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April 2005

Final Environmental Impact Statement

Special Use Permits for Commercial Operations on the Lower Rogue and Lower Illinois Rivers

Gold Beach Ranger District
Rogue River-Siskiyou National Forest
Curry County, Oregon

United States Department of Agriculture | Forest Service | Rogue River-Siskiyou National Forest | Chetco Ranger District 539 Chetco Avenue Brookings, OR 97415 | Gold Beach Ranger District 29279 Ellensburg Gold Beach, OR 97444

File Code: 1950-3
Date: April 11, 2005

Dear Participant

Enclosed you will find your copy of the Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers Environmental Impact Statement (EIS). This final EIS will also be published on the Rogue River and Siskiyou National Forests' Web site.

Comments received during public scoping and in response to the draft EIS were considered in identifying and addressing issues during the development of alternatives and analysis of the effects to the environmental setting this project encompasses. There were four alternatives proposed in the draft EIS, including the no action alternative. I have developed and analyzed two additional alternatives from comments received on the draft EIS.

Typically, a Record of Decision (ROD) accompanies a final FEIS at the time of publishing. It is the ROD that is the legal decision document authorizing actions to be taken. At this time a decision has not been made. Consultations with other Federal agencies need to be completed before issuance of the ROD. A copy of the ROD will be mailed to you upon its issuance.

Thank you for your participation in the Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers Environmental Impact Statement. Your input on this proposal has been important to us. Your involvement and commitment to a better future for our forest and community is highly valued.

Sincerely,

/s/ John Borton

JOHN T. BORTON
District Ranger

FINAL ENVIRONMENTAL IMPACT STATEMENT

Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers

Gold Beach Ranger District
Rogue River-Siskiyou National Forest
Curry County, Oregon

April 2005

Lead Agency: USDA Forest Service
Rogue River-Siskiyou National Forest

Responsible Official: John Borton, District Ranger
Gold Beach Ranger District

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Abstract:

The Rogue River-Siskiyou National Forest has prepared a Final Environmental Impact Statement (FEIS) to: (a) disclose the environmental effects of commercial outfitter/guide services consisting of scenic boat tours, guided fishing, and other commercial activities on the lower Rogue and lower Illinois Rivers for the next five years; (b) disclose the environmental effects of private lodge boat docks in the Rogue Wild Section; and (c) analyze the environmental effects of periodic channel maintenance needed for motorboat navigation of the lower Rogue River during low water flows.

There is a need to respond to existing outfitter/guide permit holders that want to continue their commercial operations by issuing new special use permits for those that expired December 31, 2004 and those that will expire April 30, 2006. There is also a need to respond to the owners of Paradise, Half Moon Bar, and Clay Hill Lodges in the lower Rogue River Wild Section who want to be issued special use permits for boat docks at their properties.

The purpose of this action is to continue providing commercial recreational activities on the lower Rogue and lower Illinois Rivers through existing outfitter/guides as outlined by Forest Service policy. The purpose for docks is to safely load and unload lodge supplies as well as lodge clients and their belongings that arrive by commercial boat.

The basis for the Proposed Action is contained in Federal Law, Forest Service Policy Directives, and the Siskiyou National Forest Land and Resource Management Plan (USDA Forest Service 1989a) as amended by the Northwest Forest Plan (USDA Forest Service and USDI Bureau of Land Management 1994).

The Curry County, Oregon project area includes the Rogue River from the western National Forest boundary at Lobster Creek upstream to the pool below Blossom Bar Rapids (River Miles 10.8 to 48.4, or 37.6 miles) and the Illinois River from its confluence with the Rogue River upriver to Nancy Creek (River Miles 0 to 3.8, or 3.8 miles). The Rogue River was designated Wild and Scenic in 1968 and the Illinois River was designated Wild and Scenic in 1984.

Motorized guided fishing and scenic trips began on the Rogue River in the late 1920s/early 1930s. The number of guides and trips increased after World War II. The invention of jet boats in 1958 allowed motorized river navigation during low summer flows. These activities have become established in the project area and thousands of people participate in them each year.

Three significant issues have been identified:

Wildlife and Fish Habitat *- Commercial motorboats under special use permit can adversely affect animals and their habitat.*

User Conflicts *- If the special use permits are issued, the recreational experience of some floaters will be degraded by commercial motorboats in the Wild Section. Motorboat wakes and noise and odor generated by motors adversely affect floaters.*

Economic Impacts *- Any decision that reduces permitted use below current use may have economic impacts that should be considered in the decision.*

In response to these issues, six alternatives were developed, including No Action and the Proposed Action.

Alternative 1 - No Action: No permits would be issued.

Alternative 2 - Proposed Action: Issue 63 permits under the same terms and conditions as the 2000-2004 permits. Authorize docks at three lodges in the lower Rogue Wild Section.

Alternative 3 – From April 1 to October 31, limit commercial motorboat use in the lower Rogue Wild Section to Tuesday through Saturday. Authorize docks at three lodges in the lower Rogue Wild Section.

Alternative 4 – Limit permitted commercial motorboat use in the lower Rogue Wild Section to the average of the highest two years from 2000-2004. Permittees may request up to 25% more Wild Section use on an annual basis, subject to approval on a case-by-case basis. Authorize the two existing docks at lodges in the lower Rogue Wild Section.

Alternative 5 - Permitted tour boat and lodge boat use on all lower Rogue River sections would be limited to the average of the highest two years from 2000-2004. Additional use may be requested annually by the permit holder and granted by the District Ranger on a case-by-case basis, not exceeding 25% of the permitted use. All other use (fishing guides, livery service, boat training trips, scenic trips, raft trips and docks) would be the same as the Proposed Action.

Alternative 6 - Same as Alternative 2, but permitted tour boat and lodge boat use would be limited to the average of the two lowest years from 2000-2004 and Illinois fishing guides would be limited to 30 trips per year for each permit.

The Responsible Official for this project is the Gold Beach District Ranger. Based on the effects of the Proposed Action and its alternatives documented in the Final EIS, the Responsible Official will either decide to implement the Proposed Action, one alternative, parts of the alternatives, or combinations of the alternatives.

READER'S GUIDE

The Forest Service has prepared this Final Environmental Impact Statement in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This Final Environmental Impact Statement discloses the direct, indirect, and cumulative environmental impacts that would result from the Proposed Action and alternatives. The document is organized into six sections, including an appendix:

- *Chapter 1. Purpose and Need for Action:* The chapter includes background information on project proposal history, the Purpose of and Need for the project, and the agency's proposal for achieving that Purpose and Need. This section also details how the Forest Service informed the public of the proposal, and issues or concerns raised by the public.
- *Chapter 2. Alternatives, including the Proposed Action:* This chapter gives a more detailed description of the agency's Proposed Action and alternatives for achieving the stated purpose. These alternatives were developed based on issues identified by the public and the agency. This discussion also includes mitigation measures and a monitoring plan. Finally, this section has summary tables of environmental consequences and issues for each alternative.
- *Chapter 3. Affected Environment*: This chapter describes the physical, biological, and socioeconomic characteristics of National Forest System lands as they exist in the project area. Resources that could be affected are emphasized.
- *Chapter 4. Environmental Consequences*: This chapter describes the environmental consequences (effects) of implementing the Proposed Action and other Alternatives described in Chapter 2. This chapter organized by affected resource area (similar to Chapter 3) and effects are described by alternative. Direct, indirect, and cumulative effects are all considered to the extent identifiable in each analysis.
- *Chapter 5. Consultation and Coordination:* This chapter has a list of preparers and agencies consulted during the development of the environmental impact statement.
- *Index:* The index gives references to page numbers by topic.
- *Appendices:* The appendices include a listing of references used for the analysis (Appendix A), further discussion of the Section 7 Analysis for the Wild and Scenic Rivers Act (Appendix B), and more detailed information to support the analyses in the environmental impact statement. Appendix C displays outfitter and guide use, Appendix D is the response to public comments received on the Draft EIS, Appendix E contains sample permits that include permit terms and conditions, Appendix F is the Fish Biological Evaluation, Appendix G is the wildlife Biological Evaluation, Appendix H is the botanical Biological Evaluation, and Appendix I is detailed information on air quality analysis.

Frequently Used Acronyms

ACOE	Army Corps of Engineers
avg	average
BE	Biological Evaluation
BLM	Bureau of Land Management
BP	before present
CFR	Code of Federal Regulations
cfs	cubic feet per second
dbh	diameter at breast height
DEIS	Draft Environmental Impact Statement
DPS	Distinct Population Segment
DSL	(Oregon) Department of State Lands
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
FAUNA	National Wildlife Observations Database
FEIS	Final Environmental Impact Statement
FOIA	Freedom of Information Act
FSEIS	Final Supplemental Environmental Impact Statement
FSH	Forest Service Handbook
FSM	Forest Service Manual
LAA	Likely to Adversely Affect
LMRP-Guides	Lower Medford Recreation Permit Guides
LRMP	Siskiyou National Forest Land and Resource Management Plan
MA	Management Area
MIIH	May Impact Individuals or Habitat
MIS	Management Indicator Species
n	sample size
NEPA	National Environmental Policy Act
NFS	National Forest System
NLAA	Not Likely to Adversely Affect
NMFS	National Marine Fisheries Service (now referred to as NOAA Fisheries)
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
ODFW	Oregon Department of Fish and Wildlife
ORV	Outstandingly Remarkable Value
OSMB	Oregon State Marine Board
PL	*Phytophthora lateralis*
POC	Port-Orford-cedar
r	range
R-Guides	(Lower) Rogue Guides
RM	River Mile
RMP	River Management Plan
ROD	Record of Decision
sd	standard deviation
USDA	United States Department of Agriculture
USDI	United States Department of Interior
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
WILDOBS	Siskiyou Wildlife Observation Database
WPT	Western Pond Turtle
WRD	(Oregon) Water Resources Department
WSRA	Wild and Scenic Rivers Act

FINAL ENVIRONMENTAL IMPACT STATEMENT

Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers

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Gold Beach Ranger District
Rogue River-Siskiyou National Forest
Curry County, Oregon

April 2005

This *Summary* is intended as a brief overview[1] of the site-specific analysis documented in a Final Environmental Impact Statement (Final EIS), that discloses (a) the environmental effects of commercial outfitter/guide services consisting of scenic boat tours, guided fishing, and other commercial activities on the lower Rogue and lower Illinois Rivers for the next five years; (b) the environmental effects of private lodge boat docks in the Rogue Wild Section; and (c) analyzes the environmental effects of periodic channel maintenance needed for motorboat navigation of the lower Rogue River during low water flows. It does not present the depth of analysis contained within the complete text of the Final EIS; please consult the complete text for further detailed information.

INTRODUCTION

The Rogue River was designated a Wild and Scenic River by Congress in 1968 to protect and enhance unique natural river corridor features. The management plan for the Rogue National Wild and Scenic River was completed in 1972 (USDI Bureau of Land Management 1972). The Illinois River was designated a Wild and Scenic River in 1984 and its management plan was completed in 1985 (USDA Forest Service 1985). Motorized sightseeing tours and guided fishing have occurred since the late 1920s/early 1930s. Commercial boating permit systems were established and administered in the 1970s by the Oregon State Marine Board, with input from the Forest Service and Bureau of Land Management.

In 2000, the Forest Service used a Categorical Exclusion to re-issue special use permits to outfitter/guides on the lower Rogue and Illinois Rivers. In 2001, a lawsuit was filed in U.S. District Court (CV.01-3035-AA) alleging the Forest Service had violated the *Wild and Scenic Rivers Act* of 1968, the National Forest Management Act (NFMA), and the National Environmental Policy Act (NEPA). The District Court ruled that the Forest Service is required to complete an Environmental Impact Statement (EIS) analyzing the effects of commercial motor boat uses. Other claims within the lawsuit were denied.

Pursuant to CEQ 1502.20, this EIS is tiered to the Final Environmental Impact Statement and Record of Decision (ROD) for the Siskiyou National Forest Land and Resource Management Plan (USDA Forest Service 1989), as amended by *The Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*, also known as the Northwest Forest Plan (NWFP). Other important management direction for Wild and Scenic Rivers predates the LRMP and/or were incorporated.

[1] The format for this Summary is adapted from "Eight NEPA Questions" (8 questions any EA or EIS should readily answer), developed by Owen L. Schmidt, Attorney USDA, OGC Portland OR.

Applicable river management direction is summarized and incorporated by reference to the Final EIS and includes *Wild and Scenic Rivers Act (WSRA), Rogue National Wild and Scenic River* Oregon: Notice of Revised Development *Management Plan (Rogue RMP), Endangered American Wilderness Act, and Illinois Wild and Scenic River Management Plan (Illinois RMP).*

Section 10(a) of the WSRA states that:

> Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the [outstandingly remarkable] values which caused it to be included in said system… [P]rimary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeological, and scientific features.

The Outstandingly Remarkable Values (ORVs) for the Rogue, as identified by Congress (HR 1623 July 3, 1968 and HR 1917 September 24, 1968) and as described in the Rogue RMP, include Natural Scenic Qualities, Fisheries, and Recreation. The ORVs for the Illinois River, as described in the Illinois RMP, are Water Quality, Fisheries, Scenery, Botanical Resources, and Recreation.

The Final EIS analyzes a Proposed Action and its alternatives, including a No Action option. The Final EIS is prepared in accordance with the National Environmental Policy Act (NEPA), and the regulations for implementing the procedural provisions of NEPA (40 CFR parts 1500-1508).

The project area is in Curry County, Oregon and includes the Rogue Wild and Scenic River corridor from the western Forest boundary at Lobster Creek upstream to the pool below Blossom Bar Rapids (River Miles 10.8 to 48.4, or 37.6 miles) and the Illinois Wild and Scenic River corridor from its confluence with the Rogue River upriver to Nancy Creek (River Miles 0 to 3.8, or 3.8 miles). The river corridor includes the land within ¼ mile on both sides of the river. The project area is approximately 10 miles inland from the Pacific Ocean and the City of Gold Beach. The center of the project area, at the confluence of the Rogue and Illinois Rivers (T.35S. R.11W. Sec. 18), is about 0.7 miles south of the town of Agness.

The Rogue River sections where commercial outfitter/guides operate are classified under the Wild and Scenic Rivers Act as either *Recreational* or *Scenic* (approximately 24 river miles from Lobster Creek to Watson Creek) or *Wild* (approximately ten river miles from Watson Creek to the pool below Blossom Bar Rapids). The Illinois section where outfitter/guides operate is classified as *Recreational.*

A Notice of Intent (NOI) to prepare an Environmental Impact Statement was published in the Federal Register on September 4, 2003. The NOI specified that comments concerning the proposal scope be received by October 3, 2003. The Forest Service sent NOI copies and a letter explaining the Proposed Action to approximately 1,250 interested individuals (which includes tribes, special interest groups, other agencies, landowners, and special use permit holders).

A press release notifying the public of the Proposed Action and scheduled public meetings was published on September 8, 2003. Two evening public meetings were held in Grants Pass and Gold Beach on September 16 and 17, 2003. Approximately 35 people attended these meetings. Thirty-nine comment letters and e-mails were received in response to this public outreach.

A press release notifying the public of Draft EIS availability and scheduled public meetings was published in December 2004. Public meetings to answer questions about the Draft EIS and take comments were held on December 13th, 2004 in Medford, December 16th in Gold Beach, and January 3rd, 2005 in Medford.

One hundred and four oral statements, comment letters, and emails were received in response to the Draft EIS. Substantive comments were responded to in three ways: (1) a Response to Comments Document was created where reference, response and/or clarification to the Draft EIS comment was provided, (2) changes were made to the content of the Draft EIS documentation, to be documented in the Final EIS, and in response to suggestions about the range of alternatives, (3) two new alternatives were developed.

WHY IS THE ACTION BEING PROPOSED?

There is a need to respond to existing outfitter/guide permit holders that want to continue their commercial operations by issuing new special use permits for those that expired December 31, 2004 and those that will expire April 30, 2006. There is also a need to respond to the owners of Paradise, Half Moon Bar, and Clay Hill Lodges in the lower Rogue River Wild Section who want to be issued special use permits for boat docks at their properties.

The purpose of this action is to continue providing commercial recreational activities on the lower Rogue and lower Illinois Rivers through existing outfitter/guides as outlined by Forest Service policy. The purpose for docks is to safely load and unload lodge supplies as well as lodge clients and their belongings that arrive by commercial boat.

WHAT WOULD IT MEAN NOT TO MEET THE NEED?

To not meet the need is defined by the No Action alternative (Alternative 1 in the Final EIS). Alternative 1 identifies and describes the baseline conditions of the physical, biological, social and economic environments within the project area. As required by NEPA, a No Action Alternative is included and analyzed in the Final EIS as a benchmark against which the action alternatives can be compared.

Under this scenario, no commercial outfitter/guide activities would take place, and the resulting environmental effects of no-action would be compared to the environmental effects of permitting the Proposed Action, or another alternative to go forward. Alternative 1 is not designed to address the stated Purpose and Need. With this alternative, it is assumed that current conditions regarding commercial operations would change and would not allow commercial operations of existing outfitter/guides. Since no special use permits would be authorized, no additional mitigation measures or management requirements and constraints would be necessary.

Over 46,000 people currently use outfitter/guide services on the lower Rogue and lower Illinois Rivers annually. Under No Action, people who do not have the time, equipment, or experience to engage in these river activities without an outfitter/guide would not be able to have this recreation experience.

The loss of commercial motorboat transportation would affect more than half of existing lodge clients. They would have to either forgo the experience or hire an outfitter/guide to float them down to the lodges from the upper Rogue River, and then float down to Foster Bar when they leave. These float trips would be more expensive, take multiple days and include more whitewater. People who want a short trip, are intimidated by whitewater, or cannot afford the float trip would not have the opportunity to vacation at the lodges.

Some non-motorized boaters (rafts, kayaks, drift boats, etc.) do not like motorboats in the Rogue Wild Section for a variety of reasons, including safety, motorboat wakes, noise, exhaust smells, and sharing the river with another user group. Non-motorized users do not like tour boat passengers taking pictures of them or looking at their camps, as it adversely affects their recreational experience.

For non-motorized boaters, Alternative 1 would have beneficial effects, but there would still be non-commercial motorboats on the river, so not all of these adverse effects would be eliminated. Inexperienced and/or unknowledgeable private motorboaters can cause conflicts with floaters by going too fast or too close to their boats. This can also occur accidentally if the people in the different boats do not see each other. Private motorboats and floaters would have less motorboat traffic to negotiate with commercial motorboats no longer on the river. Conflicts would be reduced accordingly.

Safety for Paradise and Half Moon Bar Lodge guests and staff would be reduced due to dock removal. Guests would have to step in and out of boats on an uneven gravel or sand bar. Lodge staff would have to lift heavy supplies and equipment in and out of boats on uneven gravel bars. There would be no room to use hoists to lift the loads in and out of the boats. Safety conditions at Clay Hill Lodge would not be changed because they currently do not have a dock.

Elimination of special use permits for commercial tour, lodge and guide boats means that this type of commercial recreational use on the lower Rogue and Illinois Rivers would cease. The current number of trips and clients would drop to zero. The outfitter and guide businesses that are dependent on these clients would cease business activity in the project area. The purchases by the outfitter and guides from other local business would decrease. Client purchases in other businesses such as lodging, food and services would also decrease.

Alternative 1 reduces trips, clients, revenues to the outfitter and guides along with the associated business activity, employment, and income. The revenue that would be lost is estimated to be $2,392,800 per year and the approximate loss of 156 jobs (see Final EIS Socio-economic effects).

Under the No Action alternative, effects from non-commercial recreation on wildlife would continue in the form of noise disturbance and presence disturbance by roads, powerboats, rafts, and people. This has been occurring in the project area for decades and would be expected to continue without commercial boating.

Under the No Action alternative, there would be no measurable direct adverse or beneficial impacts on fisheries in the project area. Fish would be exposed to less motorboat activity, but drift boat, raft, kayak, and private motorboat traffic would remain the same.

WHAT ACTION IS PROPOSED?

Under the Proposed Action, the Forest Service would issue 63 special use permits to outfitter/guides on the lower Rogue River, from Lobster Creek upriver to the pool below Blossom Bar Rapids, and the lower Illinois River, from the confluence with the Rogue River to the mouth of Nancy Creek, with the same terms and conditions as the previous and current permits.

The Forest Service also proposes to issue special use permits for a dock at each of three commercial lodges in the lower Rogue Wild Section: Paradise Lodge, Half Moon Bar Lodge, and Clay Hill Lodge. Docks currently exist at Paradise Lodge and Half Moon Bar Lodge, so permits for these two docks would be reissued. The Clay Hill Lodge dock no longer exists; a permit for a replacement dock would be issued.

The Proposed Action is described as Alternative 2; a more detailed description of the Proposed Action can be found in Final EIS Chapter 2.

Under the Proposed Action, if total commercial use levels exceed the average of the two highest years from 2000-2004 more than two years in a row, user surveys, complaints, and on-river monitoring by Forest Service personnel would be used to determine if adverse impacts to the Recreation and other ORVs are occurring. Commercial outfitter/guide permits would be amended as needed to adjust permitted use to protect the recreation ORV.

In addition, the Forest Service will use this environmental analysis to support the Regional Forester's determination of whether or not channel maintenance in the lower Rogue River Scenic and Recreational Sections meets the requirements of Section 7 of the *Wild and Scenic Rivers Act* of 1968 (see Final EIS Appendix B).

ARE THERE OTHER ALTERNATIVES THAT WOULD MEET THE NEED?

There are a number of variations of the Proposed Action analyzed in the Final EIS. The Final EIS also discusses an alternative that was considered by the Responsible Official, but eliminated from detailed study. Chapter 2 in the Final EIS identifies and compares a range of alternatives that address, in varying degrees, the purpose and need, and the significant issues. A summary of their function and description is as follows:

Alternative 3 – From April 1 to October 31, limit commercial motorboat use in the Rogue Wild Section to Tuesday through Saturday. Authorize docks at three lodges in the lower Rogue River Wild Section.

Alternative 4 – Limit commercial permitted use in the Rogue Wild Section to the average of the highest two years from 2000-2004. Permittees may request up to 25% more Wild Section use on an annual basis, subject to approval on a case-by-case basis. Authorize the two existing docks at lodges in the Rogue Wild Section.

Alternative 5 - All 63 permits would have permitted use for the entire project area based on the average of the 2 highest years use from 2000-2004. Additional use may be requested annually by the permit holder and granted by the District Ranger on a case-by-case basis each year. The additional use could be up to, but would not exceed 25% of the permitted use.

Alternative 6 - Same as Alternative 2, but permitted tour boat and lodge boat use would be limited to the average of the two lowest years from 2000-2004 and Illinois fishing guides would be limited to 30 trips per year for each permit.

WHAT ARE THE EFFECTS OF THE ALTERNATIVES?

The effects (environmental consequences) of all alternatives considered in detail are analyzed in the context of the response to significant issues. NEPA requires Federal agencies to focus analysis and documentation on the significant issues related to a Proposed Action. The interdisciplinary team with Responsible Official involvement and approval has identified the following as significant issues associated with the Proposed Action presented in the analysis.

Wildlife and Fish Habitat - Commercial motorboats under special use permit can adversely affect animals and their habitat.

User Conflicts - If the special use permits are issued, the recreational experience of some floaters may be degraded by commercial motorboats in the Wild Section. Motorboat wakes and noise and odor generated by motors adversely affect floaters.

Economic Impacts - Any decision that reduces permitted use below current use may have economic impacts that should be considered in the decision.

The following table summarizes and compares the effects of all alternatives in terms of significant issues. Further discussion on each issue is also summarized in this section.

Issue and Key Indicators	Alt. 1	Alt. 2	Alt.3	Alt.4	Alt. 5	Alt.6
WILDLIFE AND FISH HABITAT Key Indicator – Number of yearly permitted commercial motorboat trips	0	26,733	25,814	25,470*	3,797*	19,405
USER CONFLICTS Key Indicator – number of yearly permitted commercial trips in the Wild Section of the lower Rogue River	0	2,128	1,417	1,073*	825*	930
ECONOMIC IMPACTS Key Indicator –jobs and income generated by permitted activities	0	156	139 -153**	156	156	134
	0	$2,392,800	$2,128,400 - $2,341,700**	$2,392,800	$2,392,800	$2,055,800

***Includes 25% additional use**
****Depends on the degree to which Sunday-Monday trips shift to Tuesday-Saturday. Higher values are for maximum shift of Sunday-Monday trips to Tuesday-Saturday**

Wildlife Habitat Effects

Habitat impacts from motorboats are limited to the water and the shoreline. Habitat impacts from associated human uses are generally limited to the riparian area (within about 300' of the water). Therefore, analysis of potential effects focused on this vicinity. Noise disturbance to individuals could extend beyond 300'.

Direct and indirect effects from motorboat use and associated human uses, in combination with other potential effects to riparian habitat from other activities, such as rafting, camping, and private powerboats, would not change the effects determination for riparian habitats or species of concern (threatened, endangered, sensitive, buffer species, management indictor or neo-tropical migrant focal species in any action alternative. Cumulative effects analysis was considered from activities listed in the Final EIS (Table 24).

The Biological Evaluation process for animal species that may occur on the Gold Beach Ranger District is summarized for the Rogue and Illinois Rivers Special Use Permit Project Area.

