Act

Under the Coastal Zone Management Act (CZMA) of 1972, as amended, FS activities and development projects that affect the coastal zone must be consistent to the maximum extent practicable with the enforceable policies of the Alaska Coastal Management Program (ACMP). Such "consistency determinations" are made by the FS, and are reviewed by the State of Alaska as required by the CZMA.

Alaska Coastal Zone Management (ACMP)

The FS has determined that the Harris River Watershed Rehabilitation project has limited, indirect effects on the coastal zone, and that the Forest Plan's standards and guidelines and mitigation measures applicable to proposed projects presented in this EA meet or exceed the requirements of the State of Alaska Forest Resources and Practices Act. Therefore, the project is consistent to the maximum extent practicable with the enforceable policies of the Alaska Coastal Management Program. Copies of this determination and supporting information will be provided to the State of Alaska, Department of Program Management and Permitting, for review as required by the CZMA.

Executive Order 11988

The numerous streams in the Harris River Watershed Rehabilitation project area make it essentially impossible to avoid all floodplains during project work, primarily instream project access. Temporary access roads may be constructed (or reconstructed) in or through riparian areas subject to the design requirements of the Best Management Practices. Effects on these riparian areas from project activities have been avoided or minimized as much as possible.

Executive Order 11990

Executive Order 11990 requires federal agencies to avoid, to the extent possible, the long-term and short-term adverse impacts associated with the destruction or modification of wetlands.

The FS standard is to avoid wetlands if possible, and if not able to avoid, to minimize the effects to wetlands considering its values and functions. Wetlands are extensive in the Harris River Watershed Rehabilitation project area; therefore it is not feasible to avoid all wetland areas. A small portion of wetlands will be impacted due to temporary access trails to instream project sites, however no adverse effects to overall wetland function and condition are anticipated due to their relatively small size and through the use of Best Management Practices to reduce impacts.

Executive Order 12898

Implementation of any project alternative is not anticipated to cause disproportionate adverse human health or environmental effects to minority or low-income populations. Expected effects are similar for all populations, regardless of nationality, gender, race, or income.

Executive Order 12962 (Aquatic Systems and Recreational Fishing)

This executive order was signed on June 7, 1995 and addresses recreational fishing in the United States. It requires federal agencies to protect and promote recreational fishing opportunities and to work with anglers to encourage conservation and protection of fish habitat. The potential impacts of the Harris River Rehabilitation on on Essential Fish habitat have been evaluated and are discussed in the Fisheries section. Proposed activities are anticipated to have no adverse effect on Essential Fish Habitat. NMFS review is pending.

With the application of Forest Plan Standards and Guidelines, including those for riparian areas, no significant adverse effects to freshwater resources are anticipated to occur. Recreational fishing access would be improved through trail creation and improvements. Fish resources should improve over time through instream rehabilitation and riparian thinning projects

Magnuson-Stevens Fishery Conservation and Management Act of 1996

The Magnuson-Stevens Fishery Conservation and Management Act of 1996 (hereafter referred to in this section as "the Act") requires consultation with the National Marine Fisheries Service on activities that may affect Essential Fish Habitat (EFH). EFH is defined as "those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity." EFH for Pacific salmon includes marine waters, intertidal habitats, and freshwater streams accessible to anadromous fish. Freshwater EFH in Alaska includes all streams, lakes, ponds, wetlands, and other water bodies currently and historically accessible to salmon in the state. Marine EFH for the salmon fisheries in Alaska includes all estuarine and marine areas utilized by Pacific salmon of Alaska origin, extending from the influence of tidewater and tidally submerged habitats to the limits of the U.S. exclusive economic zone. The Act promotes the protection of these habitats through review, assessment, and mitigation of activities that may adversely affect these habitats.