Risk Assessment					
Rogue & Illinois Rivers Analysis Area			Determination of Effects		
	Pre-Field Review	Field Reconnaissance	Conflict Determination	Analysis of Significance	
Wildlife Species	Existing Sighting /Habitat?	Species/Habitat (Documented or Suspected) Present?	Potential Conflict?	Without Mitigation	With FWS PDC/ Mitigation
Federally Endangered, Threatened Or Proposed Species					
Bald Eagle	Habitat	Species D	Yes	NLAA	NLAA
Marbled Murrelet	Habitat	Species D	Yes	NLAA	NLAA
Marbled Murrelet Critical Habitat	Habitat (20 ac.)	Habitat	No	NE	NE
Northern Spotted Owl	Habitat	Species D	Yes	NLAA	NLAA
Northern Spotted Owl Critical Habitat	Habitat (320 ac.)	Habitat	No	NE	NE
Brown Pelican	Habitat	Species D	No	NE	NE
Steller Sea-lion	Habitat	Species D	No	NE	NE

Risk Assessment					
Rogue & Illinois Rivers Analysis Area			Determination of Effects		
	Pre-Field Review	Field Reconnaissance	Conflict Determination	Analysis of Significance	
Wildlife Species	Existing Sighting /Habitat?	Species/Habitat (Documented or Suspected) Present?	Potential Conflict?	Without Mitigation	With FWS PDC/ Mitigation
Forest Service Region 6 Sensitive Species					
Peregrine Falcon	Habitat	Species D	Yes	MIIH	MIIH
Pacific Shrew	Habitat	Habitat	Yes	MIIH	MIH
Pacific Pallid Bat	Habitat	Habitat	Yes	MIIH	MIIH
Pacific Fringe-tailed Bat	Habitat	Habitat	Yes	MIIH	MIIH
Wolverine	Habitat	Habitat	Yes	MIIH	MIIH
Fisher	Habitat	Habitat	Yes	MIIH	MIIH
Northwestern Pond Turtle	No	Species D	Yes	MIIH	MIIH
Common Kingsnake	Habitat	Species D	Yes	MIIH	MIIH
Black Salamander	Outside Known Range	No	No	NI	NI
California Slender Salamander	Outside Known Range	No	No	NI	NI
Del Norte Salamander	Sighting	Species D	Yes	MIIH	MIIH
Siskiyou Mountain Salamander	Outside Known Range	No	No	NI	NI
Southern Torrent Salamander	Sighting	Species D	Yes	MIIH	MIIH
Foothill Yellow-legged Frog	Habitat	Species D	Yes	MIIH	MIIH
Threatened and Endangered Species : NE = No Effect, BE = Beneficial Effect, NLAA = May Affect, Not Likely to Adversely Affect, LAA = May Affect, Likely to Adversely Affect, CHU = Critical Habitat Unit					
Sensitive Species: NI = No Impact, BI = Beneficial Impact, MIIH = May Impact Individuals or Habitat, but will not likely contribute to a trend towards Federal listing or cause a loss of viability to the population or species, WIFV = Will Impact Individuals or Habitat with a consequence that the action may contribute to a trend towards Federal listing or cause a loss of viability to the population or species					

The alternatives differ in their potential for impacts primarily as a function of permitted use level; the greater the permitted use, the greater the potential for measurable effects. Most of the effects are in the form of noise disturbance from boats. Boat noise levels were measured in May and November 2001. The ambient noise level for the Rogue River was 50-80 decibels. Motorboat noise ranged from 60-92 decibels. This noise levels is not considered to be substantially different from ambient levels in the project area. Smaller boats consistently generated more noise than the larger tour boats, but smaller boats were audible for a shorter period of time than the tour boats (2.8 minutes versus 4.2 minutes).

Formal consultation with U.S. Fish and Wildlife Service has been completed: Biological Opinion 1-14-03-F-511 20 October 2003 (USDA Forest Service 2003). None of the alternatives or channel maintenance necessitate re-initiation of consultation.

Fish Habitat Effects

Under all alternatives, fisheries would be protected because commercial motorboat use is not likely to adversely affect southern Oregon/northern California coho salmon. For Forest Service Sensitive Species, motorboat use may impact individual fish but it not likely to cause a trend toward federal listing or a loss of viability.

The proposed commercial boating activities are May Affect, Not Likely to Adversely Affect (NLAA) Southern Oregon/Northern California (SONC) coho, for the following reasons:

- Individuals may be harassed as motorboats pass directly over or within 5 meters, causing a startle or avoidance response. This effect is likely to be short in duration.
- Juvenile coho migrate at night and rest in stream margins during the day, therefore interactions with jet boats would be minimal.
- Motorboat activity occurs during months when juvenile and adult coho are using the lower Rogue River as a migration corridor.

Species	Status	Management Indicator Species	Present within Project Area	Effect Determination
Coho Salmon	Threatened	No	Yes	NLAA
Fall Chinook Salmon	Sensitive (USFS)	Yes	Yes	MIIH
Spring Chinook	Sensitive (USFS)	Yes	Yes	MIIH
Winter Steelhead Trout	Sensitive (USFS)	Yes	Yes	MIIH
Summer Steelhead	Sensitive (USFS)	Yes	Yes	MIIH
Coastal Cutthroat Trout	Sensitive (USFS)	Yes -*Resident forms only*	Yes	MIIH

NLAA = Likely to Adversely Affect
MIIH = May Impact Individuals and/or Habitat but not likely to cause a trend toward federal listing or a loss of viability

User Conflicts

Under Alternative 2, at the full permitted level, adverse recreation impacts are likely on the lower Rogue and lower Illinois Rivers. The overuse threshold in terms of commercial boat traffic is not clear. The recreation experience would be protected from this effect of overuse by required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring. Outfitter/guide clients would have the most opportunities to book a trip on the lower Rogue and lower Illinois Rivers when compared to other alternatives.

When compared to other alternatives, lodge guests would have the most opportunities to get to the lodges in the Rogue Wild Section under this alternative. The number of trips would more than double current actual use at the full permitted level and the number of lodge guests would increase in response to demand.

Livery service, whitewater boat training, scenic trips, and raft trips (Foster Bar to Agness) would expand to the full permitted level in response to demand.

Under Alternative 3, commercial recreational use would be able to expand with demand but would be limited to Tuesday through Saturday in the Rogue Wild Section, limiting the number of people with the opportunity to recreate in that section. Saturday demand for Rogue Wild Section trips would be higher since most commercial demand is on the weekend and there would be no Wild Section trips on Sunday/Monday.

It is possible that at the fully permitted level the tour boat recreational experience would be diminished for some clients since they would see more boats and people on the river than at current levels. It is not clear where the threshold of overuse, in terms of too much commercial boat traffic, would occur. The recreation experience would be protected from this effect by the required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring.

Lodge boat use would expand with demand. At full permitted use there would be 54% more trips than the current use level.

Under Alternative 4, commercial motorboat use would be able to expand with demand until it reached the permit limit. Effects in the Recreational and Scenic sections of the lower Rogue and lower Illinois rivers would be the same as described for Alternative 2.

It is unlikely that there would be an increase in motorized vs. non-motorized conflicts or adverse impacts to recreation in the lower Rogue Wild Section. The additional permitted increase in use by commercial boat traffic on the river would not exceed a 25% increase above the two highest years use from 2000-2004 and the District Ranger would have the ability to restrict the additional use to a lower level or deny it. It is not clear where the threshold of overuse, in terms of too much commercial boat traffic, would occur. If the threshold were below the 25% additional use, the recreation experience would be protected from this effect of overuse by the required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring.

Tour boat and fishing guide clients would have the same opportunities to book a trip in the lower Rogue Wild Section in 2000 to 2004. If future demand is higher than the high 2 year average, those opportunities would increase as much as 25% if additional use were approved. Opportunities on the Recreational and Scenic Sections would be the same as those described in Alternative 2.

Lodge boat use would expand with demand until it reached permit limits. At full permitted use there would be 42% more trips than at the current use level.

Under Alternative 5, commercial recreation use, whitewater boat training, and livery service would be similar to 2000 through 2004 on the lower Rogue River because permitted use is based on the high 2 year average use for that period. If future demand for services is higher than the high 2 year average, the use would increase as much as 25% if additional use were approved.

It is unlikely that there would be an increase in motorized vs. non-motorized conflicts or adverse impacts to recreation in the lower Rogue Wild, Scenic or Recreational Sections. The additional permitted increase in use by commercial boat traffic on the river would not exceed a 25% increase above the two highest years use from 2000-2004 and the District Ranger would have the ability to restrict the additional use to a lower level or deny it. However, it is not clear where the threshold of overuse, in terms of too much commercial boat traffic, would occur. If the threshold were below the 25% additional use the recreation experience would be protected from this effect of overuse by the required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring.

Effects on safety for lodge guests and staff would be the same as Alternative 2.

Under Alternative 6, if demand remains the same as from 2000-2004 levels there would be more demand than available trips on tour boats in three of the next five years. The recreation experience may be enhanced for some of the clients since they would see fewer boats and people on the river than at current use levels but fewer people would have the opportunity to take a tour boat trip.

Opportunities to fish with a guide on the lower Rogue River would be the same as in Alternative 2. Opportunities to fish with a guide on the lower Illinois would expand with demand to the limit of 30 trips per guide per year.

In three of the next five years there would be more demand than available lodge boat trips. Those guests would either have to forgo a stay in the lodges or find alternative transportation.

Effects on livery service, whitewater boat training, raft trips, and safety for lodge guests and staff would be the same as Alternative 2.

Economic Impacts

The economic methods and assumptions use trip and revenue data from the three types of operators. Commercial tour boat and lodge boat data covers the years 1999 to 2004. Fishing guide boat data is developed from the years 1999 to 2004, and 2000 to 2004. The revenue histories are not adjusted for inflation since the Bureau of Labor Statistics' Consumer Price Index for the Recreation Expenditure Class averaged about one percent annually from 1999 through 2005.

Fees paid to the Forest Service are either based on a flat rate or 3 percent of gross revenue, or vary by permit year to year. The difference in the fees paid does not vary substantially between the two fee schedules. The compiled historical data does not specify the fee plan by operator. All federal receipts are assumed to be 3 percent of reported gross revenue. The following table summarizes results by the economic indicators.

Economic Indicator	Current Actual Use	Alt 1	Alt 2 Projected Use	Alt 3 No Substitution	Alt 3 With Substitution	Alt 4	Alt 5	Alt 6
Clients								
Tour Boat Totals	44,632	0	44,632	40,511	44,632	44,632	44,632	37,936
Lodge Boats	414	0	414	296	414	414	414	328
Guide Boat Total	2,573	0	2,573	2,369	2,573	2,573	2,573	2,573
Revenue								
Tour Boat Totals	$2,152,000	0	$2,152,000	$1,953,300	$2,062,300	$2,152,000	$2,152,000	$1,829,100
Lodge Boats	$18,200	0	$18,200	$13,000	$13,000	$18,200	$18,200	$14,400
Guide Boat Total	$343,500	0	$343,500	$316,300	$343,500	$343,500	$343,500	$343,500
Total Jobs	156	0	156	139	153	156	156	134
Total Income	$2,392,800	0	$2,392,800	$2,128,400	$2,341,700	$2,392,800	$2,392,800	$2,055,800

CAN ADVERSE EFFECTS BE MITIGATED?

Specific resource mitigation measures and terms and conditions are developed for all action alternatives. These include appropriate measures as defined by NEPA Regulations at 40 CFR 1502.14(f) and 1508.20. These mitigation measures would be carried out under all action alternatives to reduce, rectify, avoid, eliminate, and/or compensate the potential resource impacts as required by 40 CFR 1508.20. Specific mitigation measures are described in the Final EIS Chapter 2.

WHAT FACTORS WILL BE USED IN MAKING THE DECISION BETWEEEN ALTERNATIVES?

Factors that will be used to make the decision include answers to the following questions:
How does the Proposed Action or alternatives address the purpose and need? How does the Proposed Action or alternatives address the significant issues? How does the Proposed Action or alternatives protect or enhance the river Outstandingly Remarkable Values without limiting other uses that would not substantially interfere with public use and enjoyment of these values?

Important factors in consideration of this decision between alternatives will also be the attainment of the overall Purpose and Need. In addition to and concurrent with attainment of Purpose and Need, the response of alternatives in relation to the identified significant issues will be used as important decision factors. No one element of Purpose and Need or significant issue will be used to make the decision, rather, they will be reviewed together with an assessment of tradeoffs to make the final decision.

WHAT MONITORING IS NECESSARY?

Monitoring of authorized actions is a requirement of all action alternatives and would be carried out according to the monitoring elements documented in Final EIS Chapter 2 and in the terms and conditions of the special use permits. Required monitoring elements will be incorporated into the Record of Decision, if an action alternative is selected. This will allow it to be developed specifically to the selected alternative.

WHICH ALTERNATIVE IS THE PREFERRED?

NEPA requires that the Final EIS identify the agency's preferred alternative or alternatives, if more than one exists. The Responsible Official for this project is the Gold Beach District Ranger. Under the Final EIS, the District Ranger has identified the Preferred Alternative to be Alternative 5. Based on public comment, two additional alternatives were developed and analyzed in the Final EIS. The preferred alternative changed between Draft and Final EIS because of the environmental consequences associated with protection of the ORVs offered under (the new) Alternative 5, and the way it addresses the user conflict issue.

The "agency's preferred alternative" is the alternative (or alternatives) which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors. The concept of the "agency's preferred alternative" is different from the "environmentally preferable alternative," (an element documented in a Record of Decision), although in some cases they may be both. A Preferred Alternative is identified so that agencies and the public can understand the lead agency's orientation.

CHAPTER 1. PURPOSE AND NEED FOR ACTION

Commercial fishing guides and scenic trips in motorboats started on the Rogue River in the late 1920s/early 1930s. The number of guides and trips increased after World War II. The invention of jet boats in 1958 allowed motorized river navigation during low summer flows. These activities have become established in the project area and thousands of people participate in them each year. Under Forest Service policy (36 CFR 251.50 and FSM 2700), these commercial operations are required to have special use permits.

Changes Between Draft and Final: Details about individual outfitter/guide permits have been removed from the Proposed Action description and placed in Appendix E in the form of sample outfitter/guide permits. One DEIS issue (Development Pressure) was dropped since it is an issue with the Rogue River Management Plan and not an issue with the Proposed Action. Another issue (Recreation Experience) was dropped because it is not an issue with the Proposed Action.

Project Area

The project area is in Curry County, Oregon and includes the Rogue Wild and Scenic River corridor from the western Forest boundary at Lobster Creek upstream to the pool below Blossom Bar Rapids (River Miles 10.8 to 48.4, or 37.6 miles) and the Illinois Wild and Scenic River corridor from its confluence with the Rogue River upriver to Nancy Creek (River Miles 0 to 3.8, or 3.8 miles). The river corridor includes the land within ¼ mile on both sides of the river. The project area is approximately 10 miles inland from the Pacific Ocean and the City of Gold Beach. The center of the project area, at the confluence of the Rogue and Illinois Rivers (T.35S. R.11W. Sec. 18), is about 0.7 miles south of the town of Agness.

The Rogue River sections where commercial outfitter/guides operate are classified under the Wild and Scenic Rivers Act as either *Recreational* or *Scenic* (approximately 24 river miles from Lobster Creek to Watson Creek) or *Wild* (approximately ten river miles from Watson Creek to the pool below Blossom Bar Rapids). The Illinois section where outfitter/guides operate is classified as *Recreational* (see Figures 1 and 2).

Background

In 1959, the Oregon State Marine Board (Marine Board or OSMB) was given the responsibility to establish and administer boating regulations in the State of Oregon, including the Rogue and Illinois Rivers.

The Rogue River was designated as Wild and Scenic by Congress in 1968. This designation protected 84 miles of the Rogue from the mouth of the Applegate River downstream to Lobster Creek Bridge.

In 1974, the Marine Board decided to eliminate motorboat use from the pool below Blossom Bar Rapids upstream to Grave Creek between May 15 and November 15. In 1976, after public comment, the Marine Board made a decision to limit commercial motorboats in the Wild Section from Watson Creek to the pool below Blossom Bar Rapids between May 15 and November 15 to current permit holders and at the use level that existed as of January 15, 1976 – six tour boat trips per day. Fishing guides were permitted an annual number of trips based on historical use. No limits were established for non-commercial motorboats in the Wild Section.

In 1979, due to increased boating in the lower Rogue Wild Section, the Bureau of Land Management (BLM) and the Forest Service introduced a permit system to limit use in the Wild Section. The Forest Service honored Marine Board commercial motorboat use levels and started requiring permits for lodge boats and for commercial and non-commercial float parties in the lower Rogue Wild Section. Non-commercial motorboats and livery services were exempt from permit requirements. A Forest Service permit was also required for commercial motorboat or float craft activity from Lobster Creek to Watson Creek.

The Illinois River was designated Wild and Scenic in 1984, protecting 50 miles of the river from the National Forest Boundary, near Selma, downstream to its confluence with the Rogue River. The Illinois River Recreational Section joins the "Agness Recreational Area" of the Rogue National Wild and Scenic River system. Management concepts in this Illinois section are similar to Rogue River Recreational Section management direction (USDA Forest Service 1985, p.14).

In 1984, OSMB decided to re-evaluate its role in the motorboat permit system and began to solicit public comment. In 1986, the Gold Beach District Ranger wrote to the Marine Board that the Forest Service would continue to administer the motorboat limits and regulations in the Wild Section as the Marine Board had done, with minor variations. Later that year, the Marine Board decided to repeal their rules, transferring the motorboat permit system to the Forest Service. The Forest Service continued to issue permits for tour boats, fishing guides, livery services, and other uses for the same numbers of trips that had been issued previously by the Marine Board.

Figure 1: Lower Rogue and Lower Illinois National Wild and Scenic River Classifications

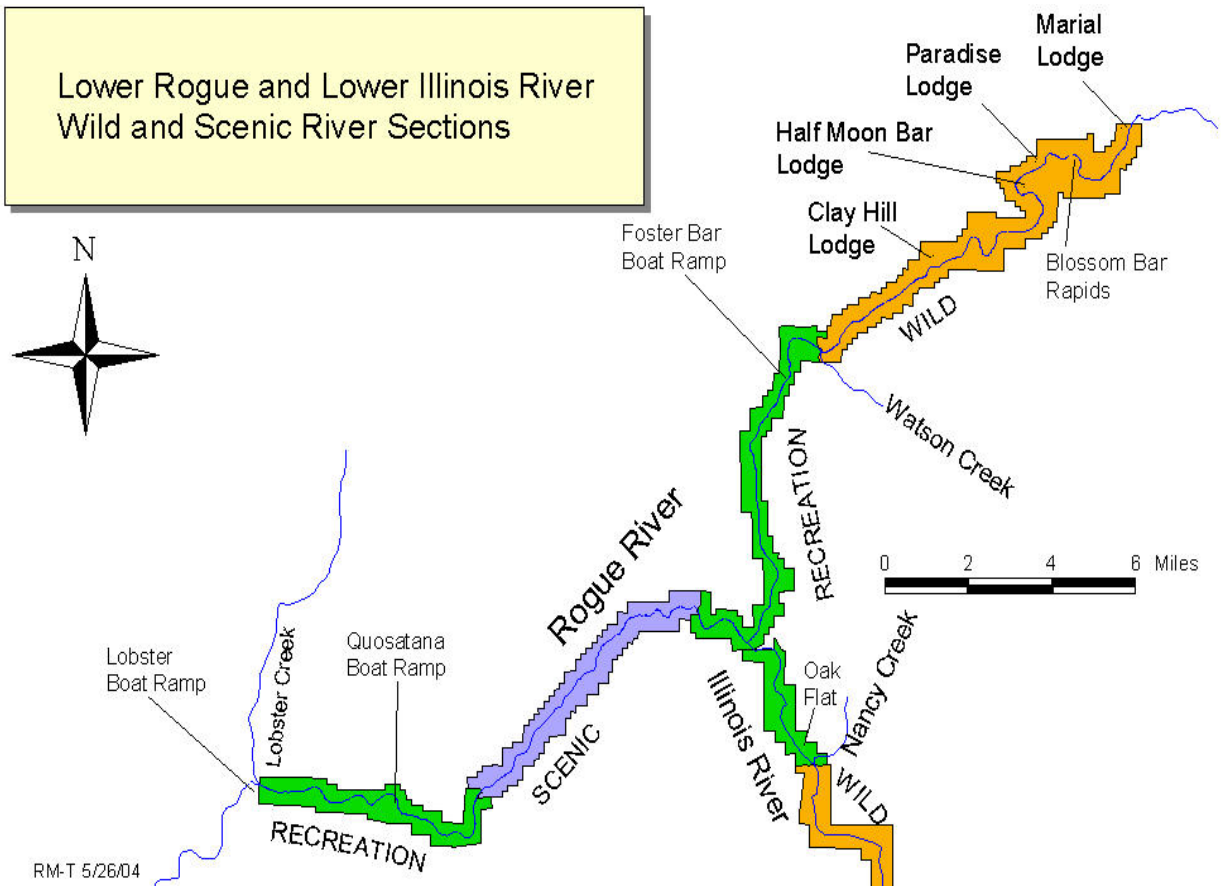
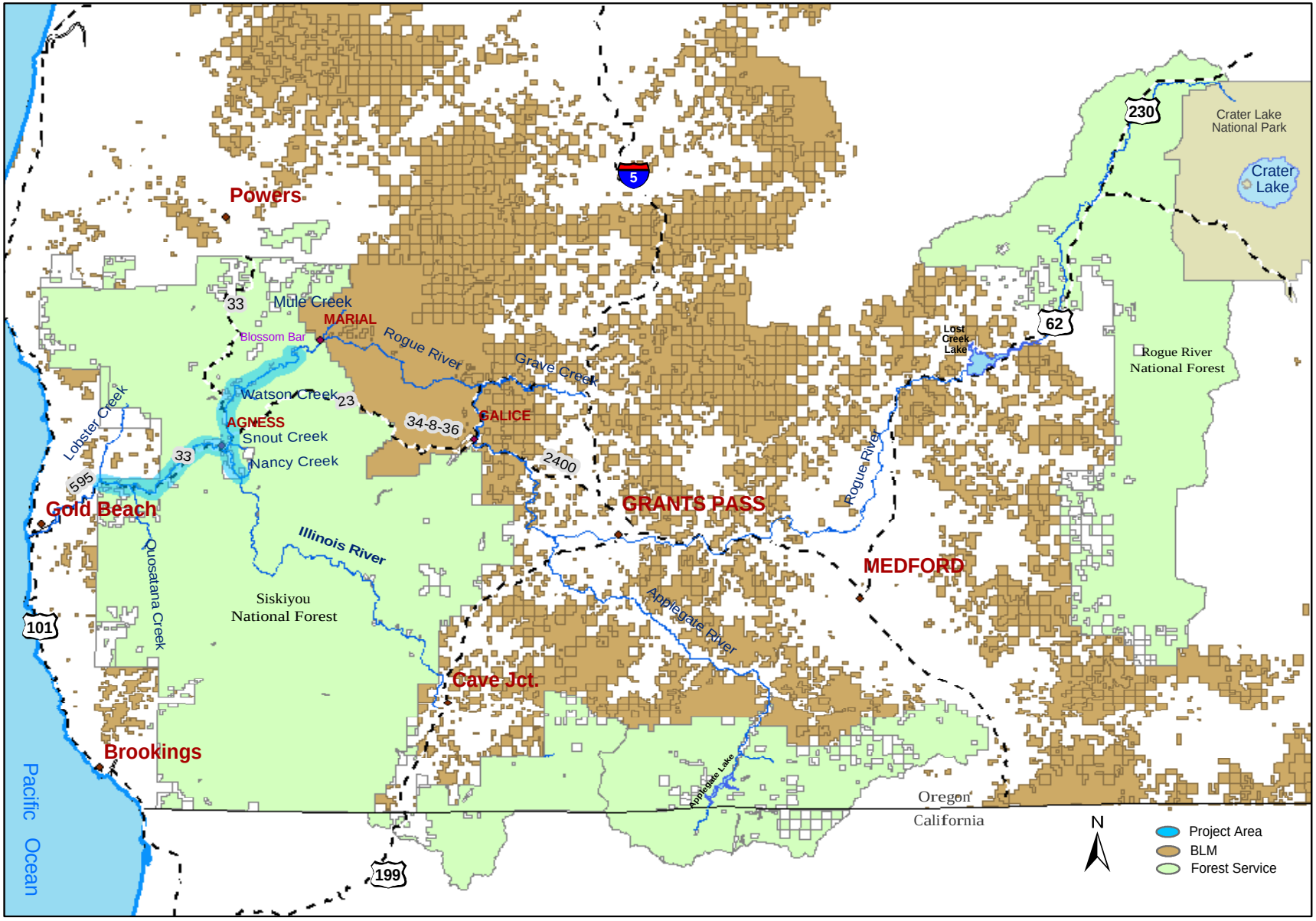


Figure 2: Rogue and Illinois Rivers in Southwestern Oregon



In 1987 a permit system was established for private recreational motorboat use in the Wild Section, limiting use to six boats a day on weekends and holidays from June 1 through September 15.

In 1995, the Forest Service issued new special use permits, limiting fishing guides in the Lobster Creek to Watson Creek section to those that were currently under permit. These permits allowed use any time of year. Only the permit holders could use them and there could be no employees operating under the permit. The Forest Service limited tour boat trips from Lobster Creek to Watson Creek based on the season of year: shoulder-season (May 1 to June 15 and the day after Labor Day to October 31), main-season (June 16 to Labor Day), and off-season (November 1 to April 30). The permits regulating private motorboat recreation in the Wild Section expanded the season from May 15 to November 15, with a maximum of six boats permitted each day, seven days a week.

In 1999, the Forest Service and BLM agreed that permit holders operating entirely on National Forest must do so under permits issued by only the Forest Service. Permit holders that could prove historical use from1974 to 1988 were issued permits for the same types of use and for the same number of trips that had been previously made. Prior to this time, some guides who operated under permits jointly administered by BLM and the Forest Service would guide fishing trips entirely on the National Forest portion of the river. These BLM/FS permit holders were limited to the maximum number of trips they could make, but were allowed to hire employees.

Also in 1999, Paradise Lodge was authorized to transport lodge guests by motorboat from Foster Bar to the lodge in the Wild Section. Permit terms and conditions were negotiated through informal resolution with parties that appealed the Forest Service decision to issue the Paradise Lodge permit.

In 2000, the Forest Service used a Categorical Exclusion to issue the existing special use permits for outfitter/guides on the lower Rogue River, which included tour boats and guided fishing trips. Also, in 2000 the Forest Service issued permits to 6 outfitter/guides for Wild Section fishing, replacing BLM permits, with no change of authorized permit conditions.

In 2001, a lawsuit was filed in U.S. District Court alleging the Forest Service had violated the Wild and Scenic Rivers Act, the National Forest Management Act, and the National Environmental Policy Act by issuing special use permits and allowing motorboat use in the lower Rogue Wild Section.

In 2004, the District Court ruled the Forest Service violated the procedural NEPA requirements when issuing the special use permits for outfitter/guides on the lower Rogue River; all other claims within the lawsuit were denied, including a request by the plaintiffs to set motorboat use in the Wild Section to 1968 levels because of potential adverse effects on the environment and other river users. The District Court ruled that the Forest Service is required to complete an Environmental Impact Statement (EIS) analyzing the effects of commercial motorboat uses.

The Forest Service in cooperation with the BLM, plans to complete a Comprehensive River Management Plan for the Rogue River in the future.

Management Direction

This proposal is analyzed in accordance with management direction from the 1989 Siskiyou National Forest Land and Resource Management Plan (LRMP) as amended by *The Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl,* also known as the Northwest Forest Plan (NWFP).

Pursuant to CEQ 1502.20, this EIS is tiered to the Final Environmental Impact Statement and Record of Decision (ROD) for the Siskiyou National Forest Land and Resource Management Plan (USDA Forest Service 1989). Other important management direction for Wild and Scenic Rivers predates the LRMP and/or were incorporated. Applicable river management direction is summarized and incorporated by reference herein. It is presented in this section in chronological order.

Wild and Scenic Rivers Act (WSRA)

The Rogue and Illinois River sections that are part of this analysis are congressionally designated Wild and Scenic Rivers. The Wild and Scenic Rivers Act of 1968 (Public Law 90-542) designated 84 miles of the Rogue river as a Wild and Scenic river from the Applegate River downstream to the Lobster Creek Bridge to be administered by the Department of Interior or Agriculture. The WRSA established a method to provide federal protection for certain remaining free-flowing rivers and to preserve them and their immediate environments. Under Section 2 (b) (1) of the Act, wild rivers are defined as "…free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted."

Section 1(a) of the WSRA states that Wild and Scenic Rivers:

> …shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.

Section 2(b) of the WSRA states:

> Every wild, scenic or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the national wild and scenic rivers system and, if included, shall be classified, designated, and administered as one of the following:
>
> (1) Wild river areas -- Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
>
> (2) Scenic river areas -- Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
>
> (3) Recreational river areas -- Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Section 7 of the WSRA states that:

> No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the [outstandingly remarkable] values for which such river was established."

Agencies designated as Wild and Scenic River managers must complete the Section 7 determination when a water resources project may have potential to result in direct and adverse effects to the values of the Wild and Scenic River.

Lower Rogue River Channel Maintenance Permit under Section 7

The Forest Service is the administering agency for the lower Rogue and lower Illinois Rivers. The Regional Forester will make a determination, based on the effects analysis documented in this FEIS, about whether channel maintenance would have a direct and adverse effect on the free flowing nature of the river, and whether or not this activity would invade the area or unreasonably diminish the Rogue Wild and Scenic River Outstandingly Remarkable Values as defined under Section 7 of the *Wild and Scenic Rivers Act* of 1968.

Channel maintenance is needed in the lower Rogue River to maintain safe passage for commercial, private, and public boats (e.g. Sheriff's Office, BLM, and Forest Service boats). Channel maintenance consists of cutting willows for sight distance and re-positioning small boulders, cobbles, gravels, and lesser amounts of sands and silts within the channel to maintain safe boat passage. Channel maintenance requires permits from the Army Corps of Engineers (ACOE) and the Oregon Department of State Lands (DSL) because the materials are excavated from and discharged into portions of the channel that lie below the ordinary high water level. These permits are required under provisions of Section 404 of the Clean Water Act.

A description of the channel maintenance activities is contained in FEIS Chapter 3, Water Resources, and the effects of channel maintenance are discussed in FEIS Chapter 4 for each affected resource area. FEIS Appendix B: Wild and Scenic River Section 7 Report (incorporated by reference) contains further discussion of Regional foresters' determination under Section 7.

Section 10(a) of the WSRA states that:

> Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the [outstandingly remarkable] values which caused it to be included in said system… [P]rimary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeological, and scientific features.

The Outstandingly Remarkable Values (ORVs) for the Rogue, as identified by Congress (HR 1623 July 3, 1968 and HR 1917 September 24, 1968) and as described in the Rogue RMP, include **Natural Scenic Qualities, Fisheries, and Recreation**.

The ORVs for the Illinois River, as described in the Illinois RMP, are **Water Quality, Fisheries, Scenery, Botanical Resources, and Recreation**.

Rogue National Wild and Scenic River Oregon: Notice of Revised Development Management Plan (Rogue RMP)

The 1972 *Rogue National Wild and Scenic River, Oregon, Notice of Revised Development and Management Plan*; Federal Register Vol. 37, No. 131, 13408-13416 states (USDI Bureau of Land Management 1972, p. 13413):

> One of the key reasons for including the Rogue River in the National Wild and Scenic Rivers System was to protect and enhance the recreational values which the river possesses. These values are realized in a great variety of activities. They range from an individual pitting only his knowledge and skill against the sometimes-hostile forces of nature to recreation uses where the facilities and equipment are so sophisticated that the river can be enjoyed with no special knowledge and skill. Since boating, fishing and sightseeing are the main recreational uses on the river; top priority for recreation development will be given to improving the quality of those activities.

Management Objectives by river classification include: (p. 13412):

> The wild area will be managed to (1) provide river-oriented recreation opportunities in a primitive setting, and (2) preserve the river and its immediate environment in a natural, wild, and primitive condition essentially unaltered by the effects of man.
>
> The scenic river area will be managed to (1) maintain or enhance the condition of the high-quality scenery and the largely undeveloped character of the shoreline, (2) provide opportunities for river-oriented recreation which is consistent with its largely undeveloped nature, and (3) utilize other resources and permit other activities which maintain or enhance the quality of the wildlife habitat, river fishery, scenic attraction or recreational values.
>
> The recreational river area will be managed to provide or restore a wide range of public outdoor recreation opportunities and water-oriented recreational facilities.

Management Direction for Recreation (p. 13413)

> Care will be taken that use levels do not reach the point where the quality of the recreation experience or quality of the stream environment deteriorates.
>
> Since boating, fishing, and sightseeing are the main recreational uses on the river, top priority will be given to improving the quality of these activities.
>
> Although current levels of all types of boating activity create few problems, uncontrolled future use would probably result in safety hazards and a lowering of the quality of the recreation experience. When the need warrants, this will be prevented by the establishment of regulations limiting size, number, type, speed, etc. to provide optimum boat use.
>
> In the *Wild Area,* boating regulations to achieve the Wild River objectives will be encouraged. The regulations should: (1) Favor non-motorized use. Motorboat use from Watson Creek to Blossom Bar Rapids will be held to the use level consistent with that of 1968, the year of the Wild and Scenic Rivers Act.

Management Direction for Improvements (p. 13414):

> In the *Wild Area,* in order to keep the river and adjacent lands in an essentially primitive condition, no new structures except those needed for public recreation or for resource protection and no new lodges or expansion of existing lodges or commercial public service facilities will be permitted. Owners of existing structures will be encouraged to maintain them in a condition compatible with the primitive character of the area. New boat docks, moorings, or salmon boards will not be permitted.

Management Direction for Channel Maintenance (p. 13410 and 13412):

> It is necessary to deepen a channel through some of the gravel bars annually to permit passage of the large commercial boats. This is all done in gravel areas, so no permanent alteration to the riverbed occurs.
>
> Alteration of the stream bed will be limited to that necessary to maintain current levels of navigability. Permission must be obtained from the agency having jurisdiction before alteration is allowed. Modification of bedrock will not be permitted.

Endangered American Wilderness Act

The 1978 *Endangered American Wilderness Act* (Public Law 95-237) designated the Wild Rogue Wilderness, in part to protect the Rogue Wild Section. The 1978 Wilderness legislation states, in part:

> [C]ertain lands in the Siskiyou National Forest…shall be known as the Wild Rogue Wilderness: Provided that the portion of the segment of the Rogue River designated as a component of the National Wild and Scenic Rivers System…which lies within the Wild Rogue Wilderness shall be managed as a wild river notwithstanding section 10(b) of that Act or any provisions of the Wilderness Act to the contrary.

This provision was included in recognition of certain established uses (including motorboats) along the Rogue River corridor which are not in conformance with the Wilderness concept, but which Congress did not wish to eliminate. The effect of this provision is that, within the Wilderness boundary, the areas on either side of the river are managed in accordance with the Wilderness Act of 1964, but the river corridor is managed as a separate entity. (LRMP, p. A-10).

Illinois Wild and Scenic River Management Plan (Illinois RMP)

The *Illinois Wild and Scenic River Management Plan* (USDA Forest Service 1985) was incorporated into the Siskiyou Land and Resource Management Plan (LRMP) in its entirety. The following directions apply or, where in conflict, supercede the Rogue Management Plan:

> If a conflict between water quality and resource uses and activities should occur, protection of water quality would take precedence. Modification of the stream bank would not be permitted except in cases where significant investments (i.e. Illinois River Bridge) need protection and where the natural river value would not be unreasonably diminished. Natural channels will not be modified to facilitate powerboat travel (p. 15).

Siskiyou National Forest Land and Resource Management Plan

In March 1989, the *Siskiyou National Forest Land and Resource Management Plan* (LRMP) was released (USDA Forest Service 1989a), setting management direction and standards and guidelines for the Forest.

The 1972 *Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan* (USDA Bureau of Land Management 1972) and the 1985 *Illinois Wild and Scenic River Management Plan* (USDA Forest Service 1985) were incorporated into the LRMP in their entirety (LRMP p. V-3).

Recreation goals and objectives in the 1989 *Siskiyou National Forest Land and Resource Management Plan* (USDA Forest Service 1989a) as amended, include:

> Fully implement the National Recreation Strategy through the development of partnerships with other local and federal agencies (e.g., counties and states), and other groups and individuals. Support local economic development strategies that focus on increased recreation and tourism. (p. IV-1, 4)
>
> Protect and enhance identified outstandingly remarkable values and free flowing condition of Wild and Scenic Rivers. (p. IV-2, 11)
>
> Management of the designated Wild and Scenic Rivers will emphasize the maintenance of the natural/near natural character of the river corridors and the continued availability of a high quality recreation experience that is described in the goals and objectives identified in each of the river management plans. (p. IV-8)

The LRMP also states:

> Increased emphasis has been placed on the Recreation program, the focus of which will be toward meeting the needs of the recreating public and toward working with four Southern Oregon Counties to assist them in developing their Economic development goals. These goals are based on the development of the Recreation/Tourism industry. (p. IV-7)

Forest-wide Standards and Guidelines for Recreation Special Uses/Outfitters and Guides:

> All recreation special uses shall be compatible with the ROS classification of the area. Facilities shall be designed to meet the designated services to be provided. The number of permits for a specific use should be limited in order to create or maintain economical operations, reduce administrative costs, and provide high quality services. (p. IV-53, 9-5)
>
> Commercial rafting and guide permits on the Illinois and Rogue Rivers shall be issued in accordance with requirements of the management plans for these rivers. (p. IV-53, 9-5)
>
> When changed conditions occur, environmental analysis shall be conducted to determine the effects of the changed conditions on recreational opportunity, and to re-evaluate and consider modification of existing recreational management objectives. (p. IV-23, 1-12)

The Wild and Scenic River corridor where the outfitter/guide special use permits would be authorized has a variety of land allocations (Management Areas). The definitions, management goals and objectives, and the standards and guidelines for individual land management allocations can be found in the LRMP and the Northwest Forest Plan (USDA Forest Service and USDI Bureau of Land Management 1994).

While the primary goals and objectives in the river corridor are defined in MA-2 and MA-10, additional management direction may be found in the following overlapping management areas (MAs): Wilderness (MA-1), Supplemental Resource (MA-7), and Visual Retention (MA-12). Many standards and guidelines for the Rogue and Illinois Rivers are in the management plans for each river and are not repeated in the LRMP. (p. IV-78)

Wild River (MA-2)

The goal is to maintain the river environment in a natural state while providing for recreation opportunities.

The Rogue Wild Section character within the Forest boundary will be maintained. Impacts due to river-related recreation will be monitored according to the Rogue RMP. (p. IV-77)

Scenic/Recreation River (MA-10)

For Scenic river segments, the goal is to maintain or enhance the high quality scenery and the largely undeveloped character of the shorelines. For Recreational river segments, the goal is to provide a wide range of river-oriented recreation activities.

The Rogue River Scenic and Recreational Sections will appear to be in a natural condition as seen from the river. Changes in river use limits will be accomplished through cooperation with the inter-agency management group with full public involvement (p. IV-121).

Other Management Direction

This proposal is also analyzed and designed under the following management direction, which is incorporated by reference:

- Final Supplemental EIS and Record of Decision for *Management of Port-Orford-Cedar in Southwest Oregon*, 2004
- Final Supplement EIS and Record of Decision *To Remove or Modify the Survey and Manage Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents with the Range of the Northern Spotted Owl*, 2004
- Final Supplement EIS and Record of Decision on *Amending Resource Management Plans for Seven Bureau of Land Management and Resource Management Plans for Nineteen National Forests within the Range of the Northern Spotted Owl* for the Clarification of Language in the 1994 Record of Decision for the Northwest Forest Plan amending wording about the aquatic conservation strategy, 2004
- Oregon Department of Fish and Wildlife – hunting and fishing regulations
- Oregon State Marine Board – watercraft regulations
- United States Coast Guard – commercial watercraft regulations

Other Federal Statutes

This proposal is designed under other required federal statutes such as the *Clean Water Act* of 1948 (P.L. 80-845) as amended in 1972 (P.L. 92-500) and 1987 (P.L.100-4), the *Clean Air Act* of 1955 (P.L. 84-159) as amended in 1964 (P.L. 88-206) and 1977 (P.L. 95-95), the *National Environmental Policy Act* of 1969 (P.L. 91-190), the *Wilderness Act* of 1964 (P.L. 88-577), the *National Trails System Act* of 1968 (P.L. 90-543), the *Endangered Species Act* of 1973 (P.L. 93-205), the *National Forest Management Act* of 1976 (P.L. 94-588), the *Archaeological Resources Protection Act* of 1979 (P.L. 96-95), and *Americans with Disabilities Act* of 1990 (P.L. 101-336).

Special Uses Management

This section identifies other regulations and policies regarding management of special uses for river-related recreational activities.

Outfitter/Guides

Forest Service regulations related to special use permit management are in 36 CFR 251.50, Forest Service Manual (FSM) 2700, and Forest Service Handbook (FSH) 2709.11.

Outfitter/guide activities are authorized by the *Land and Water Conservation Fund Act* of 1965 (Public Law 88-578). Outfitter/guide service includes all commercial outfitting operations involving services for accommodating guests, transporting persons, and providing equipment, supplies, and materials. It also includes commercial guiding activities wherein the guide furnishes personal services or serves as a leader or teacher (FSM 2721.53).

Specific guidance in administering outfitter/guide special uses is in Forest Service Handbook 2709.11, sec. 41.53a-41.53l. In general, before the Forest Service approves the issuance of a new special use permit for an established use, an analysis of the conditions of the use shall be made to determine whether changes in permit conditions are needed (FSM 2716.12). When an authorization provides for renewal, the authorizing officer must consider renewal when requested by the holder. Direction for renewal is in 36 CFR 251.64. Special uses may be reauthorized as long as the use remains consistent with:

- The Forest Land and Resource Management Plan
- Current laws, regulations, and policy
- The purpose for which the use was initially authorized, and operated or maintained, in accordance with provisions of the original decision
- When significant new information or circumstances have developed, appropriate environmental analysis must accompany the decision to reauthorize the use

Docks

Recreational boat docks include improvements that serve groups of boaters (FSM 2721.11). Boat docks are defined as improvements along rivers or shores for securing watercraft. These may range from a few pilings for log raft operations to larger pier facilities for servicing and storing boats or ships (FSM 2727.22). Specific recreational boat dock management direction is in FSM 2347.4. In general, the Forest Service should deny new docks that would interfere with public access to National Forest System land or water.

Boat Licensing

The Forest Service requires a commercial boat license to be obtained after granting authorization to operate as a commercial outfitter/guide under special use permit on the Rogue and Illinois Rivers. The U.S. Coast Guard is authorized to inspect and license all tour boats. The Oregon State Marine Board is authorized to issue annual licenses for outfitter/guides.

Tour Boat Licensing

U.S. Coast Guard Department of Marine Inspection annually inspects all tour boats. They inspect all lifejackets to ensure they meet safety requirements. They inspect all radios, electronics, mechanical parts, fuel lines and engine parts on the boats to ensure they are in working order. They also conduct tests on the river to ensure the boat's sea-worthiness.

Every five years, the U.S. Coast Guard inspects each tour boat in a dry dock for safety, structural integrity, and to determine that all parts are in working order. Passing boats receive a Certificate of Inspection and a Certificate of Documentation from the U.S. Coast Guard.

The U.S. Coast Guard requires tour boat pilot re-licensing every five years. The license identifies the allowable boat tonnage and allows the pilot to transport more than six passengers. The pilot must have a complete physical and is subject to random, mandatory drug testing on an on-going basis. The pilot must also complete a First Aid and CPR class every two years.

The U.S. Coast Guard also requires tour boat companies to have a safety plan and to ensure all pilots and personnel are knowledgeable of and can complete their responsibilities under the safety plan. Safety plan components include procedures for maritime accidents, emergency responses, and radios; a map with latitude and longitude, and a procedure to contact emergency personnel, including U.S. Coast Guard Helicopters.

Fishing Guide Licensing

The Oregon State Marine Board requires a yearly license to operate as an outfitter/guide. The permit is for a maximum of six people on the boat. Licensing requires first aid and CPR class completion.

The U.S. Forest Service requires fishing guides to maintain a complete insurance policy at all times for their operations, requires that their boat be readily identifiable, and requires the permit holder to follow all federal and state laws and permit requirements.

The permit holder shall comply with all applicable federal, state, and local laws, regulations and standards, and other relevant environmental laws, as well as public health and safety laws. The permit holder must manage hazardous material and fuel and oil spills in accordance with Oregon Administrative Rules, Department of Environmental Quality.

Purpose and Need for Action

There is a **need** to respond to existing outfitter/guide permit holders that want to continue their commercial operations by issuing new special use permits for those that expired December 31, 2004 and those that will expire April 30, 2006. There is also a need to respond to the owners of Paradise, Half Moon Bar, and Clay Hill Lodges in the lower Rogue Wild Section who want to be issued special use permits for boat docks at their properties.

The **purpose** of this action is to continue providing commercial recreational activities on the lower Rogue and lower Illinois Rivers through existing outfitter/guides as outlined by Forest Service policy. The purpose for docks is to safely load and unload lodge supplies as well as lodge clients and their belongings that arrive by commercial boat.

Proposed Action

The Proposed Action would issue 63 special use permits to outfitter/guides on the lower Rogue River, from Lobster Creek upriver to the pool below Blossom Bar Rapids, and the lower Illinois River, from the confluence with the Rogue River to the mouth of Nancy Creek, with the same terms and conditions as the previous and current permits (see FEIS Appendix E.)

The Forest Service also proposes to issue special use permits for a dock at each of three commercial lodges in the lower Rogue Wild Section: Paradise Lodge, Half Moon Bar Lodge, and Clay Hill Lodge. Docks currently exist at Paradise Lodge and Half Moon Bar Lodge, so permits for these two docks would be reissued. The Clay Hill Lodge dock no longer exists; a permit for a replacement dock would be issued.

The Proposed Action is described as Alternative 2; a more detailed description of the Proposed Action can be found in Chapter 2.

Public Involvement

A Notice of Intent (NOI) to prepare an Environmental Impact Statement was published in the Federal Register on September 4, 2003. The NOI specified that comments concerning the proposal scope be received by October 3, 2003. The Forest Service sent NOI copies and a letter explaining the Proposed Action to approximately 1,250 interested individuals (which includes tribes, special interest groups, other agencies, landowners, and special use permit holders).

A press release notifying the public of the Proposed Action and scheduled public meetings was published on September 8, 2003. Two evening public meetings were held in Grants Pass and Gold Beach on September 16 and 17, 2003. Approximately 35 people attended these meetings.

Thirty-nine comment letters and e-mails were received in response to this public outreach.

A press release notifying the public of DEIS availability and scheduled public meetings was published in December 2004. Public meetings to answer questions about the Draft EIS and take comments were held on December 13th, 2004 in Medford, December 16th in Gold Beach, and January 3rd, 2005 in Medford.

One hundred and four oral statements, comment letters, and emails were received in response to the Draft EIS. Substantive comments were responded to in three ways: (1) a Response to Comments Document was created where reference, response and/or clarification to the DEIS comment was provided, (2) changes were made to the content of the DEIS documentation, to be documented in the FEIS, and in response to suggestions about the range of alternatives, (3) two new alternatives were developed.

Decision Framework

The purpose of this FEIS is to disclose environmental effects that could result from implementation of the Proposed Action or alternatives. The FEIS is not a decision document.

Based on the effects of the Proposed Action and its alternatives, the Responsible Official will either decide to implement the Proposed Action, one alternative, parts of alternatives, combinations of alternatives, or to not implement any action at this time.

The District Ranger, as Responsible Official, must make the following decisions:

- Outfitter and Guide Permits. Determine the number of permits to issue, if any.
- Outfitter and Guide Permit Terms and Conditions. Determine the terms and conditions of those permits.
- Docks. Determine if docks would be permitted at Paradise, Half Moon Bar and Clay Hill Lodges in the lower Rogue Wild Section.

Factors that will be used to make the decision include:

> How does the Proposed Action or alternatives address the purpose and need? How does the Proposed Action or alternatives address the significant issues? How does the Proposed Action or alternatives protect or enhance the river Outstandingly Remarkable Values without limiting other uses that would not substantially interfere with public use and enjoyment of these values?

Issues

The interdisciplinary team sorted issues into two categories to facilitate the concise, full disclosure, presentation and comparison of environmental effects between alternatives. The following issue categories were utilized for this analysis.

> **Significant Issues** include points of discussion, debate or dispute expressing important, substantive cause-effect relationships to the quality of the human environment, which are also relevant to the timing and context of the decision to be made. They were used to design alternatives, unique alternative mitigation, and/or facilitated the display of important environmental consequences.

Non-significant Issues include points of discussion, debate or dispute that could not be addressed with a project level analysis, issues already decided by law, regulation, or other higher level decisions, issues, and/or issues received from the public that were found to be conjectural or non-substantive.

The following **significant issues** were identified for this project and analysis:

Wildlife and Fish Habitat - Commercial motorboats under special use permit can adversely affect animals and their habitat.

The **key indicator** for this issue is the number of permitted commercial motorboat trips. Refer to FEIS Chapters 3 and 4, Fisheries and Wildlife Sections for consequences.

User Conflicts - If the special use permits are issued, the recreational experience of some floaters may be degraded by commercial motorboats in the Wild Section. Motorboat wakes and noise and odor generated by motors adversely affect floaters.

The **key indicator** for this issue is the maximum number of permitted commercial motorboat trips in the Wild Section. Refer to FEIS Chapters 3 and 4, Recreation Section for consequences.

Economic Impacts - Any decision that reduces permitted use below current use may have economic impacts that should be considered in the decision.

The **key indicators** for this issue are the jobs and income generated by permitted activities, both directly to the permit holders' businesses and secondarily to the businesses in the community. Refer to FEIS Chapters 3 and 4, Economics Section for consequences.

Non-significant Issues:

The Council on Environmental Quality (CEQ) NEPA regulations explain 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). A complete list of non-significant issues and reasons regarding their categorization as non-significant may be found in the project record at the Gold Beach Ranger District. Noteworthy issues found to be non-significant and out of scope include:

There were comments concerning fishing guiding operations (permit violations, boat stunts). These comments can be managed through administrative procedures with the permits and the specific operating plans.

Another comment brought up the idea of additional commercial outfitter/guide opportunities from Lobster Creek to Watson Bar. The Forest Service does not see a need for additional permit holders at this time because current permittees are not using their maximum permitted trips. This can be addressed in the Rogue RMP revision.

Another concern raised by the public was that placing docks at all Rogue Wild Section lodges will lead to more development in the Wild Section. The concern over more development is dealt with in the Rogue RMP standards and guidelines.

There were issues that were considered outside the scope because they would not meet the Purpose and Need for Action. These included the permit system for private recreational motorboat trips or float trips in the Rogue Wild Section, private recreational motorboat trips for ingress/egress to private property along the lower Rogue and lower Illinois Rivers, private property easements, non-recreation developments, and general recreation use.

CHAPTER 2. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

This chapter describes and compares the alternatives considered for the lower Rogue and lower Illinois outfitter/guide and lodge dock special use permits. This section also presents alternatives considered in detail in comparative form, providing a clear basis for choice among options by the decision maker. Some information to compare the alternatives is based on alternative design (i.e., number of permitted trips and docks) and some on environmental, social and economic effects of alternative implementation (i.e., motorboat effects on water quality, wildlife, fish, and user group conflicts). Some alternatives were eliminated from detailed study; see below.

Changes Between Draft and Final: Two additional alternatives were developed in response to public comments on the DEIS to have permitted use more in line with actual use. One alternative reduces permitted use to the average of the highest two years from 2000-2004, and the other reduced permitted use to the average of the lowest two years from 2000-2004.

Alternatives Considered but Eliminated

Information was received from interested groups and individuals, which influenced alternative development. Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss reasons for eliminating alternatives that were not developed in detail (40 CFR 1502.14). The following discusses an alternative considered but eliminated from detailed study, including the rationale for elimination. Other alternatives raised during public comment are analyzed in detail under the Final EIS.

Re-Establish 1968 Use Levels in the Wild Section

An alternative was considered that would have issued 63 special use permits, but reduced the commercial motorboat use in the Wild Section to a level approximated from 1968 figures in the document, *Motorboat Use on the Wild Rogue River: an Investigation of Use between Watson Creek and Blossom Bar* (Donheffner and Muckleston 1976). The remaining permits (below the Wild Section) would be issued under the same terms and conditions that currently exist.

Rationale: As outlined in Chapter 1, management decisions were made after 1968 by the regulatory agency delegated to permit use on the Rogue and Illinois Rivers. Since 1974, decisions have been made on managing motorized and non-motorized boat use by requiring permits, setting use levels, and implementing seasonal restrictions. The Oregon State Marine Board regulated use and issued permits until 1986 when permit system consolidation and management became a Forest Service responsibility. The Forest Service continued to issue permits to the tour boats, fishing guides, livery services, and other uses for the same numbers of trips that had been issued previously by the Marine Board.

In 2002, the U.S. District Court ruled in a lawsuit that the Rogue RMP "does not require motorboat use to be limited to 1968 levels." Recent user surveys and studies indicate a quality experience exists in the Wild Section for ninety percent or more of all users. As stated in Chapter 1, the revision to the Rogue RMP will analyze the effects of all recreation use in the Wild Section which could modify the permitting system to motorized and non-motorized boat use.

Alternatives Considered in Detail

Five action alternatives and a No Action Alternative are analyzed in detail in this Final EIS. This range of alternatives is designed to provide a variety of choices for responding to existing outfitter/guide permit holders and action alternatives are designed to be responsive to the stated purpose and need and address the significant issues. These alternatives were developed by the Forest Service and are responsive to issues raised by the public. Permitted use levels for all alternatives are comparatively displayed in Table 3.

Alternative 1 - No Action

Alternative 1 (the No Action Alternative) was developed as a requirement of the National Environmental Policy Act (NEPA) and is used to compare the effects of authorizing the other alternatives. This alternative forms the basis for comparison against action alternatives. Under the No Action Alternative, the special use permits would not be issued.

Special use permits for the docks at Paradise and Half Moon Bar Lodges would not be issued when they expire. A permit for a replacement dock would not be issued at Clay Hill Lodge.

Alternative 1 identifies and describes the baseline conditions of the physical, biological, social and economic environments within the project area. As required by NEPA, a No-Action Alternative is included and analyzed in the Final EIS as a benchmark against which the action alternatives can be compared.

Under this scenario, no project activities would take place, and the resulting environmental effects of no-action would be compared to the environmental effects of permitting the Proposed Action, or another alternative to go forward. Alternative 1 is not designed to address the stated Purpose and Need. With this alternative, it is assumed that current conditions regarding commercial operations would change and would not allow commercial operations of existing outfitter/guides. Since no special use permits would be authorized, no additional mitigation measures or management requirements and constraints would be necessary.

Alternative 2 - Proposed Action

This alternative was developed to analyze permitted operations with the same terms and conditions as the 2000-2004 permits.

This alternative would reissue all 63 permits with the similar terms and conditions as the 2000-2004 permits (see Specific and Unique Mitigation below).

Total permitted use	26,733 trips per year
Total permitted Rogue Wild Section use	2,128 trips per year
Jobs	156
Income	$2,392,800

Commercial Tour Boats

Two commercial tour boat companies would be offered three permits to operate jet boats on the Rogue River for scenic trips and to transport lodge guests. Three trip types would be permitted: Lobster Creek to either Snout Creek (Agness), Watson Creek (the beginning of the Wild Section on the lower Rogue), or to the pool below Blossom Bar Rapids (approximately 10 miles above Watson Creek in the Rogue Wild Section). Refer to sample permits in Appendix E for permit terms and conditions.

Fishing Guides

Fifty-nine permits would be offered to fishing guides for trips on the lower Rogue and lower Illinois Rivers. Refer to the sample permits in Appendix E for permit terms and conditions.

Livery Service, Boat Training Trips, Scenic Trips, and Raft Trips

Three fishing guide permits would include additional uses. One permit would include livery service, scenic trips, and boat training trips from Lobster Creek to the pool below Blossom Bar Rapids. Another would include livery trips and scenic trips from Foster Bar to Agness. The third permit would include raft trips from Foster Bar to Agness. Refer to the sample permits in Appendix E for permit terms and conditions.

Commercial Lodge Boats

One permit would be issued to transport lodge guests from Foster Bar to Paradise Lodge. Refer to the sample permits in the Appendix E for permit terms and conditions.

Docks

Three special use permits would be issued for docks in the Rogue Wild Section at the Paradise, Half Moon Bar, and Clay Hill Lodges. Refer to the sample permits in the Appendix for permit terms and conditions.

Specific and Unique Mitigation

If total commercial use levels exceed the average of the two highest years from 2000-2004 more than two years in a row, user surveys, complaints, and on-river monitoring by Forest Service personnel would be used to determine if adverse impacts to the recreation Outstandingly Remarkable Values (ORVs) are occurring. Commercial outfitter/guide permits would be amended as needed to adjust permitted use to protect the Recreation ORV.

Alternative 3

This alternative was developed to reduce user conflicts in the Rogue Wild Section by restricting motorboat use to Tuesday through Saturday in the Rogue Wild Section. Restrictions apply when most floaters are using the river (Sunday and Monday).

Total permitted use	25,814 trips per year
Total permitted Rogue Wild Section use	1,417 trips per year
Jobs	139-153*
Income	$2,128,400 - $2,341,700*

***Actual amount depends on the degree to which Sunday-Monday use shifts to Tuesday-Saturday. Higher values are for maximum shift to Tuesday-Saturday.**

From April 1 through October 31, **all 63 permits** would prohibit motorboat use on Sunday and Monday in the **Rogue Wild Section**. On Tuesday through Saturday, permitted daily trip limits for each type of permit would be the same as the Proposed Action.

Commercial Tour Boats

Two commercial tour boat companies would be offered three permits to operate jet boats on the Rogue River for scenic trips and to transport lodge guests. Three trip types would be permitted: Lobster Creek to either Snout Creek (Agness), Watson Creek (the beginning of the Wild Section on the lower Rogue), or to the pool below Blossom Bar Rapids (approximately 10 miles above Watson Creek in the Rogue Wild Section). In the Rogue Wild section, trips between November 1 and March 31 would be specifically authorized for each permittee by the District Ranger. Refer to sample permits in Appendix E for permit terms and conditions.

Fishing Guides

Fifty-nine permits would be offered to fishing guides for trips on the lower Rogue and lower Illinois Rivers. Refer to the sample permits in Appendix E for permit terms and conditions.

Livery Service, Boat Training Trips, Scenic Trips, Raft Trips

Three fishing guide permits would include additional uses. One permit would include livery service, scenic trips, and boat training trips from Lobster Creek to the pool below Blossom Bar Rapids. Another would include livery trips and scenic trips from Foster Bar to Agness. The third permit would include raft trips from Foster Bar to Agness. Refer to the sample permits in Appendix E for permit terms and conditions.

Commercial Lodge Boats

One permit would be issued to transport lodge guests from Foster Bar to Paradise Lodge. Refer to the sample permits in the Appendix E for permit terms and conditions.

Docks (same as Alternative 2)

Three special use permits would be issued for docks in the Rogue Wild Section at the Paradise, Half Moon Bar, and Clay Hill Lodges. Refer to the sample permits in the Appendix for permit terms and conditions.

Specific and Unique Mitigation

If total commercial use levels exceed the average of the two highest years from 2000-2004 more than two years in a row, user surveys, complaints, and on-river monitoring by Forest Service personnel would be used to determine if adverse impacts to the Recreation ORV are occurring. Commercial outfitter/guide permits would be amended as needed to adjust permitted use to protect the Recreation ORV.

Alternative 4

This alternative was developed to bring use in the Rogue Wild Section closer to actual use, while providing some allowance for future increases in demand for outfitter/guide services.

Total permitted use*	25,470 trips per year
Total permitted Rogue Wild Section use*	1,073 trips per year
Jobs	156
Income	$2,392,800

***Includes 25% additional use**

All 63 permits would have permitted use in the **Rogue Wild Section** calculated as the average of the **two highest** years from 2000 to 2004.

Commercial Tour Boats

Two commercial tour boat companies would be offered three permits to operate jet boats on the Rogue River for scenic trips and to transport lodge guests. Three trip types would be permitted: Lobster Creek to either Snout Creek (Agness), Watson Creek (the beginning of the Wild Section on the lower Rogue), or to the pool below Blossom Bar Rapids (approximately 10 miles above Watson Creek in the Rogue Wild Section).

Additional use may be requested annually by each permit holder and granted by the District Ranger. This additional use would not exceed 25% of the permitted use on an annual basis or the maximum permitted use in the Proposed Action, whichever is less. Refer to the sample permits in Appendix E for permit terms and conditions.

Fishing Guides

Fifty-nine permits would be offered to fishing guides for trips on the lower Rogue and lower Illinois Rivers. Refer to the sample fishing guide permit in Appendix E for permit terms and conditions. Additional use may be requested annually by each permit holder and granted by the District Ranger. This additional use would not exceed 25% of the permitted use or 10 trips, whichever is greater. Refer to the sample permits in Appendix E for permit terms and conditions.

Livery Service, Boat Training Trips, Scenic Trips, and Raft Trips **(same as fishing guides)**

Three fishing guide permits would include additional uses. One permit would include livery service, scenic trips, and boat training trips from Lobster Creek to the pool below Blossom Bar Rapids. Another would include livery trips and scenic trips from Foster Bar to Agness. The third permit would include raft trips from Foster Bar to Agness. Additional use may be requested annually by each permit holder and granted by the District Ranger. This additional use would not exceed 25% of the permitted use or 10 trips, whichever is greater. Refer to the sample permits in Appendix E for permit terms and conditions.

Commercial Lodge Boats

One permit would be issued to transport lodge guests from Foster Bar to Paradise Lodge. Additional use may be requested annually by each permit holder and granted by the District Ranger. This additional use would not exceed 25% of the permitted use or 10 trips, whichever is greater. Refer to the sample permits in Appendix E for permit terms and conditions.

Docks

This alternative would only issue special use permits for the two existing docks at Paradise and Half Moon Bar Lodges. Refer to the sample permits in Appendix E for permit terms and conditions.

Specific and Unique Mitigation

If total commercial use levels in the Scenic and Recreational Sections of the lower Rogue River or in the Recreational Section of the lower Illinois River exceed the average of the two highest years from 2000-2004 more than two years in a row, user surveys, complaints, and on-river monitoring by Forest Service personnel would be used to determine if adverse impacts to the Recreation ORV are occurring. Commercial outfitter/guide permits would be amended as needed to adjust permitted use to protect the Recreation ORV.

Alternative 5 - Preferred Alternative

This alternative was developed in response to public comments on the DEIS to include an alternative that analyzed actual use. This alternative would bring all commercial special use permits for all sections of the lower Rogue River and the Recreation Section of the lower Illinois River closer to actual use.

All 63 permits would have permitted use for **the entire project area** based on the average of the **two highest** years use from 2000-2004. Additional use may be requested annually by each permit holder and granted by the District Ranger. The additional use could be up to, but would not exceed 25% of the permitted use.

Total permitted use*	3,797 trips per year
Total permitted Rogue Wild Section use*	825 trips per year
Jobs	156
Income	$2,055,800

***Includes 25% additional use**

Commercial Tour Boats

Two commercial tour boat companies would be offered three permits to operate jet boats on the Rogue River for scenic trips and to transport lodge guests. Three trip types would be permitted: Lobster Creek to either Snout Creek (Agness), Watson Creek (the beginning of the Wild Section on the lower Rogue), or to the pool below Blossom Bar Rapids (approximately 10 miles above Watson Creek in the Rogue Wild Section). Refer to sample permits in Appendix E for permit terms and conditions.

Fishing Guides

Fifty-nine permits would be offered to fishing guides for trips on the lower Rogue and lower Illinois Rivers. Refer to the sample permits in Appendix E for permit terms and conditions.

Livery Service, Boat Training Trips, Scenic Trips, and Raft Trips (Same as Alternative 2)

Three fishing guide permits would include additional uses. One permit would include livery service, scenic trips, and boat training trips from Lobster Creek to the pool below Blossom Bar Rapids. Another would include livery trips and scenic trips from Foster Bar to Agness. The third permit would include raft trips from Foster Bar to Agness. Refer to the sample permits in Appendix E for permit terms and conditions.

Commercial Lodge Boats

One permit would be issued to transport lodge guests from Foster Bar to Paradise Lodge. Refer to the sample permits in the Appendix E for permit terms and conditions.

Docks (Same as Alternative 2)

Three special use permits would be issued for docks in the Rogue Wild Section at the Paradise, Half Moon Bar, and Clay Hill Lodges. Refer to the sample permits in the Appendix for permit terms and conditions.

Specific and Unique Mitigation
If commercial use levels in the Wild, Scenic and Recreation Sections of the lower Rogue River or in the Recreational Section of the lower Illinois River exceed the average of the two highest years from 2000-2004 more than two years in a row, user surveys, complaints, and on-river monitoring by Forest Service personnel would be used to determine if adverse impacts to the Recreation ORV are occurring. Commercial outfitter/guide permits would be amended as needed to adjust additional use to protect the Recreation ORV.

Alternative 6

This alternative was developed in response to public comments on the DEIS and would reduce tour boat and lodge boat permitted use to current outfitter/guide use levels.

Total permitted use	19,405 trips per year
Total permitted Rogue Wild Section use	930 trips per year
Jobs	134
Income	$2,055,800

Commercial Tour Boats

Two commercial tour boat companies would be offered three permits to operate jet boats on the Rogue River for scenic trips and to transport lodge guests. Three trip types would be permitted: Lobster Creek to either Snout Creek (Agness), Watson Creek (the beginning of the Wild Section on the lower Rogue), or to the pool below Blossom Bar Rapids (approximately 10 miles above Watson Creek in the Rogue Wild Section). Permitted use on all sections of the lower Rogue River would be limited to the average of the **two lowest** years of use between 2000 and 2004. Refer to the sample permits in Appendix E for permit terms and conditions.

Fishing Guides (same as Alternative 2 for Rogue River Fishing Guides)

Fifty-nine permits would be offered to fishing guides for trips on the lower Rogue and lower Illinois Rivers, but use **on the Illinois would be limited** to 30 trips per year for each permit. Refer to the s sample permits in Appendix E for permit terms and conditions.

Livery Service, Boat Training Trips, Scenic Trips, Raft Trips (same as Alternative 2)

Three fishing guide permits would include additional uses. One permit would include livery service, scenic trips, and boat training trips from Lobster Creek to the pool below Blossom Bar Rapids. Another would include livery trips and scenic trips from Foster Bar to Agness. The third permit would include raft trips from Foster Bar to Agness. Refer to the sample permits in Appendix E for permit terms and conditions.

Commercial Lodge Boats

One permit would be issued to transport lodge guests from Foster Bar to Paradise Lodge. Permitted use on all sections of the lower Rogue River would be limited to the average of the **two lowest** years of use between 2000 and 2004. Refer to the sample permits in Appendix E for permit terms and conditions.

Docks (Same as Alternative 2)

Three special use permits would be issued for docks in the Rogue Wild Section at the Paradise, Half Moon Bar, and Clay Hill Lodges. Refer to the sample permits in Appendix E for permit terms and conditions.

Specific and Unique Mitigation

If commercial use levels by fishing guides, livery service, boat training trips, scenic trips and raft trips in the Scenic and Recreational Sections of the lower Rogue River exceed the average of the two highest years from 2000-2004 more than two years in a row, user surveys, complaints, and on-river monitoring by Forest Service personnel will be used to determine if negative impacts to the Recreation ORV are occurring. Permits would be amended as needed to adjust permitted use to protect the Recreation ORV.

Maximum Boat Trip Limits - All Action Alternatives

In accordance with permit terms and conditions, the following maximum daily limits are applicable to all action alternatives described above. Also see sample commercial boat and lodge boat permits in Appendix E for specific permit terms and conditions.

Table 1: Daily Maximum Commercial Tour Boat Trip Limits - Action Alternatives

	Rogue River – all Sections	Snout Creek (Agness) to Watson Creek	Rogue Wild Section
May 1 – June 15 and day after Labor Day – October 31	16	13	6
June 16 – Labor Day	28	17	6
November 1 – April 30	4 (maximum 8 per week)	No limit	No limit

Table 2: Daily Maximum Commercial Lodge Boat Trip Limits - Action Alternatives

	Trips per Day	Trips per Season	Passenger Limits
May 1 – October 31	2	180	15/day upstream 15/day downstream
November 1 – April 30	No limit	185	18/trip

Comparison of Alternatives

This section presents a comparison of proposed permitted use (Table 3) and a comparison of alternatives by key indicators for the significant issues (Table 4).

Table 3: Average Annual Use (2000-2004) and Proposed Permitted Annual Use (number of trips per year) by Alternative.

Type of Permitted Use/Area	Average of 2 highest years use 2000-2004	Average of 2 lowest years use 2000-2004	Alt. 1 No Action	Alt. 2 Proposed Action	Alt. 3	Alt. 4*	Alt. 5*	Alt. 6
Tour Boats								
Lobster Creek To Watson Creek	1,089	852	0	2,932	2,724	2,724	1361	852
Lobster to Blossom Bar	510	349	0	1,312	792	639	639	349
Lodge Boats								
	197	130	0	365	261	246	246	130
Rogue River Fishing Guides **								
Wild Section Year-Round	132	99	0	394	307	165	165	394
Wild Section Winter only	18	5	0	57	57	23	23	57
Lobster Creek To Watson Creek	1,061	861	0	17,293	17,293	17,293	1,326	17,293
Illinois River Fishing Guides								
	30	16	0	4,380	4,380	4,380	38	330
Docks								
			0	3	3	2	3	3

*__Includes 25% additional use__

__Includes livery trips, scenic trips, and float trips from Foster Bar to Agness__

Table 4: Comparison of Alternatives by Key Indicators for Significant Issues

Issue and Key Indicators	Alt. 1	Alt. 2	Alt.3	Alt.4	Alt. 5	Alt.6
WILDLIFE AND FISH HABITAT Key Indicator – Number of yearly permitted commercial motorboat trips	0	26,733	25,814	25,470*	3,797*	19,405
USER CONFLICTS Key Indicator – number of yearly permitted commercial trips in the Wild Section of the lower Rogue River	0	2,128	1,417	1,073*	825*	930
ECONOMIC IMPACTS Key Indicator –jobs and income generated by permitted activities	0	156	139 -153**	156	156	134
	0	$2,392,800	$2,128,400 - $2,341,700**	$2,392,800	$2,392,800	$2,055,800

__*Includes 25% additional use__

__Depends on the degree to which Sunday-Monday trips shift to Tuesday-Saturday. Higher values are for maximum shift of Sunday-Monday trips to Tuesday-Saturday__**

Mitigation Measures Common to All Action Alternatives

Specific resource mitigation measures and terms and conditions are developed for all action alternatives analyzed in detail. These include appropriate measures a defined by NEPA Regulations at 40 CFR 1502.14(f) and 1508.20. These mitigation measures would be required under all action alternatives to reduce, rectify, avoid, eliminate, and/or compensate the potential resource impacts as required by 40 CFR 1508.20.

Botany

Mitigation measures to reduce the noxious weed spread along the lower Rogue and Illinois River corridors would include:

- Avoid parking equipment or docks on noxious weed populations during winter storage
- Avoid driving through noxious weed populations while moving docks
- Treat weed sites by pulling up plants and mark weed locations with flagging prior to moving docks for high water events
- Avoid pulling boats up onto gravel bars near noxious weed populations
- Clean all equipment and vehicles prior to entry onto USFS lands

Mitigation measures that would minimize impacts to vegetation resource:

- Avoid parking equipment in wet areas at Oak Flat. The wet areas at Oak Flat are habitat for *Scirpus pendulus*

Monitoring

The following listing outlines specific resources that would be monitored, subject to funding availability, over the next five-years of any permitted commercial motorboat use.

Hydrology

Continue to monitor stream temperature at designated sites on the Rogue and Illinois Rivers.

Observe and document specific sites annually where prop wash, willow cutting, and rock moving forms of channel maintenance occur on the Rogue River. Also observe excavator operations at Illahe Island and document the extent of downstream turbidity.

Fisheries

Continue partnering with the Lower Rogue Watershed Council and ODFW to monitor watershed attributes and fisheries.

Wildlife

Continue to monitor bald eagle, osprey, and peregrine falcon nest locations and western pond turtle and yellow-legged frog populations in the Rogue and Illinois River corridors.

Monitor yellow-legged frog egg masses and/or tadpole/juvenile amphibians in the Rogue and Illinois River corridors.

Recreation

Continue staff observations of all boat types when conducting administrative river trips. Follow up on and document any complaints concerning boating conflicts. Conduct surveys with river users concerning their recreational experience as described in the specific and unique mitigation.

Discuss concerns with fishing guides, tour boat operators, lodge boat operator, and floaters through meetings with the various user groups.

Cultural Resources

Programmatic and random monitoring of known sites will occur to help prevent casual collection or looting.

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CHAPTER 3. AFFECTED ENVIRONMENT

This chapter summarizes the project area physical, biological, social, and economic characteristics and presents the scientific and analytical basis for comparing the alternatives described in Chapter 2.

Changes Between Draft and Final: This chapter was updated with information about two additional Endangered and Threatened wildlife species – Steller sea lion and brown pelican. The Water Resources section on Channel Maintenance was also expanded, with more site-specific information on channel maintenance activities and the site-specific locations of these activities. The Botany section was updated to remove one former "Survey and Manage" fungus and to add the other three former "Survey and Manage" species to the "Sensitive Species" listing.

Physical Setting

The Wild and Scenic Rogue and Illinois River corridors are dynamic landscapes. The mountainous topography has steep slopes and incised canyons. Rainfall ranges from 90 to 120 inches per year. The maritime climate has hot, dry summers and wet, moderately cold winters.

The Rogue River is the third largest river in Oregon after the Columbia and the Willamette. It drains 5,164 square miles. It is one of three Oregon rivers that originate in the Cascade Range and flow west to the Pacific Ocean. From its source near Crater Lake National Park, the Rogue River flows over 200 miles before entering the Pacific Ocean near the town of Gold Beach, Oregon.

The Rogue River stretch from Marial to the mouth is one of the most recreationally diverse areas on the Gold Beach Ranger District. The river corridor below Agness has the highest number of recreational visitors on the district. Recreational activities include downriver floating with rafts, drift boats, canoes and kayaks; motorboating, commercial tour boat trips, fishing, hiking, hunting, swimming, camping, and recreational driving.

The Illinois River is a major Rogue River tributary. The Illinois River drains 990 square miles - 19 percent of the Rogue River basin. The Illinois basin is located primarily within Oregon's Josephine and Curry Counties, with a small portion in Siskiyou County in northwestern California.

The Lower Illinois Watershed (defined as the Illinois River from Silver Creek to its confluence with the Rogue) offers a variety of recreational opportunities, including camping, hiking, rafting, recreational driving, mountain biking, motorcycling, horseback riding, hunting, wildflower viewing, botanical study, catch and release fishing, motorboating, and downriver floating with rafts, drift boats and kayaks.

Geology - Rogue River

The Rogue River traverses dissimilar geological provinces between its Cascade Mountain headwaters and the Pacific Ocean. The river geomorphology – channel shape, trend, and character – reflects these differences in bedrock.

A wide range of geological land types and soil parent materials is represented along the Rogue and Illinois Rivers. The land type diversity includes rock outcrops, river-washed gravels, land flows, and land slump terrain. Soil parent materials are also diverse and include Umpqua Formation sandstones and siltstones and Galice Formation metavolcanic rocks. The Wild and Scenic Sections of both rivers fall within the Klamath Mountains Geologic Province.

Flat, open land is limited along both river corridors, but where it does occur, slopes on river terraces range from four to ten percent. More commonly, steep mountain slopes, as high as 5,000 feet, come down to the river. While topography limited historical land use, geology provided gold deposits as an economic substitute.

As the Rogue River nears Galice and the Wild and Scenic Section, it encounters the rugged terrain of the Klamath Mountain Geologic Province. The Klamath province is a product of millions of years of tectonic subduction and accretion in which pieces of ocean crust, island arc volcanoes, and sedimentary basins collided with the North American continent. These rocks are faulted, fractured and sheared. Between Galice and Foster Bar the river is bedrock controlled, following ancient fault trends and fractures and the more easily eroded rock types. Landforms in this segment reflect differential erosion within fracture zones and among rock types with varying erosion resistance.

Metamorphosed volcanic rocks and sheeted dike complexes exposed at Mule Creek Canyon and Stair Creek Falls are resistant to erosion, and form steep canyon walls through which the river flows rapidly. A zone of sheared muscovite schist creates a knickpoint and rapids at Blossom Bar, where large conglomerate boulders are an obstacle for motorboats and a challenge to whitewater floaters.

Stream morphology changes dramatically at Tate Creek below Blossom Bar Rapids, as the river flows across a contact between the Rogue and Riddle Formations. Riddle Formation rocks include resistant metamorphosed sandstone and conglomerate, and less resistant shale. Near vertical bedding shows differential erosion, but because the bedding is thinner and less resistant than the Dothan Formation upstream of Blossom Bar, the river cuts a wider, shallower channel. Backwater embayments are shallower and less protected than those in similar sites upstream in the Dothan Formation.

Contact between the Riddle Formation and the sedimentary conglomerate, sandstone and shale of the Flournoy and Lookingglass Formations is exposed below Clay Hill Creek. Bedding is near horizontal, and massive conglomerate beds form cliffs and waterfalls adjacent to the river and on tributary streams. The Riddle Formation upper portion is composed of thinly bedded mudstone, fine-grained sandstone, and siltstone. The Rogue River channel becomes increasingly wider here and the stream gradient continues to decrease. Backwaters, such as those at the mouth of Two-mile Creek, are wide and shallow.

A fault between Shasta Costa and just beyond Tom Frye Creek thrust older Myrtle Group sandstone, siltstone, and conglomerate over the younger Lookingglass Formation. Large river bends through the Illinois River mouth and around Copper Canyon are structurally controlled. A series of parallel faults (shear zones) have juxtaposed rocks of varying hardness, and the faults are areas of weakened, fractured bedrock.

Jurassic Colebrooke Formation is the dominant bedrock type between Copper Canyon and Lobster Creek. It is a less resistant graphite schist with occasional but large inclusions of pillow lavas. Tributary streams often define the common faults and fractures in the area. Fault trends control the river channel, and morphology is controlled by easily eroded fault zones and large, ancient, marginally stable to active slumps and earth flows that toe into the stream. Backwater embayments are rare in this reach. Small coves form below more quartz-rich (and resistant) schist, but these are usually not large enough to offer protection from or to dissipate waves.

Geology - Illinois River

The Illinois River originates in the Siskiyou Mountains near the California – Oregon border. The river travels through an uplifted remnant of a broad plateau, now eroded into rugged and mountainous landforms. The geomorphology of the mountains, valleys and stream courses reflects the underlying rock and tectonic history. More easily eroded rocks, such as mudstone, form rounded hills, while harder rocks, such as gabbro, form sharp resistant ridges.

The lower Illinois River course is strongly controlled by the underlying geologic structures. The project area has many faulted contacts between and within rock types. The fault patterns influence stream course and gradient, especially where rocks of different hardness are juxtaposed. Where north trending normal faults cut through more resistant rocks, the river is confined to a straight, deeply entrenched bedrock channel. Northwest trending faults create sharp bends in the stream course, often marked by debris slides and rock falls from the canyon walls.

Geologically recent deposits are unconsolidated water-deposited sand, silt, and gravels. Material deposited at Oak Flat or at the Illinois River mouth comes from many sources along the river course. Humans have used the river terraces for settlements, pasture, and agriculture. Soil development tends to be minimal and droughty on these deposits. Several higher and more ancient terraces have developed deeper, productive soils, possibly accelerated by organic material additions from crops and livestock. However, because of their lower slope position and poor sediment consolidation, they are prone to stability problems that are substantially worsened by stream channel erosion, roads and building sites. Surface erosion and landslides can also be triggered by groundwater saturation or concentrated surface water runoff.

River Outstandingly Remarkable Values (WSRA)

Rogue River

The Outstandingly Remarkable Values (ORVs) for the Rogue River are fisheries, recreation and scenery. It is internationally known for its fisheries. In the 1920s and 1930s, the Rogue became famous for sport fishing. Recreation use is centered on water oriented activities including fishing, boating, and sightseeing. The river flows through many areas of outstanding natural beauty. Natural features, including towering cliffs and large moss covered boulders in some of the canyons and chutes, are spellbinding. Rapids provide “picture taking” scenery of white water conditions.

Illinois River

The Outstandingly Remarkable Values for the Illinois River are recreation, fisheries, water quality, scenery, and botanical. The Illinois is widely known for its good fishing, clean water, scenery, botanical diversity, whitewater rafting and boating.

Water Resources

Water Quality is designated as an Outstandingly Remarkable Value under the Wild and Scenic Rivers Act for the Illinois River.

River Morphology

The Rogue River channel gradient ranges from about 35 feet per mile in the upstream section to about 3 feet per mile downstream of Clay Hill. River current is strong and punctuated by riffles. The riffles result from differential erosion of harder and softer rocks along the river bed, slumping of rocks and soil from banks into the river, and rock and debris deposition at tributary mouths. The lower Illinois gradient from its mouth to Nancy Creek is also about 3 feet per mile.

Flooding occurs on a major and minor scale, eroding land along the river and simultaneously depositing silt on bars and terraces. Large flood events have occurred in 1861, 1890, 1927, 1955, 1964, 1974 and 1997. Minor flood events deposit temporary rock and debris dams at tributary mouths. These dams last until a major river flood washes them away. Major floods also clean silt from river gravels, thin riparian vegetation, carry away or cover up vegetation along the river, and change the river bed.

Water Quantity

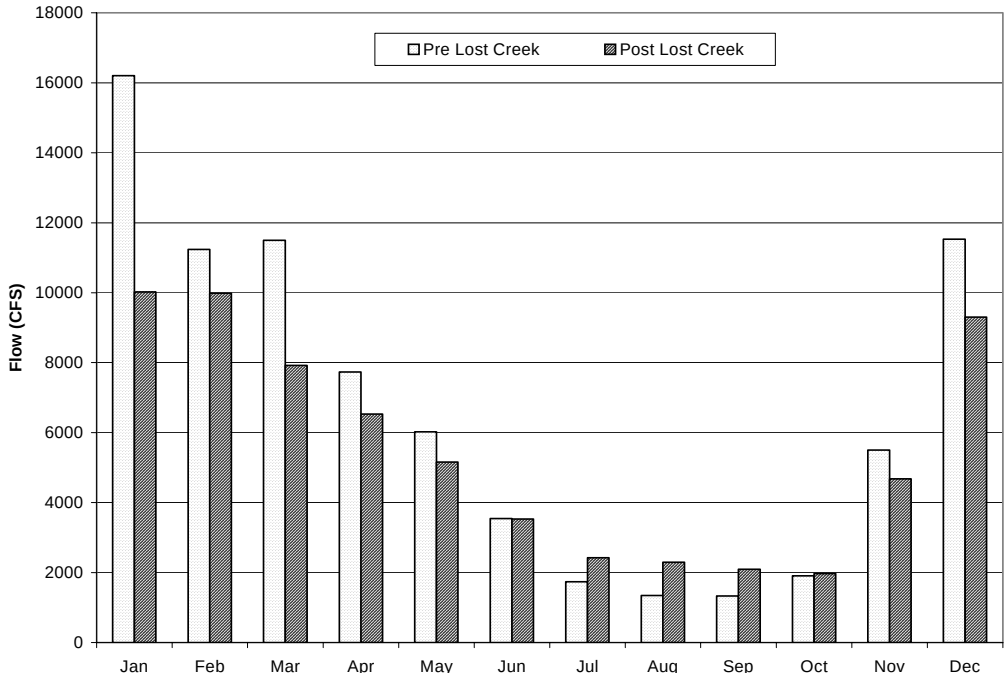
Average annual flow in the lower Rogue River below its confluence with the Illinois is 6,730 cubic feet per second (cfs): 5,473 cfs from the Rogue River and 1,257 cfs from the Illinois. Flow patterns mirror the annual precipitation pattern in the basin. During the relatively wet winter season from November through March, flows are high. From March through the end of summer, flows recede, gradually as the winter snowpack melts, then more rapidly as the upper watersheds dry out. Flow upstream of Marial Lodge has been regulated by Lost Creek Lake (located 110 miles upstream of Marial on the Rogue River) since February 1977 and by Applegate Lake ((located 93 miles upstream of Marial on the Applegate River) since December 1980. The effect of regulation downstream of Marial Lodge has been to reduce high winter flows and to increase low summer flows (see Figure 3).

Until a certain date, low reservoir levels are maintained for flood storage. Sometime after the threat of flooding has sharply decreased, reservoir levels may be increased up to the spillway crest for use during low flows.

From about July through September large quantities of water are withdrawn from Lost Creek and Applegate Lakes for many purposes, including irrigation, municipal, and industrial uses. Most of this latter use is in the upper Rogue River Valley between Lost Creek Lake and Grants Pass, in the Applegate River valley below Applegate Lake, and in the Bear Creek valley below Emigrant Lake.

During the summer and early fall, river flow averages about 2,000 cfs, or less than one-third the annual average. The record high flow at the gauging station near Agness was 290,000 cfs on December 23, 1964. The 1997 flood produced a flow of 241,000 cfs on January 2. The record low flow at this gauging station was 608 cfs on July 9, 1968.

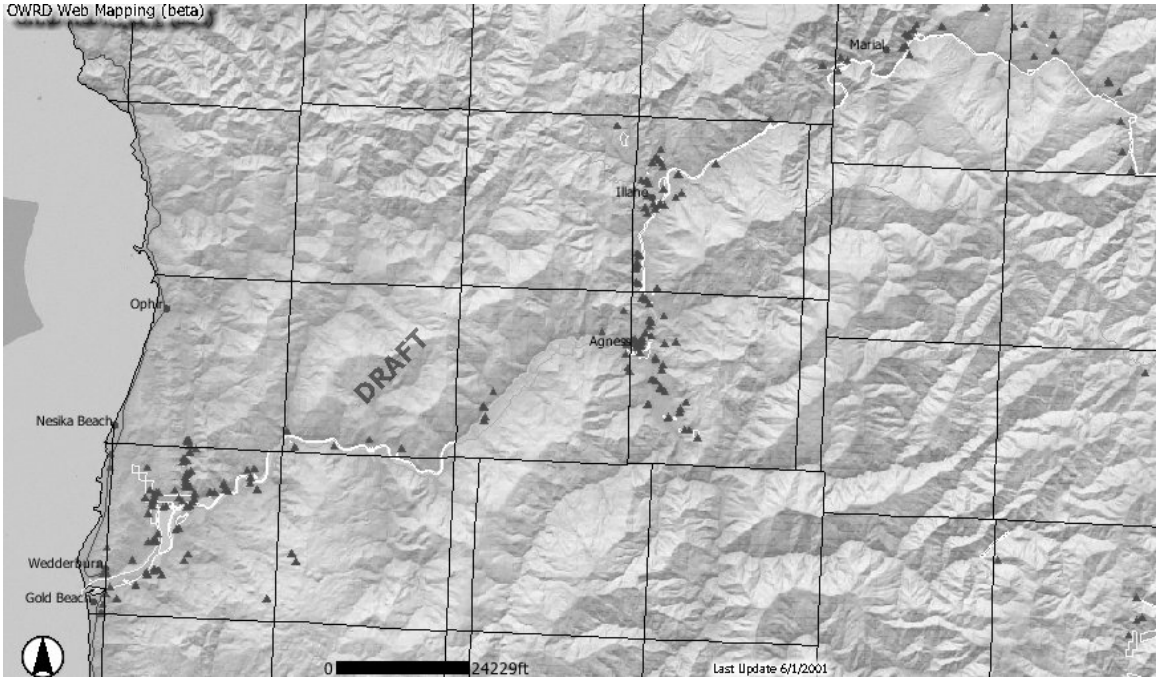
Figure 3: Average Monthly Flow on the Rogue River Before and After Lost Creek Dam Construction



Source: USGS

There are many water withdrawals in the lower Rogue and Illinois Rivers (between Marial and Lobster Creek on the lower Rogue and Nancy Creek and the mouth on the lower Illinois). Most are for domestic or stock watering use. The water amounts withdrawn are minor in comparison with those in the populated valleys in the middle portion of the basin. Figure 4 shows withdrawal locations in the lower rivers.

Figure 4: Water Diversions on the Lower Rogue and Lower Illinois Rivers (triangles)



Source: Oregon Water Resources Department

Water Quality

The lower Rogue and lower Illinois Wild and Scenic Sections are thought to have excellent water quality. Other than storm events that produce high, turbid flows, the rivers are visually clear. The Oregon Water Quality Index Report for 1986 to 1995 rated project area water quality as 'good'. Report ratings ranged from 'very poor' (Bear Creek in the Middle Lower Rogue sub-basin) to 'good'. The highest rating was at Dodge Bridge in the upper Lower Rogue River. The Illinois River was also rated as 'good'.

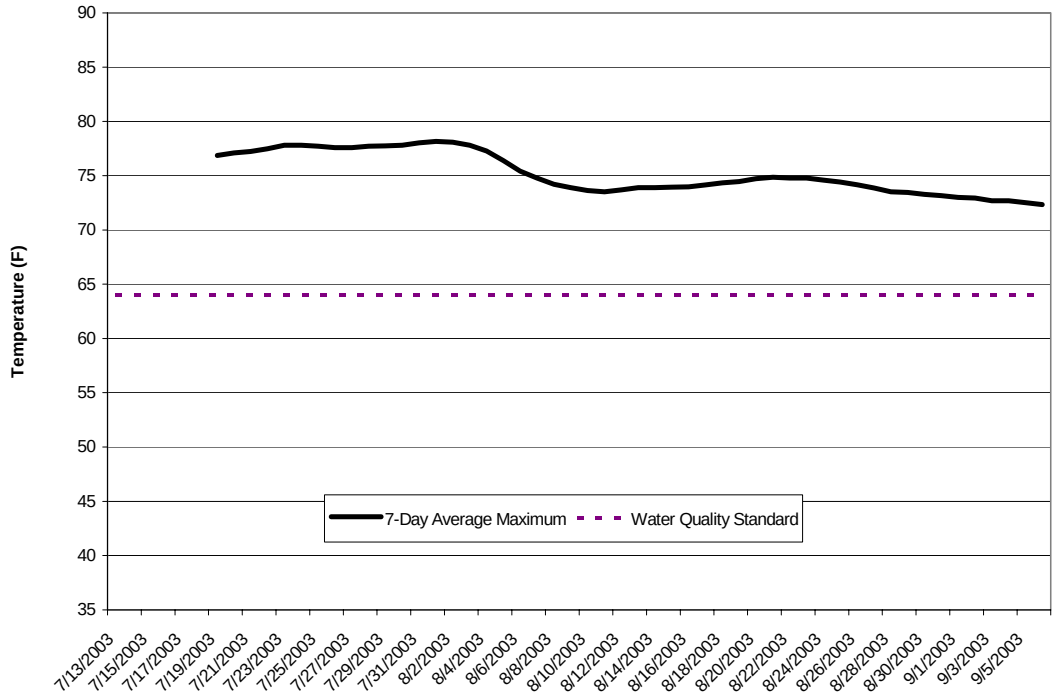
The Oregon Department of Environmental Quality (2002) has designated the Rogue River from the Pacific Ocean upriver to Little Butte creek at RM 132, and the Illinois River from its confluence with the Rogue to RM 56 as stream segments that do not meet water quality standards and placed them on the "303(d) List", in part because they regularly exceed the water quality standard for stream temperature. This means that water quality standards designed to protect beneficial uses (domestic and municipal water supplies, industrial water supply, irrigation, livestock watering, anadromous and resident fish spawning, rearing, and passage, wildlife, fishing, hunting, boating, water contact recreation, and aesthetic quality) are regularly exceeded. The EPA approved the Oregon 2002 303(d) list on March 24, 2003.

Both rivers exceed the stream temperature standard most of the summer. The daily high temperature 7-day moving average should be at or below 64°F. High temperatures in both rivers are often nearly ten degrees warmer than the standard. Warm water temperatures, while pleasant for recreationists, are detrimental to aquatic life, especially salmonids. Figure 5 shows the 7-day maximum water temperatures and the water quality standard.

During the summer, upstream reservoirs (Lost Creek and Applegate) release cooler water than would occur at those reservoir sites under natural conditions, and they release considerably more flow into the rivers (Rogue and Applegate Rivers) than would be occurring in the rivers under natural conditions. The combination of increased flow and cooler temperatures results in lower stream temperatures in the project area than would occur under natural flow conditions. Release of cooler temperature water by itself is not enough to cool water temperatures in the project area due to the warming that occurs between the reservoirs and the project area.

Elevated stream temperatures are not the only river water quality problem. In summer, the lower Rogue River from the mouth to the Illinois confluence also exceeds the pH water quality standard of 6.5 - 8.5. Values of 8.9 have been recorded. High pH readings are most likely due additional dissolved minerals or to algal growth stimulated by warmer water temperatures. River pH between Grave Creek and the Applegate River also exceeds the standard during the fall to spring period.

Figure 5: Summer Water Temperatures on the Rogue River, July-September 2003



Source: USGA

Channel Maintenance

Channel maintenance activities have occurred since 1935 on the Rogue River at or below Agness (see Table 5 and Figure 6), and since 1962 at Illahe Island. Channel maintenance does not occur and is not authorized in the Illinois River.

Boulders, cobbles, gravels, sands, and silt are moved and deposited in response to stream flow. Channel maintenance needs occur when enough of these materials build up to restrict boat travel at riffles or near Illahe Island, or when willows reduce sight distance. Channel maintenance activities include moving accumulated cobbles and gravels and lesser amounts of sand and silt at selected riffles and Illahe Island, moving small boulders by hand at selected riffles, and cutting willows at specific locations to improve safety.

Most channel maintenance consists of repositioning small boulders, cobbles, gravels and lesser amounts of sands and silts within the channel. This is accomplished at most riffles with a boat engine propeller. A boat is tethered to the shore, and the boat propeller creates enough water force to suspend cobbles and smaller material in the flowing water so they can be re-deposited to one side and/or carried downstream to be re-deposited in deeper parts of the channel. This technique is referred to as the "prop wash" method. Thirty-three maintained riffles are in the Scenic/Recreational Section and the remaining 11 are below Lobster Creek. Maintenance generally occurs at 10-15 riffles each year whenever and wherever needed (and possibly more than once a year). The riffles that require channel maintenance vary from year to year, depending on the size and number of high winter flows and the sediment supply for that year.

Riffle maintenance by prop wash is done where the water depth is 1-1.5 feet or less, and there is a hazard to safe boat passage. Maintenance deepens the channel about 1.5-2.5 feet in an area about 8-12 feet wide and 50-300 feet long at each riffle. The amount of material moved varies from ~22 to 333 cubic yards for each riffle (median amount = 130 cubic yards). Most of the material moved (~80%; median amount = 104 cubic yards) is transported downstream to a deeper section of the river. The remaining 20% is pushed to the sides of the riffle. These deeper river sections (pools) are generally about 100 feet wide, 100 feet long, and 7 feet deep during summer flows (about 2,600 cubic yards of water). The median amount of material moved by prop wash into a pool represents about 4 percent of the summer pool volume. Assuming that half of the 29 river miles from the uppermost prop wash location to the Rogue mouth consist of pools, prop wash at 15 sites would fill in about 0.003 percent of the total pool volume.

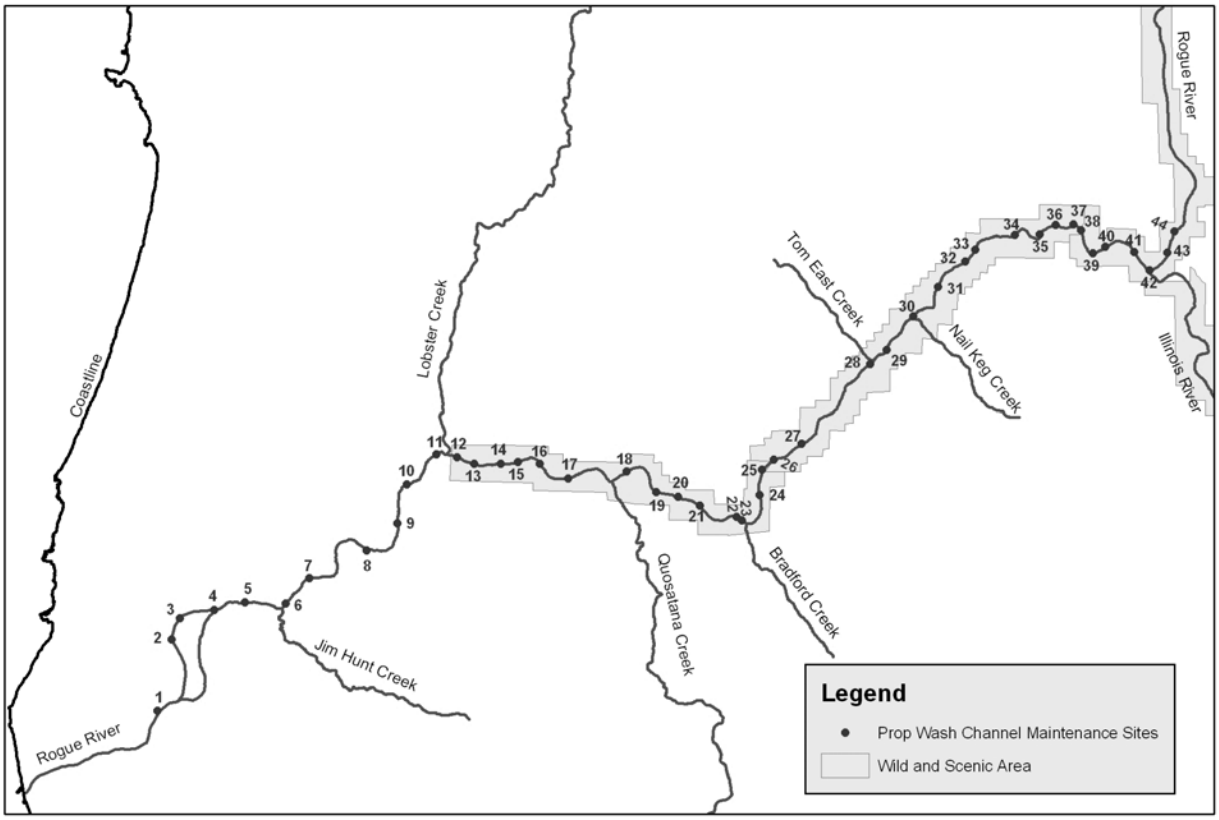
Table 5: Lower Rogue River Riffles where Prop Wash Channel Maintenance Occurs

Riffle Name	Map Number	Riffle Name	Map Number	Riffle Name	Map Number
Alder	1	William Miller	16	Nail Keg	30
Snag Patch	2	Hawkins	17	New	31
Cannery	3	Silver Creek	18	Bear	32
Ferry	4	Lowery	19	Bean	33
Canfield	5	Bacon Flat	20	Boiler/Mixer	34
Coyote/Jim Hunt	6	Big Fish	21	Peterman	35
Wakeman/Four Seasons	7	Fry's Landing	22	Twin Sisters/Smithers	36
Bill Ash	8	Bradford Creek	23	Crooked	37
Gillespie	9	Coal/Lower Coal	24	Upper Crooked	38
Jimmy Davis	10	Upper Coal	25	Wee	39
Coffee Pot	11	Slide Creek	26	Smith	40
Lobster	12	Sherman	27	Hotel	41
Shallow	13	Auberry	28	Illinois	42
Scow	14	Tom East	29	Milkmaid	43
Jennings	15			Mermaid	44

The deepened portion of the riffles would have a greater hydraulic efficiency, resulting in a lower water surface for a given flow. However, there is no or very little visual change in flow width due to the fact that the width of the channel on which maintenance is performed is small in comparison to the total width. Consequently, change in wetted perimeter due to change in flow width is insignificant. The deepening of a portion of the riffle results in an increase in both the wetted perimeter and the average depth. Consequently, there is little change in wetted perimeter to depth ratios.

An average of five maintained riffles have additional prop wash two to three times per summer as flows decrease. The amount of material moved is small in comparison to that described above for the initial maintenance at each site. The turbidity is also much less than for the initial maintenance at each location, as fines that produce turbidity have been washed out during the initial maintenance.

Figure 6. Lower Rogue River Riffles where Prop Wash Channel Maintenance Occurs



Note: riffle Names are found in Table 5.

Maintenance at Illahe Island occurred in 1974, 1986, 1992, 1994, and 1996-2000. This maintenance is not annual and is not done more than once a year. Channel maintenance at Illahe Island uses an excavator, tractor, or bulldozer to excavate or push material out of the channel and onto a gravel bar in the river. The equipment is brought down the right bank near Illahe Lodge. The maintenance takes about one-half day and the material moved varies from 389 to 583 cubic yards. The discussion above about changes in flow width and wetter perimeter to depth ratios also applies to the Illahe Island maintenance. This maintenance has no impact on pools, as the material is placed on a gravel bar.

At up to four to six riffles each year, small boulders are removed from the boating channel by hand. This does not occur every year, and, when it does occur, usually only 1-2 riffles are affected. The boulders are placed along the outside edge of the passable channel to mark the area safe for boat travel. Water continues to flow on both sides of these boulders. Roughly 40-60 small boulders are removed from the boating channel by hand at each location.

Due to relatively large hydraulic forces, particularly during winter flows, the bed material deposited and subsequently moved by channel maintenance activities is composed primarily of cobbles and gravels. The winter flows have enough hydraulic force to redistribute all materials moved by channel maintenance, including the small boulders moved by hand.

Willows would be cut using hand pruners and chain saws to improve sight distance for boater safety. The cut material would be thrown further back onto the river bar among the other willows. During most winters high water knocks down or removes these willows. When there are unusually low flows the willows are not knocked down or removed by high water and reduce the sight distance. Willows are removed from five areas (Foster Creek Rapid, Watson Creek Rapid, Burns Rapid, Peyton Rapid, and Clay Hill Island). Willow cutting areas are 15-30 feet wide and 40-200 feet long (0.01 to 0.13 acre).

Fisheries

Fisheries are designated as an Outstandingly Remarkable Value under the Wild and Scenic Rivers Act for both the Rogue and Illinois Rivers. Fish and fish habitat were identified as a significant issue in Chapter 1. The Fisheries Biological Evaluation can be found in FEIS Appendix F.

The Rogue and Illinois Rivers are a rich fishery and their many tributaries offer spawning and rearing habitat for a variety of fish. Seasonal runs of anadromous steelhead trout and salmon have been important to river corridor dwellers since prehistoric times. Fish aggregate at riffles and rapids during spring and fall migrations to inland spawning grounds, providing rich fishing. Year-round native trout populations also inhabit these waterways.

Four Pacific salmon and trout species are found in both rivers. Coho (*Oncorhynchus kisutch*) and chinook (*O. tshawytscha*) are the traditional Pacific salmon. They must migrate to the ocean and they die after one spawning run from the ocean. Steelhead and rainbow trout (*O. mykiss*) and coastal cutthroat trout (*O. clarki*), have less-restricted life histories. Resident and anadromous populations of each species exist in the lower Rogue below Grave Creek and lower Illinois. These fish can make more than one return migration to freshwater and can spawn more than once in their lifetime. The Rogue River is unusual in that it supports three *O. mykiss* forms sympatrically: resident rainbow trout, winter steelhead and summer steelhead.

The diversity of salmonid stocks that use the middle and upper Rogue River (upstream of Grave Creek) and the Illinois River, means there are adult fish in the lower Rogue River throughout the year. These fish are the basis of both a world-class sport fishery and the human cultures along the Rogue River. Anglers support a large portion of the Agness and Gold Beach economies, and many lodge and guide businesses have been developed to serve these anglers.

Salmonids spawning in the lower Rogue and Illinois Rivers tend to enter the river at the end of adult migration runs. Juveniles also enter the ocean earlier than upriver fish and they migrate south and stay close to shore in the ocean (Rivers 1991; Meehan and Bjornn 1991).

Non-salmonids in the two rivers are listed in Table 6. They include: anadromous Pacific lamprey, a poorly-known species whose populations are suspected to be in decline throughout their range; brook lamprey, another poorly known species whose populations are suspected to be in decline throughout their range; and green sturgeon, which was petitioned for listing under the Endangered Species Act, but did not warrant listing.

Nearly all fish production in the lower Rogue and lower Illinois sub-basins occurs in tributaries. Winter mainstem flows are too powerful and can mobilize the mainstem stream bottom, destroying eggs laid in gravel. Few tributaries have well-developed habitat for salmonids. Below Agness, only Lobster and Quosatana Creeks have extensive salmonid habitat, while Shasta Costa and Foster Creeks are the only tributaries above Agness that provide habitat.

Lawson, Indigo, and Silver Creeks produce most of the salmon and trout in the lower Illinois. However, during low water years, dry tributary mouths block access to spawning habitat and chinook will spawn in the mainstem. Tributaries of both rivers also provide spawning and rearing habitat for steelhead, anadromous cutthroat, and resident trout.

Table 6: Non-salmonids in the Rogue and Illinois Rivers

Common Name	Scientific Name	Anadromous	Native
Pacific lamprey	*Lampetra tridentate*	Yes	Yes
Brook lamprey	*Lampetra richardsoni*	No	Yes
Green sturgeon	*Acipenser medirostrus*	Yes	Yes
White sturgeon	*Acipenser transmontanus*	Yes	Yes
Coast range sculpin	*Cottus aleuticus*	No	Yes
Prickly sculpin	*Cottus asper*	No	Yes
Reticulate sculpin	*Cottus perplexus*	No	Yes
Redside shiner	*Richardsonius balteatus*	No	No
Three-spined sticklebacks	*Gasterosteus aculeatus*	No	Yes
Umpqua pikeminnow	*Ptychocheilus umpquae*	No	Yes

Fish Habitat

The lower Rogue has a wide active channel and flows through a narrow canyon from river mile (RM) 27 to RM 17 (Columbia Basin Inter-Agency Committee 1967). Downstream of RM 17, the river valley opens up, the gradient decreases further and extensive gravel bars form. The project area extends down to RM 10.8 at Lobster Creek. Downstream of RM 5, tides influence flow. Large islands form, and the river flows through multiple channels.

The lower Illinois flows through a steep bedrock-dominated canyon that starts 40 miles upstream near Eight Dollar Mountain. From the mouth of Nancy Creek downstream to the Illinois River mouth, the river valley widens. Within this wider channel, large depositional bars change size and shape with peak flow events, and the river meanders through these bars. Above the channel are alluvial terraces, including Oak Flat on the east bank.

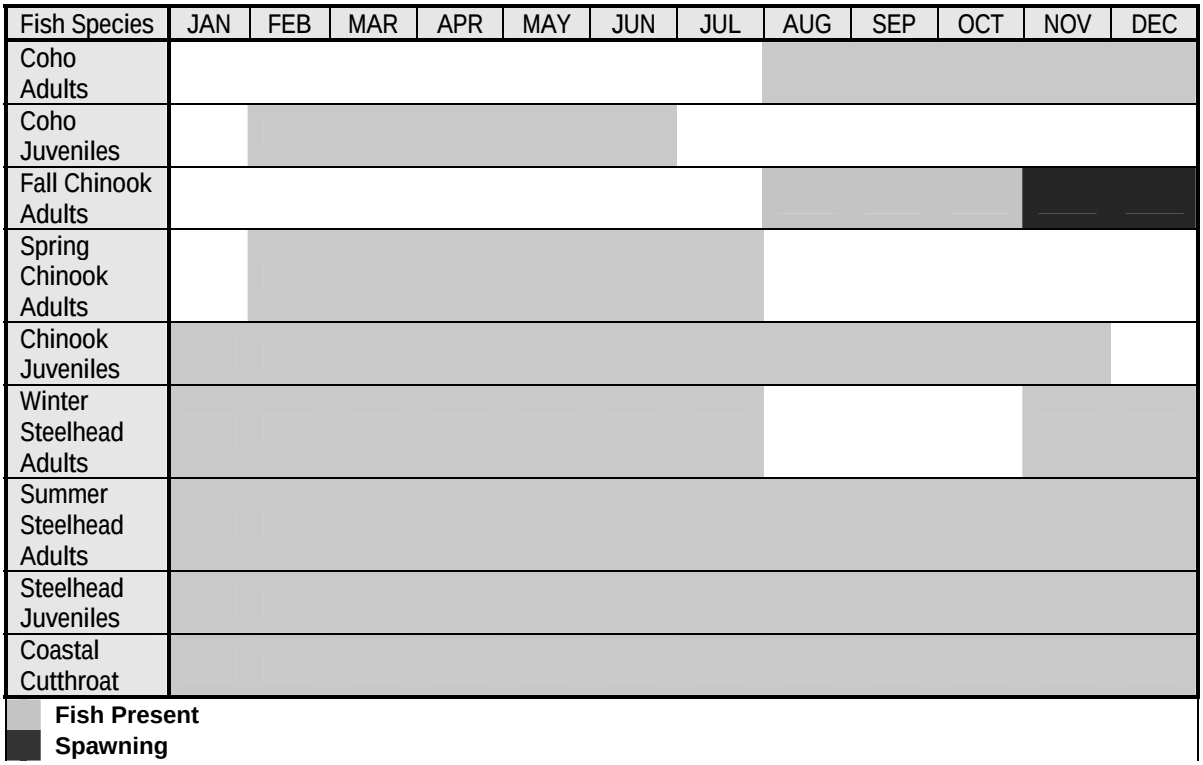
Both rivers have a low stream gradient and powerful winter stream flows. Active floodplain development is minimal and restricted to larger tributary confluences. Large wood is absent from the mainstem channel except in the lower five miles of the Rogue, where islands disperse the river force and wood accumulates at river bends.

Fish habitat consists of many elements. Boulders and bedrock outcrops provide structural habitat diversity. Deep pools and turbidity provide instream cover. The mainstem Rogue and Illinois Rivers in the project area are primarily used for fish migration. The Rogue estuary (downstream of RM 5) is important rearing and smolting habitat for salmon and trout.

During peak flows in late autumn, winter, and spring, the channel of both rivers is submerged, with only the inactive terraces above water. Fish hold on the channel margins, in submerged tributary mouths, and in eddies behind boulders to escape the flow force. Spawning is restricted to the tributaries, where flow force is too low to wash away eggs incubating in gravel streambeds. During drought years, spawning may occur in the mainstem when access to tributaries is blocked by subsurface flow through alluvial deposits at tributary confluences.

By late summer the wetted channel is reduced to only a fraction of the total channel width in many places, revealing wide gravel bars and islands in the estuary. Exposed to the sun, water temperatures rise to the low 70s, and fish hold in cooler water at the bottom of deep pools and at tributary mouths.

Table 7: Occupancy and Spawning Times of Salmonids in the Lower Rogue and Lower Illinois Rivers



Source: ODFW unpublished data

Coho Salmon

Coho in the Rogue and Illinois Rivers are part of the southern Oregon/northern California Evolutionarily Significant Unit (ESU), listed as Threatened in 1997 under the federal Endangered Species Act (ESA). This ESU ranges from the Elk River in Oregon south to the Mattole River in California. The Rogue River is one of the major remaining coho producers (National Marine Fisheries Service 1997).

The estimated historical coho abundance ranged from 150,000 to 400,000 spawning fish. Today, most of the population is hatchery fish, and there are about 10,000 naturally produced adults. Within the Rogue River, coho predominantly spawn and rear in the upper Rogue and the Illinois Rivers. Most wild coho production in the Rogue occurs in the Illinois River tributaries. Below Agness, a few coho spawn in the South Fork Lobster Creek and in Silver Creek. When coho populations were higher, a larger number of strays probably used the marginal habitat in lower Rogue River tributaries.

Fall Chinook

Fall chinook are part of the southern Oregon and northern California Coastal ESU. This ESU ranges from Cape Blanco, Oregon, south to Klamath River, California. This ESU was proposed for listing as Threatened under the ESA, but in September 1999 was determined by NMFS (now National Oceanic and Atmospheric Administration (NOAA) Fisheries), to not warrant listing. Fall chinook in the upper Rogue River were identified by NMFS (March 9, 1998) as the only relatively healthy population in the entire ESU.

During the late 1980s, the combination of drought, stream habitat degradation, low ocean survival and high ocean exploitation rates resulted in a severe decline in chinook populations in all of the Oregon coastal basins south of Elk River. Chinook angling in several south coast basins, including the lower Rogue and Illinois Rivers, was closed during this time. Populations began to increase in 1991, helped by a sharp curtailment in ocean harvest and by the end of the drought in 1993 (ODFW 1997).

Winter Steelhead

Winter steelhead are part of the Klamath Mountains Province ESU. The ESU extends from the Elk River in Oregon south to, and including, the Klamath River in California. This ESU was proposed as Threatened under the ESA in 1996. However, in 1998 the ESU was determined to not warrant a listing due to recovery efforts in Oregon and California. Current ESU abundance is estimated to be 85,000, with an historic abundance of greater than 275,000 (National Marine Fisheries Service 1996). From 1970-1987, ODFW estimates average annual Rogue River winter steelhead populations averaged 44,000 adult spawners. The estimated average since 1990 is 55,000 adults, indicating a positive trend in the population (RVCOG 1997).

Summer Steelhead

The Rogue River has the largest Oregon summer steelhead run outside of the Columbia River system. The Hood, Siletz, and North Umpqua rivers are the only other Oregon coastal rivers producing summer steelhead. Summer steelhead that spawn in the Rogue River system, especially in the middle Rogue, are the weakest population of the Klamath Mountains Province steelhead ESU. Huntley Park census information shows a 25 percent population decrease since the mid-1980s.

Unlike winter steelhead, summer steelhead do not spawn or rear in the lower Rogue River or its tributaries. They spawn and rear in middle and upper Rogue tributaries, including the Applegate River. Summer and winter steelhead are raised at Cole Rivers Hatchery and released into the Rogue River.

Trout and Sturgeon

Resident and anadromous cutthroat trout occur in the lower Rogue and Illinois Rivers. Multiple cutthroat age-classes are consistently present in coastal Oregon streams and forces driving their complex life histories are poorly understood (ODFW 1997). Resident rainbow and cutthroat trout occupy the uppermost reaches of most tributaries and commingle with the anadromous forms throughout the basin.

Green sturgeon are part of the northern Distinct Population Segment (DPS), which spans the coastal region north of the Eel River, California. In 2002, NOAA Fisheries determined that this DPS did not warrant listing, as the population did not have declining population trends, but there were potential population threats. Sturgeon were placed on the Candidates list for an additional status review in five years (Adams et al. 2002). The Rogue, Columbia and Klamath Rivers are the documented spawning sites for green sturgeon in this DPS.

Wildlife

The Wildlife Biological Evaluation is contained in FEIS Appendix G. Wildlife and wildlife habitat were identified as a significant issue in Chapter 1.

Information in this section comes from the Regional Ecosystem Assessment Project (USDA Forest Service 1993), the Southwestern Oregon Late-Successional Reserve Assessment (USDA Forest Service and USDI Bureau of Land Management 1995), and three watershed analyses (USDA Forest Service 1999, 2000a, 2000b). Other sources of information include wildlife observation databases, aerial photography, satellite imagery and field reconnaissance.

Although the distribution and abundance of animal species of concern are important for managing species, a large data gap exists for most of them. Systematic surveys for a few species have been conducted, primarily for past environmental analyses, and data on other species comes primarily from incidental sightings. With the relatively high amount of human use in the river corridor compared to other areas on the Rogue-Siskiyou National Forest, relatively more species location data exists for the river corridor than for areas outside of the river corridor.

Wildlife viewing is an important primary and secondary activity for people recreating on the Rogue and Illinois River. The opportunity to see otters, black bears, deer and elk, bald eagles, and other wildlife from the river attracts many people to jet boat tours and other river-related recreation.

Rogue River

The lower 10.8 miles of the Rogue River, which is outside the project area, includes the Rogue River estuary, Port of Gold Beach, motels, docks, boat ramps, private residences, businesses (including the two tour boat companies) and roads (including U.S. Highway 101). As you move upstream there are wide gravel bars with willow clumps, cottonwood, and other vegetation that can withstand winter high water flows. Above the high water line there are scattered large conifers. Private residences are fewer as you approach the forest boundary. Numerous gravel bars provide access to the river's edge. Annual channel maintenance occurs in this section.

At the mouth of Lobster Creek, you enter the project area. The section from Lobster Creek to Agness is dominated by large conifers and evergreen hardwoods above the high water line. Deciduous hardwoods, including alder, maple and willow, occur just below the high water mark. Gravel bars and rocky banks dominate the area immediately adjacent to the river. There are a few sandy beaches and high terraces that are occasionally used for camping. Lobster Creek and Quosatana campgrounds have public boat ramps, and so do a few private residences. Four gravel bars are accessible to vehicles. Annual channel maintenance occurs in this section.

The section from Agness to Watson Creek includes many residences, Illahe Campground, Foster Bar boat ramp, roads, and lodges. The river narrows, so rocky banks are more prevalent, and sandy beaches are fewer. Large conifers dominate the area above high water; however Oregon white oak and California black oak are also common. Annual channel maintenance occurs in this section.

Above Watson Creek, the Rogue Wild Section begins. This reach extends to the limit of permitted motorboat use at the pool below Blossom Bar Rapids. There are a few private residences. Large conifers and hardwoods are the dominant vegetation above the high water line. Oregon white oak and California black oak savannas are found at a few locations.

Illinois River

The Illinois from the mouth to Nancy Creek has wide gravel bars dominating the water's edge. Steep, rocky slopes extend from the gravel bars to the high water line. Oak savanna, meadow, pasture, and mixed conifer-hardwood forests dominate the uplands. Private residences and the Illinois River trailhead are located in this section.

Species of Concern

These include:

- Species listed as Proposed, Endangered, or Threatened (PETS) under the Endangered Species Act
- Sensitive species designated by the Forest Service Region 6 Regional Forester
- Management Indicator Species (MIS) identified in the Siskiyou LRMP (USDA Forest Service 1989a) representing other species requiring the same habitat
- Protection Buffer Species (USDA Forest Service and USDI Bureau of Land Management 1994).
- Neo-tropical Migrant Birds (NTMP) identified in Partners in Flight Bird Conservation Plan for Oregon and Washington (Oregon-Washington Partners in Flight 2000) to represent habitat seral stage distributions.

Proposed, Endangered, or Threatened Species

Bald Eagle (*Haliaeetus leucocephalus*)
Status: Federal – Threatened
References: Anthony and Isaacs (1989), Anthony, et al. (1982), Dillingham (1997), Garrett et al. (1993), Johnsgard (1990), Stahlmaster (1987), USDI Fish and Wildlife Service (1986, 1999b).

Bald eagles were listed as Endangered in Oregon and elsewhere by the U.S. Fish and Wildlife Service (USFWS) in 1967, down listed to Threatened status in 1995, and proposed for delisting in 1999.

Oregon and Washington are key locations for wintering bald eagles and support approximately 25 percent of wintering bald eagles in the contiguous United States. Wintering sites are typically near concentrated food sources, such as anadromous fish runs, high waterfowl concentrations, or mammalian carrion. Winter roost sites offer protection from inclement weather and are characterized by more favorable microclimate.

Most bald eagles nest within 0.6 to 1.2 miles of aquatic foraging areas, typically a lake, reservoir, large river, or coastal estuary. Bald eagles require an abundant food supply of mostly fish, waterfowl, small mammals, and carrion, but the specific diet may vary by season and location.

Suitable bald eagle winter roosting, foraging, and nesting habitat exists in the project area and eagles are sighted regularly. The project area has year-round use by bald eagles and there are two known nest locations adjacent to the project area. Bald eagle breeding season can start as early as January 1 and may extend until August 31 each year. Reproduction at these two sites is comparable to bald eagle reproduction elsewhere in the State of Oregon (Isaacs and Anthony 2004).

The current Programmatic Biological Assessment (USDA Forest Service and USDI Bureau of Land Management 2003) states that "bald eagles are fairly tolerant of human activity, but high noise levels or disturbance can dissuade them from important breeding areas or winter roost sites, particularly during early nesting season. Individual pairs have widely variable responses to disturbance. Some eagles choose to next in areas of high recreational use or urban development and consistently and successfully reproduce, while other pairs are more sensitive to disturbance and would be adversely impacted by the same type of activity."

Bald eagles on the Rogue River are occasionally (<5-10% of the time) flushed by motorboats or rafts (pers. comm. Tom Hawkins 2005). Most of the time they are very tolerant of human activities. Dillingham (1997) reported that bald eagles in the Rogue River corridor showed desensitization to motorboat noise.

Marbled Murrelet (*Brachyramphus marmoratus*)
Status: Federal – Threatened
References: Csuti et al. (1997), Dillingham (1997), Dillingham et al. (1995), Hamer and Nelson (1995a, 1995b, 1998), Long and Ralph (1997, 1998), Marshall (1998), Paton and Ralph (1990), USDA Forest Service and USDI Bureau of Land Management (1994), USDI Fish and Wildlife Service (1992, 1997).

Due to nesting habitat loss and poor reproductive success, USFWS listed the marbled murrelet as threatened in 1992.

The marbled murrelet is a small seabird found in the area from Alaska to California. It spends most of its life at sea, but nests almost exclusively in mature or old-growth conifer trees with large moss-covered branches. Other nesting area characteristics include multi-layered canopies, low elevation, and close proximity to water. The breeding season (egg laying, incubation, and fledging) for marbled murrelets in Oregon begins in late April and extends to the end of September.

In the Pacific Northwest, murrelets have been found up to 53 miles inland. No murrelets were detected more than 32 miles from the ocean on the Siskiyou National Forest, although surveys had been conducted up to 47 miles inland. South of the Rogue-Coquille River divide, the farthest inland murrelets have been detected is 17 miles. Sixteen murrelet detections have occurred in the project area below Agness. There are no detections above Agness. Suitable nesting habitat occurs in the project area above Lobster Creek.

Many bird species, including murrelets, can habituate to relatively high disturbance levels. In their summary of all information concerning murrelet disturbance, Long and Ralph (1998) reported that "[Marbled] murrelets appeared generally undisturbed by passing vehicles, or sharp or prolonged loud noise" and "overall, it appears that marbled murrelets are not easily disrupted from nesting attempts by human disturbance except when confronted at or very near the nest itself."

Northern Spotted Owl (*Strix occidentalis caurina*)
Status: Federal –Threatened
References: Dillingham (1997), Forsman et al. (1982), Thomas, et al. (1990), USDI Fish and Wildlife Service (1990), USDI Fish and Wildlife Service (2003).

The northern spotted owl was listed as Threatened by USFWS in June 1990. The project area contains breeding and foraging habitat for northern spotted owls. Northern spotted owls use old-growth forests almost exclusively and rarely use clear cuts or young forest plantations. If young stands are used, they typically contain remnant large trees. Where timber harvest has occurred, spotted owls are usually found in remaining old-growth and mature forest patches.

Habitat features associated with spotted owl use include multi-layered canopies, relatively high canopy closure, large diameter trees, and many snags and logs. These stand features are related to requirements for feeding, nesting, and roosting. Spotted owls most commonly nest in tree cavities or on platforms created by debris or mistletoe infections between March 1st and June 30th.

Suitable owl habitat occurs in the project area and is considered occupied unless surveys indicate otherwise. Eleven spotted owl territories overlap into the project area. Of these, the closest known activity center to the project area is 700 feet. Dillingham (1997) reported that northern spotted owls in the Rogue River corridor show desensitization to motorboat noise.

Brown Pelican (*Pelecanus occidentalis*)
Status: Federal – Endangered
References: Marshal et al. (2003), USDI Fish and Wildlife Service (2005)

The brown pelican was first listed in 1970. It is currently designated as Endangered in its entire range except the Atlantic Coast, Florida, and Alabama. The subspecies in Oregon is the California brown pelican (*P. o. californium*), a marine coastal species that rarely occurs inland or far offshore.

Non-breeding adult and subadult birds usually begin to arrive in Oregon during April. Postbreeding adults arrive in May and June; juveniles during July and August. Peak numbers occur in August-September. The return migration southward usually begins in November.

Brown pelicans feed near shore in the ocean as well as the mouth of the Rogue River. They feed mainly on fish, especially northern anchovy, and they roost on sandy shores and off-shore rocks.

Steller (Northern) Sea Lion (*Eumetopias jubatus*)
Status: Federal – Threatened
References: Verts and Carraway (1998), USDI Fish and Wildlife Service (2005)

The Steller sea lion was listed in 1990 as Threatened in California, Oregon, Washington, and Alaska. The species occurs along the west coast of North America from the Aleutian Islands south to the Channel Islands off southern California. They eat lamprey, salmonids, other fish and invertebrates.

Pyramid Rock, on the Rogue River Reef, is one of the primary rookeries used by Steller sea lions. Steller sea lion presence in the Rogue River estuary (below RM 5) is highest in June and July.

Forest Service Region 6 Sensitive Species

American Peregrine Falcon (*Falco peregrinus anatum*)
Status: USDA Forest Service – Sensitive
References: Johnsgard (1990), USDI Fish and Wildlife Service (1999a)

The American peregrine falcon was identified as an endangered species in the 1970s and then delisted in 1999. Peregrine falcons are typically associated with cliffs, which serve as nesting and perching sites. Nest site criteria include ledges, potholes, and small caves that are near water, inaccessible to mammalian predators, and offer protection from rain and snow, and heat and cold. Peregrine falcons feed almost exclusively on birds.

Peregrines forage within the project area. Two nest sites occur adjacent to the project area, with the closest nest site 3,000 feet from the Rogue River. Peregrine breeding season is January 1st through July 31st.

California Wolverine (*Gulo gulo)*

Status: USDA Forest Service – Sensitive
References: Csuti et al. (1997), Hornocker and Hash (1981), Maser (1998), Ruggiero et al. (1994), Yocum (1973).

Wolverines are rare in Oregon and typically found in the Cascade Mountains. They are solitary animals with large home ranges, sometimes several hundred square miles. Yocum concluded from sighting records that the wolverine was becoming established in the western Siskiyou Mountains of Del Norte County, California. Wolverines typically avoid areas used regularly by humans.

Wolverines are commonly associated with open forests at high elevation and in alpine areas, though it may be that the high elevation areas simply have the lowest level of human activity. Wolverines are opportunistic omnivores in summer and scavengers in winter; they prey on a variety of smaller animals, but large mammal carrion is an import food source all year.

There are no recorded sightings of wolverine for the Gold Beach Ranger District. Numerous roads exist within the project area and human disturbance is common. The adjacent wilderness provides suitable habitat. The high level of human activity in much of the project area indicates poor habitat quality and a low likelihood of wolverine activity.

Pacific Fisher (*Martes pennanti*)
Status: USDA Forest Service – Sensitive
References: Csuti et al. (1997), Maser (1998), Maser et al. (1981), Ruggiero et al. (1994).

Pacific fishers are rare in Oregon and typically only found in the southwest and northeast quarters of the state. The preferred habitat is coniferous forests, although deciduous forests may be used in portions of the range. Fishers may use clear cuts, but more commonly they avoid areas with no overhead cover. Natal and maternal dens are typically large cavities in living or dead trees. During winter, temporary dens may be found in snow, brush piles, and under logs or roots. Resting areas are predominantly in closed canopy stands in large trees, snags, or logs. Suitable habitat for fishers exists in the project area, but no fishers have been observed.

Pacific Fringe-tailed Bat (*Myotis thysanodes*)
Status: USDA Forest Service – Sensitive
References: Csuti et al. (1997), Maser (1998), Maser et al. (1981)

The Pacific fringe-tailed bat is rare in Oregon, but is most commonly found in southwestern Oregon. Little is known about its habitat, but it is known to use caves, mines, rock crevices, and buildings for day and night roosts. Preferred habitat seems to be forested and riparian areas. The fringe-tailed bat is sensitive to human disturbance. There are no recorded Pacific fringe-tailed bat sightings in the WILDOBS database within the project area, however there are bridges, rock outcrops, snags, and or buildings present and suitable for roosting.

Pacific Pallid Bat (*Antrozous pallidus pacificus*)
Status: USDA Forest Service – Sensitive
References: Csuti, et al. (1997), Maser (1998).

In Oregon, the pallid bat is found east of the Cascade Mountains and in the Siskiyou Mountain region of southwest Oregon. The pallid bat is most often found in arid regions where desert vegetation predominates, but can also be found in open ponderosa pine and oak forests. Daytime roosts include caves, undersides of bridges, and cracks in rocks, hollow trees, buildings, and mines. Nighttime roosts include open shelters easily accessible by flight such as open buildings, porches, undersides of bridges, and mines.

The Pacific pallid bat is intolerant of disturbance and readily abandons roosts. This species was not detected during project area bat monitoring in 2002 and 2003.

Pacific Shrew (*Sorex pacificus pacificus*)
Status: USDA Forest Service - Sensitive

Pacific shrews are typically found in wet areas along small forest streams that have interspersed down wood and marshy patches, or around down wood in moist forests away from streams and wetlands (Maser 1998). Pacific shrews are not typically associated with conifer forests, but prefer alder/salmonberry riparian areas and skunk cabbage marshes (Csuti et al. 1997). Though no Pacific shrew sighting records were located for the project area, field reconnaissance indicates suitable habitat within project area riparian areas.

Del Norte Salamander (*Plethodon elongatus*)
Status: USDA Forest Service - Sensitive

Habitat for Del Norte salamanders includes coniferous and deciduous forests with rocks and logs (Cockran and Thomas 1996). This species is most closely associated with rocks or talus slopes within forests (Csuti et al. 1997) and may also be found in partially-decayed logs or under forest litter in coastal areas (Cockran and Thomas 1996). Del Norte salamanders are common, abundant, and widely distributed across the Gold Beach Ranger District, and there are 2 sightings in the project area.

Siskiyou Mountains Salamander (*Plethodon stormi*)
Status: USDA Forest Service - Sensitive

The Siskiyou Mountains salamander is primarily a California species and is only found in the Siskiyou Mountains of southern Oregon and northern California (Cockran and Thomas 1996). This species is associated with habitat similar to that of the Del Norte salamander. Gold Beach Ranger District is outside the known Siskiyou Mountains salamander distribution. No Siskiyou Mountains salamanders have been found during surveys on the Gold Beach Ranger District.

Black Salamander (*Aneides flavipunctatus*)
Status: USDA Forest Service - Sensitive

The black salamander is also a primarily California species and is only found in the Siskiyou Mountains of southern Oregon near the California border (Cockran and Thomas 1996). The project area is outside the known black salamander distribution. Potential habitat for the black salamander occurs in the project area, but no black salamanders have been found during surveys on the Gold Beach Ranger District.

S**outhern Torrent Salamander** (*Rhyacotriton variegates*)
Status: USDA Forest Service - Sensitive

Torrent salamanders are sensitive to desiccation and changes in water temperature, so they are rarely found far from cold water (Cockran and Thomas 1996). Typical torrent salamander habitat includes cold and clear springs, seeps, headwater streams, and waterfall splash zones (Cockran and Thomas 1996). Metamorphosed individuals and adults may be found in moist forests near flowing water foraging for food. Larvae and adults are commonly found in gravel or under cobbles in clear flowing or seeping water (Cockran and Thomas 1996). Eggs are laid singly, loosely, and unattached during the spring in rock crevices where cold water will flow around them. Southern torrent salamander habitat exists within the project area; southern torrent salamanders are commonly seen along streams in the Gold Beach Ranger District. Three records of southern torrent salamander activity adjacent to the project area were located.

Foothill Yellow-legged Frog (*Rana boylii*)
Status: USDA Forest Service - Sensitive

The foothill yellow-legged frog lives in or near streams with rocky or gravel substrates (Cockran and Thomas 1996). Streams with sandy or muddy bottoms are occasionally used, as well as moist, rocky outcrops (Nussbaum et al. 1983). Adults commonly live among sedge clumps at the edges of deep pools, cobbles on the bottom of pools, or in bedrock at the main stream channel edge (Cockran and Thomas, 1996). Eggs are deposited during late spring or early summer in clusters attached to rocks on the bottom or edges of streams and tadpoles live in pools for three to four months before metamorphosing into adults (Cockran and Thomas 1996). Foothill yellow-legged frog activity has been documented at two sites in the project area.

Common Kingsnake (*Lampropeltis getula*)
Status: USDA Forest Service - Sensitive

In Oregon, the common kingsnake is thought to be most closely associated with moist river valleys with thick riparian vegetation (Storm et al. 1995). The common kingsnake is widely distributed throughout the southern United States but is only known in Curry, Douglas, Jackson, and Josephine Counties in Oregon. There are two common kingsnake activity records within the project area.

Northwestern Pond Turtle (*Clemmys marmorata marmorata*)
Status: USDA Forest Service - Sensitive

The (north) western pond turtle (WPT) inhabits marshes, ponds, lakes, reservoirs, sloughs, and slow moving portions of creeks and rivers (Storm et al. 1995). Pond turtles seem to prefer areas that have refugia such as undercut banks, submerged vegetation, rocks, logs, or mud (Storm et al. 1995). Areas with basking sites for thermoregulation, such as rocks, logs, or emergent vegetation are also preferred. Partially submerged logs, vegetation mats, mud banks, rocks, and tree branches offer areas for sunning (Stebbins 1985).

The project area offers suitable year-round habitat for the species, and WPTs are common in the project area. Two habitats, both most prominent along the Rogue River north bank, seem to have the vast majority of turtle riverine activity.

Figure 7: One Type of Western Pond Turtle Habitat, the Willow-pedestal Sedge Shoreline

The first can be characterized as a willow (*Salix* sp.) - pedestal sedge (*Carex* sp.) shoreline where summer river flow is relatively constant, resulting in a close proximity of foraging, basking, and resting habitat, and security cover. Willow and sedge stem and root clumps provide structural complexity used by turtle prey (small aquatic invertebrates) and are used for security cover by turtles. The sedge has a unique growth form in which its roots are clumped ("stub footed") and often hanging over the shoreline. WPT are often seen at the base of these sedge clumps. Peninsular and island rocks are regularly used for basking. Water more than 3 feet deep offers escape cover whenever threatening conditions prevail.

The second dominant habitat condition (Figure 8) in the shallow shoreline water zone (0.5 to 2 feet deep) of slow moving, warmer water. The river bed within the geologic Riddle Formation is nearly vertical in places and differential erosion results in undulating backwater embayments. These embayments provide structural diversity which, in turn, provides turtle foraging, basking, resting, and probably rearing habitat.

Figure 8: Second Western Pond Turtle Habitat Type, Shallow Shoreline, Slow Moving Water

The embayments contain ridges upon which little to no vegetation grows. Between the ridges there are pools with a sand-silt floor where vegetation, such as curly-leaf pondweed, grows and where algae often accumulate in mid to late summer. The European pondweed (*Potamegeton crispus*) growth form is dense, wide-spreading, and flexible, resulting in effective hiding cover for turtles and possible heat sinks in which water is further warmed and retained. Pondweed roots in the riverbed and extends dense stems through the water column and often up to the surface. WPT have been observed taking refuge in pondweed patches to avoid being captured.

Holland (1994) found that juvenile WPT use the same habitat as adults, though it is likely juveniles will seek microhabitats which afford greater security cover, warmer water temperatures to facilitate growth, and greater food abundance.

Holland (1994) describes nest site attributes, which include compact soils and alluvium with higher amounts of clay or silt and a smaller proportion of sand. Nest sites generally occur on S, SW, or SE aspects and on slopes greater than 25 degrees. Nest site distance to water averages 161 feet above the average high-water line. Nest sites have not been located in the project area but are likely to be present.

WPT distribution within the project area is uneven. At least 95% of the WPT sightings have been in the Wild Rogue Section and upper half of the Recreational Rogue Section. The turtle distribution indicates habitat differences which are suspected to be positively correlated with the geologic Riddle Formation. Using the 2002-2003 average population estimate, adult/juvenile ratios are, under normal circumstances, quite variable (Holland 1994) and would generally consist of 55 to 70 percent adults. The project area shows an adult-biased population structure (98 percent adults). The reason for this is unknown. Predation and or disease associated with introduced species, such as bullfrog (*Rana catesbeiana*) and red-eared slider (*Pseudemys scripta*), might play a substantial role in juvenile mortality. WPT wintering sites are also found in the project area.

Management Indicator Species

Table 8 identifies Management Indicator Species and their habitat represented in the project area. Only those species not already introduced in this FEIS or in the Wildlife Biological Evaluation for this project are included here.

Table 8: Wildlife Management Indicator Species and Habitat Represented in the Project Area

Species	Habitat Represented
Osprey	Habitat corridors along large creeks and rivers
Pileated woodpecker, marten	Mature forest
Woodpeckers	Snags (standing dead trees)
Black-tailed deer, Roosevelt elk	Early successional forest stages

Ospreys (*Pandion haliaetus*) are commonly observed in the project area. Ospreys arrive during early spring (March), nest, and then leave for wintering grounds by October. Their primary diet includes fish and eels, which they hunt while in flight. Foraging and nesting occur in the project area; district records indicate 45 osprey nest sites within the project area. Ten nest sites are in the Rogue Wild Section while the remaining 35 nest sites are downstream of the Wild Section. Each year, 13 to 15 percent of the nest sites are active (at least one adult observed at the nest site).

The woodpecker group includes acorn, black-backed, downy, hairy, Lewis', and white-headed woodpeckers, as well as northern flickers and red-breasted sapsuckers. White-headed and black-backed woodpeckers are unlikely inhabitants of the analysis area.

Black-tailed deer and Roosevelt elk occur in the project area and deer are commonly sighted along the Rogue and Illinois Rivers.

Protection Buffer Species

The Record of Decision "To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning documents within the Range of the Northern Spotted Owl" (USDA Forest Service and USDI Bureau of Land Management 2004) (Survey and Manage ROD) removed many species from the Survey and Manage requirements. Standard and Guidelines for certain cavity nesting birds, Canada Lynx, and some bat roosts remained. Species potentially in the project area include white-headed and black-backed woodpeckers, flammulated owl which require large (>20 inches), and bats that use caves, mines, and abandoned wooden bridges and buildings. White-headed and black-backed woodpeckers and flammulated owl are unlikely inhabitants of the project area as white headed woodpeckers are high elevation species and flammulated owls are a pine forest associated species. Townsend's big-eared bat has been observed at one location in the project area.

Neo-Tropical Migrant Birds

Priority bird species for varying habitats in the project area are summarized in Table 9 (Oregon-Washington Partners in Flight 2000). Bird conservation objectives are tied to focal species that represent habitat attributes and/or ecological functions of various forest age classes. For example, Vaux's Swifts use large snags in old-growth systems, olive-sided flycatchers use residual canopy trees in early seral stages, and hermit warblers use the closed canopy in young to mature-aged forests. These habitats and their attributes, in certain quantities and combinations, should be maintained on landscapes in a shifting mosaic of conditions. Portions of the project area provide for nesting, dispersal, foraging, and cover for variety of bird species.

Table 9: Partners in Flight Focal Bird Species by Habitat within Project Area

Habitat	Condition	Attribute	Bird species
Coniferous forest	Old-growth / Mature	Large snags	Vaux's swift, pileated woodpecker
Coniferous forest	Old-growth / Mature	Large trees; conifer cones; mid-story tree layers	Brown creeper; red crossbill; varied thrush
Coniferous forest	Mature / Young	Varied canopy closure; deciduous canopy & understory; complex forest floor	Hermit warbler; Hammond's flycatcher; Pacific-slope flycatcher; Wilson's warbler; winter wren
Coniferous forest	Young / Pole	Deciduous canopy	Black-throated gray warbler
Coniferous forest	Pole	Deciduous subcanopy / understory	Hutton's vireo
Coniferous forest	Early-seral	Residual canopy trees, snags, deciduous vegetation; nectar-producing plants	Olive-sided flycatcher; western bluebird; orange-crowned warbler; rufous hummingbird
Coniferous forest	Unique	Mineral spring	Band-tailed pigeon
Oak woodlands (including non-forested prairie)			California quail, western screech-owl, Nutall's woodpecker, oak titmouse, wrentit, California thrasher, black-chinned sparrow.

Botanical Resources

The Botanical Resources Biological Evaluation is contained in FEIS Appendix G. The lower Rogue and lower Illinois River corridors are botanically diverse. Vegetative types found along each river corridor depend on the land type, soil, elevation and aspect of a given area. Plant habitats include steep slopes with exposed rock outcrops, arid rocky benches, springs and seeps, creeks, gravel bars, forested benches, and the river itself.

The rivers flow through mountains covered in mixed conifer and hardwood forests of Douglas-fir, tanoak, myrtle, golden chinquapin, canyon live oak, sugar pine, ponderosa pine, and incense cedar. The forests are generally dry mesic to xeric. South-facing slopes have species more tolerant of drier conditions, such as manzanita, Oregon white oak and madrone. Plants that live in rock crevices along the river include the brilliant red California fuschia, stonecrops, ferns, and Siskiyou daisy. Rocky seeps are home to drooping bulrush, monkey flowers, ferns, sedges, and other rushes. Waterfalls and creek confluences are habitat for monkey flower, stream orchid, and shrubs. Arid rock benches support wild onions, brodiaea, wild iris, and annual and perennial grasses. Shrubs on benches and slopes along the river include poison oak, honeysuckle, hazel, wild grape, currants, evergreen huckleberry, salal, and occasionally California smilax (Hickman 1993).

Disturbance-Related Habitats

Plants, plant parts, and seeds are frequently washed downstream with silt and sand during high water. Some plants that wash downstream and re-establish are natives, such as willows. Other plants that wash downstream and establish in freshly deposited silt or gravel bars are noxious weeds, such as purple loosestrife and meadow knapweed. Noxious weeds, such as yellow star thistle, French broom, Scotch broom, and Spanish broom, are able to thrive in areas with frequent disturbance and nutrient-rich soils that flooding can create. Native species, such as willows and alder, can also thrive in frequently disturbed habitats. Sensitive species, such as Leach's brodiaea, require openings created by fire, landslides, or scouring. Pillar sedge (*Carex nudata*) grows among rocks in the river (Figure 9). Pillar sedge appears to be relatively impervious to the dynamic Rogue River flows.

Figure 9: Pillar Sedge at Windy Creek (RM 58) in the Wild Section of the Rogue

Lightning- and human-caused fires are another disturbance component of lower Rogue and Illinois River ecology (USDA Forest Service 1999, 2000a). Fire, like other natural disturbances, creates habitat for disturbance-loving plant species by removing competition for light, water and nutrients. Early settlers in the area used fire as a tool to manage meadow lands for pasture and for clearing the surrounding forests. Early forest management curtailed the use of fire for many years, creating the patchwork vegetative patterns seen today (see Cultural Resource section).

Humans were part of each river's ecology long before the advent of northern European settlement (USDA Forest Service 1999, 2000a). Non-native plants, such as asparagus and sweet pea, most likely were planted by homesteaders. Other plants, such as teasel, orchard grass, and bull thistle, probably arrived with livestock. Occasionally, escaped houseplants like fiery orange Crocosmia wash downstream and lodge in the banks above the water.

Humans are a well-known vector for seed dispersal and it is likely that present day rafters, fishermen, and hikers transport seeds from one campsite to the next.

Plant Species of Concern

Current management direction mandates the conservation of several categories of rare plants on the Siskiyou National Forest. The Endangered Species Act mandates protection of federally listed Threatened and Endangered species. Sensitive species are protected by USDA Forest Service regulations and manual direction. No federally listed Threatened Endangered, or Proposed plants, nor suitable habitat, are known to occur in the project area.

The project area potential to support suitable habitat for sensitive plant species was determined by pre-field analysis of soils and topographic maps, knowledge of sensitive plant species range, distribution, and habitat characteristics; and review of the district's sensitive plant files. Field surveys subsequently verified the habitat suitability.

All known records of vascular and nonvascular rare and sensitive plants and noxious weeds occurring on the Gold Beach Ranger District were reviewed in regard to potential effects on any of these species by project activities.

The most recent plant surveys along the Rogue River occurred in July 2003. The focus was aquatic and riparian noxious weed species. The sensitive plant species *Scirpus pendulus* was found near Lookout Rock above Blossom Bar, and at Brushy Bar. No *Usnea longissima* was found in the immediate riparian corridor. Noxious weed species found in the riparian corridor include: *Centaurea pratensis, Centaurea solsitialis, Cirsium arvense, Cirsium vulgare, Cytisus scoparius, Gensita monspessulana, Brachypodium sylvaticum*, and *Lythrum salicaria*.

The following sensitive plants are considered as having potential habitat and/or presence within the project area active areas because there are known populations near by, or because there is appropriate habitat:

Sensitive Species

Information on vascular species is from Mullens (2000).

Erigeron cervinus: Siskiyou daisy grows in rocky places or crevices on solid rock, especially along stream banks at low elevations near seeps or vernally wet spots. The sites are above the level of the wake created by jet boats.

Scirpus pendulus: Drooping bulrush grows in marshes wet meadows, river terraces and ditches. There are three known sites on the Gold Beach Ranger District, two of which are on rocky terraces within the Rogue River flood zone between Blossom Bar and Brushy Bar. The sites are above the level of the wake created by jet boats.

Leucogaster citrinus: This false truffle is found in association with the roots of white fir, lodgepole pine, alpine fir, white pine, Douglas-fir, and western hemlock and is endemic to the Pacific northwest. The sites are above the level of the wake created by jet boats.

Scirpus subterminalis: Water clubrush grows in quiet relatively shallow water, typically in lakes, ponds and marshes. There are no known sites of water clubrush on the Rogue or Illinois Rivers.

Trillium angustipetalum: Siskiyou trillium is found in coniferous forest, woodland, and chaparral at low to moderately high elevations. There are occurrences of Siskiyou trillium on benches above the Rogue River. The sites are well above the level of the wake created by jet boats.

Triteleia hendersonii var. ***leachiae***: Leach's brodiaea is found on wooded or open slopes, brush, forest and open meadows. It is found on slopes above the Rogue River. The sites are above the level of the wake created by jet boats.

Wolffia borealis: Dotted water-meal grows in fresh water in areas with less than 3000-foot elevation. There are no known sites of dotted water-meal on the Siskiyou National Forest.

Wolffia columbiana: Columbia water-meal is found free-floating in quiet water. There are no known sites of Columbia water-meal on the Siskiyou National Forest.

Usnea longissima*:* Tinsel or beard lichen is found on the branches of old growth Douglas-fir and on oaks in open areas associated with streams and rivers. There is one known site along the Rogue River and potential habitat in oak flats above the Rogue River. Pre-disturbance surveys are required. The species is considered rare in Curry and Josephine counties in Oregon and rare in California (McCune and Geiser 1997; USDA 2000a). The site is above the level of the wake created by jet boats.

Dermatocarpon luridum: Streamside stippleback is an aquatic lichen found on rocks in seepy terraces, slopes and riparian edges with alder, Douglas-fir, western hemlock, and maple. Streamside stippleback has not been found along the Rogue River. It is well adapted to the effects of moving water and would not be affected by any of the proposed activities.

Other Species of Concern

Adiantum jordanii and *Smilax californica* are plants that do not meet all of the criteria to be included on the Forest Service Sensitive Plant List, but are listed with the Oregon Natural Heritage Information Center (ONHIP) as species of concern. *Carex nudata* is of concern because it was brought up during public scoping as a species potentially affected by jet boat wakes.

Adiantum jordanii: California maidenhair is found on shaded hillsides with moist woods. It is found near the Illinois and Rogue Rivers, but is considered rare throughout its range by the ONHIP (2004). The sites are above the level of the wake created by jet boats.

Carex nudata: Pillar sedge is found in and along the Rogue River banks. It grows in large clumps with a pillar like base of roots that is normally exposed and is found throughout Oregon and in northern California. This plant grows within the area potentially affected by jet boat wakes.

Smilax californica: California smilax is found along stream banks in coniferous forest. There are a number of occurrences on forested terraces along the Rogue River. It is uncommon on the Gold Beach Ranger District outside the Rogue River corridor and is considered as a long-term concern by the ONHIP. The sites are above the level of the wake created by jet boats.

Noxious Weeds

Noxious weeds are defined as those plant species designated noxious weeds by the Secretary of Agriculture or the responsible State official. Noxious weed generally possess one or more of the following characteristics: aggressive and difficult to manage, poisonous, toxic, parasitic, a carrier or host of a serious insect or disease, or being native or new to or not common to the United States or parts thereof. Noxious weed species found during the July 2003 plant survey along the Rogue River include:

Centaurea pratensis: Meadow knapweed is found within the high water mark along the Rogue. It spreads though roots, and can establish in new locations when plant parts are washed downstream.

Centaurea solstitialis: Yellow star thistle grows on benches above and below the high water mark. Their preferred habitats along the Rogue and Illinois Rivers are gravel bars, and sparsely vegetated rocky benches and slopes.

Cirsium ravens: Canada thistle is found throughout southwest Oregon and is common west of the Oregon Coast range. It spreads through airborne seeds.

Cirsium vulgare: Bull thistle is found throughout southwest Oregon and is common west of the Oregon Coast range. It spreads through airborne seeds.

Cytisus scoparius: Scotch broom grows on benches generally above the high water mark. It spreads through tiny persistent seeds produced in great abundance.

Genista monspessulana: French broom grows on benches generally above the high water mark. It spreads through tiny persistent seeds produced in great abundance.

Lythrum salicaria: Purple loosestrife is found on the banks and river bars on the Rogue River in calm flat stretches of water. Its roots are wet-to-submerged year-round. Purple loosestrife can reproduce and spread from seeds, roots, and broken bits of stem.

Port-Orford-Cedar

The BLM and Forest Service recently published the *Final Supplemental Environmental Impact Statement* (FSEIS) *for Management of Port-Orford-Cedar in Southwestern Oregon* (USDA Forest Service-USDI Bureau of Land Management 2004a), which includes the Coos Bay, Medford and Roseburg BLM Districts and the Siskiyou National Forest. A Record of Decision for lands administered by the Forest Service (USDA Forest Service 2004) was signed in March 2004. These two documents have Standards and Guidelines for managing POC and reducing the spread of *Phytophthora lateralis*, including:

- Reduce the spread and severity of root disease in high-risk areas to retain its ecological function to the extent practicable; and
- Reduce the likelihood of root disease becoming established in disease-free 7th-field watersheds.

Port-Orford-cedar (POC) is a conifer tree found in southwestern Oregon and northwestern California. This tree can be infected by an introduced pathogen, *Phytophthora lateralis* (PL), which causes POC root disease. The root disease is nearly always fatal to the Port-Orford-cedar trees it infects, reducing POC in the ecosystem and impacting other organisms dependent upon it. Research shows the root disease rate of spread is linked, at least in part, to transport of spore-infected soil by human and other vectors. Water-borne spores readily spread the pathogen down slope and downstream.

Gold Beach Ranger District database records indicated POC occurs intermittently along the entire length of the Rogue River in the project area. POC is found along the Illinois River in the project area adjacent to Nancy Creek. POC in Nancy Creek is dead due to fire damage in 2002 and pre-existing root disease. There are other tributaries infested with PL flowing into the Rogue and Illinois Rivers and both rivers are considered infested.

The project area includes the following uninfested 7th field watersheds: 22M01F, 22M09W, 23L03W, and 23L06W (USDA Forest Service and USDI Bureau of Land Management 2004a, Appendix 1). An uninfested 7th field watershed is defined as having at least 100 acres of POC stands, at least 50% federal ownership, and free of PL except within the lowermost 2 acres of the drainage.

Fire

During the summer and early fall months, fire weather, fuel conditions, and the potential for a human-caused fire are the highest concern for fire managers. High daily temperatures and strong winds can promote rapid-fire growth in the river canyons. Temperatures are generally higher in the upper canyon (Foster Bar/Agness to Blossom Bar) than in the reach below, while winds are generally stronger in the lower canyon area (Lobster Creek to Foster Bar/Agness). During the critical fire season, fuels are generally volatile and vegetation would burn readily if a fire started.

The greatest potential for fire starts comes from the human presence along the river. The Rogue Wild Section has the greatest risk because of the large number of floaters and hikers that regularly camp in this area. By comparison, the Lobster Creek to Foster Bar/Agness river reach has much less camping. While not as great a threat, private cabins and lodges within the Wild Section are also potential sources for fire.

The ability to rapidly access the most probable ignition points, which are within a quarter-mile of the river corridor, is limited in the Lobster Creek to Foster Bar/Agness Rogue River reach, and practically non-existent in the Foster Bar/Agness to Blossom Bar reach. With the exception of Rogue River that has parallel access roads within 0.75 mile or less, the river canyon terrain makes a rapid response by ground-based firefighting resources impractical.

The lower Illinois corridor is primarily private land; National Forest System lands begin at Oak Flat meadow and campground. Oak Flat campground is the primary source of possible fire starts, since there are a large number of campers each summer. A road that accesses the meadow and campground can be used for fire prevention and suppression needs if necessary.

Air Quality

Congress passed the first Federal Clean Air Act (Public Law 95-95, as amended) in 1955 to regulate air quality across the nation and protect public health and welfare from air pollution. The Act gave the Environmental Protection Agency (EPA) the task of setting limits, or National Ambient Air Quality Standards (NAAQS), on how much of various pollutants can be in the air where the public has access.

The EPA also develops policy and technical guidance on Clean Air Act implementation. Each state is required to develop State Implementation Plans (SIP) that describe and define how the state will meet the Clean Air Act. These plans must meet or exceed the Federal EPA standards. The Oregon Clean Air Act SIP was developed in compliance with the Federal Clean Air Act and is on file with the Oregon Department of Environmental Quality (DEQ) and the EPA.

Air quality can be affected by meteorology and emission sources. Weather processes usually cleanse the air of most pollution. Atmospheric stability determines the vertical mixing that can occur. Stable air prevents mixing and traps pollutants at the ground. Unstable air facilitates mixing and dispersal of pollutants. Due to their proximity to the coast, both river canyons are regularly subject to strong afternoon winds that channel cool marine air upstream. These canyon winds help circulate air within the area and disperse any concentrations of air pollutants.

Pollution sources that can impact the lower Rogue and lower Illinois River corridors are classified into two categories: area sources and mobile sources. Area sources are relatively small individual sources of pollution, usually spread over a broad geographic area that collectively contributes emissions. Area sources include: wood stoves, slash and field burning, forest fires, backyard burning, and dust emissions from roads and agricultural tilling. Mobile sources include: motor vehicles, motorboats, off-highway vehicles, and aircraft. Pollutants of concern from motorboats are hydrocarbons (HC) and oxides of nitrogen (NOx). HC and NOx produce ground-level ozone, which can irritate the respiratory system, causing chest and lung inflammation. Ozone can also aggravate respiratory conditions such as asthma. In the past, river user groups apparently have not perceived motorboatboat emissions as a problem and concerns over air quality have not been voiced. No air quality monitoring related to motorboat emissions has been done for the reaches of the Rogue or Illinois Rivers considered in this study.

The EPA established new emission standards for spark-ignition gasoline marine engines in 1996 (Federal Register, Vol. 61, No. 194, pp. 52087-52169). The rule covers outboard engines and gasoline marine engines in personal watercraft and jet boats. Emission standards were not set for stern drive and inboard engines due to the inherently clean nature of this engine technology. The new generation of outboard and personal watercraft marine engines is over 75 percent cleaner than current marine engine technology. In addition these engines have less smoke, fumes and noise.

Cultural Resources

For millions of years, the Rogue and Illinois Rivers evolved without the influence of humans. Over the last several thousand years, Native Americans and early settlers discovered and utilized the rivers and the surrounding terrain, functioning as integral parts in the evolution of the watersheds as they appear today. The interactions between natural and human forces have shaped past human use of the area and have resulted in the configuration of plants, animals, river terraces and even the course of each river today. Heritage Resource sites tend to be situated on a series of riverine benches and raised terraces along each river.

The human use history within the river corridors can be reconstructed and interpreted by examining the physical remains and historic records of previous inhabitants, and through observable changes that are the result of human activities. Remains, examined in conjunction with information from the natural environment and historical records, can reveal patterns of human behavior and adaptation. Many surveys have been conducted within the Wild and Scenic River corridors to identify Heritage Resources which may be impacted from various projects and activities. Survey and reconnaissance will continue along the rivers and it is inevitable that new sites will be discovered over time.

The Rogue and Illinois Rivers contain prehistoric and historic sites representing every cultural milestone in local history. Some of the earliest sites on the Oregon coast can be found in the river vicinities along with sites representing later Indian cultures to the time of Euro-American contact. Battle sites and military camps are the remnants of the mid-1850s Rogue River Indian Wars. Mining and prospecting remains are quite evident along the river as are the remains of early settlement activities. Lodges, vacation cabins and recreation facilities are representative of later river recreational uses. Some sites within the Rogue Wild and Scenic River corridor are of great significance and are listed on the National Register of Historic Places and many more are potentially eligible to be listed.

Prehistory

Paleo-Indian Cultures

The archeological record attests to a continuous human occupation of southwest Oregon for the last eight to nine thousand years. The Marial site (35CU84, Griffin 1983) on the Rogue River provides carbon-14 dates beginning at 8,560 years before present (BP), clearly establishing the antiquity of human life in this portion of southwest Oregon. Excavations near the Illinois River mouth at the Tlegetlinten site (35CU59) unearthed materials from another ancient culture, possibly dating from two major periods of use at 6,000 and 2,000 years BP. Human adaptations in southwest Oregon appear to have changed from a moderately mobile, hunting-gathering lifestyle to more sedentary, specialized economies. These changes are likely to have been influenced by the effects of population displacement and growth as a result of changing climates and environments in southwestern Oregon and other areas.

Northwest Coast Culture

Athabaskan-speaking people occupied the Rogue and Illinois watersheds at Euro-American contact, although they are considered relative latecomers to the region. The Athabascans may have brought with them a way of life more strongly oriented to riverine resources, displacing groups who followed a subsistence lifestyle characterized by greater reliance on big game hunting in the uplands.

The Athabascans are linked to changes in settlement pattern and technology, which appear in the archeological record about 1,500 years ago along the coast and into the interior of southwest Oregon. These groups spoke various Athabaskan dialects and are collectively referred to as the Tututni or Coast Rogues, although each band had its own name.

The Tututnis inhabited much of southwestern Oregon from the beaches to the upland forests and extending up the coastal rivers. They occupied an area from south of Bandon, Oregon to northern California and extending up major drainages like the Smith, Chetco, Pistol, and Rogue Rivers. The bands were many and their locations diverse. On the Rogue River, a number of bands lived along the river from its mouth to a point just below Grave Creek where they met their neighbors, the Lowland Takelma. The general pattern of Tututni settlement indicates that large winter villages of 50 to 150 people were established along coastal areas, rivers and major streams. On the Rogue River, these villages were on terraces and meadows, often at the confluence of streams. These villages served as semi-permanent habitation spots, where foods collected throughout the year could be stored for use in the winter.

History

The historical period in this portion of southwestern Oregon begins as early as the 16th and 17th centuries, with the voyages of the Spanish explorers. The log of Captain George Vancouver notes the earliest recorded contact between the coastal natives and Europeans in 1792. Within the next quarter century, trappers and traders from around the world appeared in southwestern Oregon.

The Rogue River Wars

The discovery of gold near Jacksonville and the Donation Land Act of 1850 enticed thousands of transient miners and permanent settlers to southern Oregon. Mining activity reduced many fish runs. Livestock feasted on vital native foods, such as camas and acorns. Over-hunting threatened deer and elk populations. The Rogue River Indians, already the victims of infectious diseases, became refugees in their own homeland and were reduced to starvation. Within just a few years, the Rogue River Indians were fighting for their land and lifestyle in a series of conflicts called the Rogue River Wars.

The Rogue River and its surrounding valleys became the centerpiece for these conflicts. Although few pitched battles occurred during the war, many small violent encounters and acts of revenge kept the war fires burning. Eventually, Indians sought shelter and protection in the Rogue River canyon. Some of the largest battles were fought in the most remote Rogue River stretches: Hungry Hill, Skull Bar, Battle Bar and the final conflict at Big Bend. An overwhelming number of miners and settlers coupled with the devastation of war, disease and starvation finally forced the indigenous inhabitants to relinquish their homelands. The year 1856 marked the sunset of Native American dominance in the area. At the end of the Rogue River Wars the remaining aboriginal peoples were moved to the Grande Ronde or Siletz reservations.

Euro-American Settlement

The removal of native inhabitants opened the area to more settlement. Early settlers and miners moved into the area, often building their houses on the same river terraces that had provided homes for native inhabitants.

Gold served as the initial spark that ignited settlement. Some of the first permanent Euro-American settlers to the region were 1850s gold rush miners. Gold deposits were discovered on the coast at places like Whiskey Run and Gold Beach, and later along the Rogue and Illinois Rivers and their tributaries, where large mining districts were established.

In both rivers, all early mining technologies were employed, including placer mining, hydraulic mining, and lode mining (Kramer 1999). Mineral deposits were often re-worked after the initial strike played out, first by Chinese miners and later by Depression Era prospectors. Many documented heritage sites along the Rogue River are related to the prospecting and mining of precious metals.

Following or accompanying these prospectors were the early settlers. Settlement in the Rogue River canyon began in the mid-nineteenth century and continued into the 1950s (Beckham 1978). In the summer of 1868, a pack train of 20 men, women, and children slowly made their way to the Rogue and Illinois confluence, the site that would later become Agness. This group of emigrants hailed from the Klamath River gold country, seeking better opportunities on the Rogue River and its tributaries. Abraham and Jim Fry, along with their Karok Indian wives, established their homesteads on the lower Illinois River that year. Long a prime living space, Oak Flat still bore the signs of Indian camps and villages which had been inhabited only fifteen years earlier. The open, flat land continued to offer the same rich life source it had provided earlier residents.

The remoteness and difficult access to the river canyon precluded extensive development. Most people followed a subsistence-oriented lifestyle, making maximum use of fish and game supplemented with produce and animals raised on small farms. Goods and services were traded, borrowed and scavenged. Population densities remained low. Cash earning opportunities were limited with small-scale mining, raising and sale of livestock, packing, and the sale of fish. One alternative to this self-sufficient lifestyle was the development of large-scale hydraulic and hard rock mining operations. Although temporary, this industrial development was significant in the Rogue River canyon history. Mining sites such as Mule Creek, Galice Creek, Solitude Bar and Blossom Bar are lasting reminders of this period, which existed through the 1930s.

The Siskiyou National Forest was established on October 5, 1906. The early forester's duties included multiple jobs involved with administration of a large timberland and various trails, lookouts, forest guard stations, camps and telephone lines were constructed in the area during the first three decades of the Forest's history.

The 1930s Depression brought an influx of people to the river as many unemployed individuals sought survival in the mountains, once again undertaking a subsistence economy lifestyle. These people were also engaged in prospecting and small-scale mining encouraged by the re-valuation of gold. The Depression Era also marked the creation of Civilian Conservation Corps (CCC) work programs in the Rogue River corridor, including many improvement projects along the Rogue River Trail.

In the early twentieth century, recreational river use added a new economic emphasis to the area. Guiding and packing, river rafting and motorboat tours, and lodges and hotels have all been developed to offer services to visitors. Some riffles and rapids on the Rogue were blasted to open the river to boat traffic. Today, the Rogue River corridor is heavily used by recreationists, especially river floaters, fishing guides, motorized tour boats, and hikers.

Recreation

Recreation is designated as an Outstandingly Remarkable Value under the Wild and Scenic Rivers Act for both the Rogue and Illinois Rivers. Recreational user conflicts were identified as a significant issue in Chapter 1.

The Rogue River is internationally known for its fisheries. In the 1920s and 1930s, the Rogue became famous for sport fishing, due in part to pioneer river guides like Glenn Wooldridge and the writing of Zane Grey. The number of people fishing and recreating increased enough to support lodges, with lodges in the Wild Section becoming established in the 1950s and 1960s. Early recreational activities in the Illinois watershed were horseback riding and boating. Hunting and fishing were subsistence activities that gradually became more recreational over the years.

The lower Rogue River also provides some of the best opportunities for wildlife viewing on the Siskiyou National Forest. Bald eagles, otter, black bear, and deer and elk are often the highlight of commercial jet boat tours.

Trails along the Rogue and Illinois Rivers offered travel routes for Native Americans, then miners and settlers. A 1911 Siskiyou National Forest map shows the Rogue River Trail from Grave Creek to Big Bend on the north side of the river. A 1915 Forest map shows a trail on both sides of the Illinois River, and an additional trail going to Silver Prairie.

Rivers and trails were the primary access routes in the forest until the Civilian Conservation Corps (CCC) arrived in Agness in the 1930s. Trails were improved and roads were constructed connecting Agness to Illahe and Powers and to Oak Flat. In the 1960s, roads were constructed primarily for timber harvest, and the paved road between Gold Beach and Agness was completed. This brought increased road-related recreation activities to the area, such as driving, camping, and hunting.

Before the 1960s, drift boats were primarily used for floating the Rogue Wild Section. Since that time, inflatable raft use increased. Technological advances during the 1990s have allowed rafting to occur year-round, although the heaviest use on the Rogue River still occurs during the regulated season, from May 15 through October 15.

Commercial tour boats comprise another major component of recreational use on the Rogue River, taking visitors upriver to view and experience whitewater, scenery, wildlife, and other resources. The first commercial tour boat trip in the lower watershed began in 1938 with Rogue River Mailboats taking passengers and mail, from Gold Beach to Agness. This activity became more popular in the 1940s after an article about the trip was published in *Sunset* magazine (E. Kammer, pers. comm. September, 1999). In 1962, Shasta Costa rapids were dug and blasted, allowing motorboats to travel above Agness to Blossom Bar Rapids without portaging. The first 104-mile tour boat trip to Blossom Bar was made this same year. Although Blossom Bar Rapids were also blasted in the 1950s, larger boats are unable to negotiate this area and it remains the upper tour limit. The number of people who recreated via tour boats increased between the 1960s and the 1990s. The peak years for use were in the early 1990s when nearly 59,000 people traveled on the tour boats each year.

Rogue River Recreation

Whitewater Rafting

The current regulated season for floating the Rogue Wild Section is May 15 to October 15 for private boaters and May 15 to November 15 for commercial companies. One hundred and twenty person starts are available per day from May 15 to October 15. Maximum party size for private floating groups is 20 and the maximum party size for commercial floating groups is 30. Average annual use during the past five years (1998-2003) was 7,412 private floaters and 6,016 commercial clients. The ratio of private to commercial use remained consistent at 55 percent private to 45 percent commercial (See Figures 10-13).

Most people floating the Rogue Wild Section begin their raft trip at Grave Creek (RM 68) and end at Foster Bar (RM 34). Trips can range from two to five days, with a maximum of seven days allowed during the regulated season. Drift boats can continue on to Quosatana or Lobster Creek boat ramps downstream. There is not much rafting use below Agness due to heavy upriver winds.

Guided Fishing

Known internationally for decades as a "fish highway", the Rogue River attracts anglers with its five annual runs of fish: spring chinook (April-May), summer steelhead (August-September), fall chinook (September-November), coho (December-January), and winter steelhead (December-March). Most of this fishing occurs with motorized or drift boats, although a large number of anglers also fish from the riverbanks and gravel bars. Commercial and non-commercial anglers use the river heavily during the spring and fall fish runs, with less use occurring in winter and summer.

Commercial Tour Boats

There are two commercial tour boat companies that operate boats out of the Rogue River estuary in Gold Beach. They feature one day trips to Agness (64-mile round trip), Watson Creek (80-mile round trip), and to the pool below Blossom Bar Rapids (104-mile round trip). Boats traveling to Agness can carry up to 75 passengers. Boats traveling beyond Agness (Snout Creek) can carry 42 passengers. The number of passengers carried on any day also depends on water levels in the river.

Between 1999 and 2003, an annual average of 44,000 people rode commercial tour boats on the Rogue River. Approximately 12,500 of these passengers visited the Wild Section annually. During this period, there was an annual average of 471 trips to Agness, 482 trips to Watson Creek, and 447 trips to Blossom Bar (see graphs in FEIS Appendix C).

Lodges and Recreational Cabins

There are four commercial lodges in the Rogue Wild Section: Marial, Paradise, Half Moon Bar, and Clay Hill. While the lodges primarily cater to downriver floaters, each offers accommodations and meals to all visitors. Motorboats can access all lodges except Marial, which is above Blossom Bar Rapids and is the only lodge in the Forest Service portion of the Wild Section that has road access. Paradise and Half Moon Bar also have grass air strips on their property that are used occasionally. Illahe Lodge is just upriver from Foster Bar, in the Recreational Section, and also accommodates downriver floaters and motorboaters, or can be accessed by vehicle via the Illahe Road (County Road 375).

Historically, lodges and recreational cabins in the Wild Section have had unlimited motorboat ingress/egress to their private property for transport of supplies, staff, family, and friends. In 1999, Paradise Lodge entered into a special use permit agreement that allowed the transport of commercial guests to the lodge. The other lodges decided to continue with unlimited ingress/egress to their lodge with no provision for transporting commercial passengers. Between 1999 and 2003, Paradise made an average of 170 round trips per year. The commercial tour boats and Paradise Lodge boat help transport approximately 25-40 percent of all guests to lodges in the Wild Section.

Private landowners currently have unlimited ingress/egress to their properties for non-commercial purposes. They are not authorized to go upstream of their property. The boat trips to the cabins and lodges are dependent on reconstruction projects at the property, family schedules, personal situations, weather conditions, and water flow. Over the last five years, three of the four major properties in the Wild Section have been remodeled and this has increased the number of trips. Based on staff observations and personal communication with the landowners in early 2004, the number of private landowner motorboat trips could range from 400 to 800 trips per year, with an estimated average of 730 trips annually, inclusive of remodeling.

Other Motorboat Use

Administrative motorboat use is primarily by the U.S. Forest Service and the Curry County Marine Deputy. Other agency users include Oregon Department of Fish and Wildlife and Oregon State Police, whose use is primarily in the Recreation and Scenic Sections. The five-year average use in the Wild Section was 59 trips per year and 89 trips per year in the Recreational and Scenic Sections.

Private recreational motorboats and landowner boats operate in the Wild Section year-round. Between May 15 and November 15, private recreational motorboats are limited to six per day in the Wild Section, with little use in the off-season. During the past ten years, an average of 162 permits has been issued annually during the regulated season. The number of private motorboats and passengers that travel into the Wild Section during the regulated season has declined; in 1995 there were 174 trips and 775 people, while in 2003 there were 102 trips and 314 people.

Private motorboats traveling from Lobster Creek to Watson Creek are not regulated. The average number of passengers per boat is estimated to be one to six persons. Based on staff observations and comparing the number of fishing guide boats to private boats, private motorboat use in 2003 was estimated to be 1,230 boats (T. Hawkins and T. Heath, pers. comm. March 2004).

Boat ramps on National Forest System lands are located at Lobster Creek and Quosatana Campgrounds and at Foster Bar. There are additional boat ramps on private land at Agness and below Lobster Creek, which also offer access to the Rogue and Illinois rivers.

Docks

Over the years, docks have come and gone at the lodges in the Rogue Wild Section. A number of people were interviewed to determine the dock histories. From these conversations, it appears that there were buildings on all lodge properties prior to 1968, with primitive docks to unload freight and materials (B. Tankersley and A. Boice, pers. comm. November 2003). As building took place at the lodges between 1968 and the early 1970s, docks were still being used to unload building supplies (E. Rutledge, pers. comm. November 2003; Gold Beach Ranger District Conservation Easement files).

Long-time fishing guides remember a dock at Paradise Lodge since 1966, when Deak and Louise Miller were there, at Half Moon Bar Lodge since Bill Norfleet was there[1], and at Clay Hill in 1968. These docks were primitive in style, incorporating barrels and planks (I. Urie, M. Norrick, G. Briggs, and P. Brown, pers. comm. March 2004). Paradise Lodge had a larger dock than Half Moon Bar and Clay Hill, because it was used to unload passengers (L. Miller, pers. comm. November 2003).

From these interviews, it appears that Paradise Lodge had consistent use of a dock at their property through the years to the present. When the tour boats stopped at the Half Moon Bar, Clay Hill and Wild River Lodges for lunch, they brought docks so passengers could load and unload safely. Clay Hill Lodge had a dock in the 1970s from approximately 1973 to 1978 (C. Boice, pers. comm. November 2003) and again from 1985 to 1991 (L. Bowen, pers. comm. January 2004). Wild River Lodge had a dock for the tour boats in 1976 and it stayed at that location for a couple of years (Boice, Urie, and Kammer).

Some people recall that the docks at Half Moon Bar washed out twice when Bill Norfleet had the lodge (Norrick); a dock was not there in the early 1970s and boats landed on the gravel bar (C. Boice, B. Scherbarth, and J. Genre, pers. comm. November 2003). A dock was built in the 1980s when Mark Minnis was owner (W. Crouse, pers. comm. March 2004). This dock was washed out in the 1996 flood, after which a request was made to reinstall a dock that would safely unload passengers from the commercial tour boats. This request was approved in January 1998.

Today, the docks at Paradise and Half Moon Bar Lodges, and the proposed dock at Clay Hill Lodge, are 6 to 8 feet wide and 24 feet long. These docks are not permanent structures - they are moved out of the river prior to the winter months to keep them from being washed out in high flows. Their primary use is for boarding and discharge of passengers, equipment and supplies from lodge boats. There is a minor amount of overnight moorage of boats at these facilities.

Boating Regulations

To date, the Forest Service has chosen to manage the Rogue Wild Section so it is available to all recreationists within the permit limits that were established through OSMB, and the Forest Service regulations that were developed through a public process.

The motorboat use in the Rogue Wild Section was recognized and documented in the Rogue RMP. Congress further recognized motorboat use when the Wild Rogue Wilderness was established. The river corridor was exempted from Wilderness regulations because of the recognized motorboat uses and the homes and lodges in the Wild Section corridor.

Recreation Conflicts

Many studies have been conducted on the Rogue River over the years to assess social conflicts, user attitudes and displacement, and Agency management and policies. Through these studies and conversations with various users, the Forest Service is aware that non-motorized boaters complain about motorboat and vice-versa, and anglers also complain about motorboats.

Donheffner and Muckleston (1976) indicated that the greatest problem cited by motorboaters was encountering floaters. In meeting floaters, 41 percent of motorboaters mentioned some form of discourtesy. This may reflect attitudes reported in a study on drift use conducted in 1974, where 80 percent of downriver users oppose the use of motorboats on the Wild Rogue (Pfister and Frenkel 1974).

[1] Sale of the lodge to Norfleet was in 1966 and 1967, although the dock may have been built later.

These studies helped identify the need for regulation that was developed by the managing agencies. The regulations were initially proposed in 1976, and after receiving received and analyzing public comment, the regulations were adopted by OSMB for implementation in 1978 (Conklin 1982).

Alexander and Weber (1982) completed a study titled *Rogue River Report, Recreation Use,* which reviewed user counts and attitudes from Lobster Creek to Marial. Bank fishermen and rafters identified conflicts with commercial jet boats and motorboats. Users were satisfied with Rogue River management and they did not wish to have additional regulations. Landowners and local citizens were most opposed to additional regulations, while floaters were more supportive of prohibiting motorized watercraft and restricting the number of river users.

River Use Conflicts in Oregon: A Study of Jet Boat Use on Oregon's Rivers and Streams was published in January 1987. This was a general study across the state with public meetings held at many locations. It concluded that most jet boaters are aware of the impacts and controversy surrounding their jet boat use. For the most part, they operate in a safe and orderly manner. However, a few jet boat owners, through either ignorance or a lack of understanding, have created a bad image for jet boaters. Many conflicts, real or perceived, stem from overcrowding and conflicting fishing techniques, rather than the boat type or propulsion system. In the absence of motorized use, many of these problems would still exist. Another cause of conflict is the lack of understanding between user groups. The issue of educating all user groups was cited by 76 percent of the people at the workshop meetings as one of the major solutions for reducing conflicts. The recommendation for motorboat regulations varied for each river in the state. No further restrictions on the Rogue Wild Section were recommended, since regulations already existed.

Schindler and Shelby (1992) completed the *Rogue River User Study: Wild Rogue Planning and Policy Study*. Floaters identified the number of jet boats, danger from jet boats, and competition over campsites as major issues. Anglers were the strongest opponents of jet boat use.

The Forest Service conducted a survey of private rafters in 2001. This survey was based on Schindler and Shelby's (1992) study to identify visitor perceptions of conditions, preferences for recreation opportunities, and assessments of river management. Approximately 10 percent of the 2001 non-commercial rafters were surveyed. The vast majority of respondents (99 percent) rated their river experience as "good, very good, or excellent" and also indicated that their actual trip often matched their expectation. There were still occasional conflicts encountered by visitors, usually within their own user group, but these occurrences appear to have dropped slightly since recorded by Schindler and Shelby a decade earlier. Survey findings also revealed that there was still dissatisfaction with allowing motorboats on the Wild Section below Blossom Bar; however it seemed people were more willing to tolerate private homeowner/lodge boats over other motorboats.

Some floaters contend that accidents can occur when both boat types are in the same limited channel location during low flows. These occurrences raise safety concerns, although no accidents between floaters and motorboats under special use permit have been reported in more than 30 years of recreational boat use in the Wild Section.

Noise generated by motorboats is also a concern. Smaller boats consistently generate more noise than the larger tour boats, but smaller boats are audible for a shorter time than the tour boats.

The number of complaints or conflicts depends on river levels, boat numbers, boater experience level, and other factors. The less water in the river, the narrower the channel, effectively putting both boat types closer. The greatest number of float craft and motorboats on the river are in July and August when the weather is best and the most people are on vacation. If there are inexperienced boat operators that do not know the river or river etiquette, problems can arise. The number of complaints about tour boat operators by floaters is small compared to the number of trips. The Forest Service receives 0 to 4 complaints per year concerning motorboat operation. The complaints range from boat wakes or traveling too close to the floaters, to private motorboats going too fast or not yielding the right-of-way to floaters in the Wild Section. There was one physical altercation between a private motorboater and a floater a few years ago, but that is the only known occurrence. There are also complaints from motorboaters about floaters. The most common complaints are that floaters are blocking the channel or not being courteous to motorboaters. This, too, is a small number of complaints compared to the number of trips.

Illinois River Recreation

Private motorized and float use on the lower Illinois River, from the mouth to Nancy Creek, is not regulated. Motorboats can only travel as far as Nancy Creek (3.8 miles), just upstream from Oak Flat where private floaters take-out.

The Illinois River upstream of Nancy Creek is known for its exceptionally rugged and undeveloped character. Prior to 1970, the Illinois River from Briggs Creek to Nancy Creek received little recreation use due to poor accessibility. However, in the early 1970s, white water rafting became popular and rafting increased on the Illinois. Today, an average of 290 people float the Illinois Wild Section annually, but the number varies widely each year depending on river flows and weather; for example, there were 65 floaters in 1978, compared to 529 floaters in 1998. Most floaters are private, but there are two commercial companies with special use permits for whitewater rafting trips from Miami Bar to Oak Flat.

The float season is short and generally occurs from early March to mid-May, when the water flow ranges from 300 to 2,500 cfs. Water flow on the Illinois River can fluctuate greatly and once floaters put in at Miami Bar, there is no point where they can easily take-out until they reach Oak Flat, approximately 29 miles downstream. There are no private lodges or cabins along the Illinois River downstream of Briggs Creek, and suitable river camping sites are more limited compared to the Rogue River.

Campgrounds and Trails

Lobster Creek and Quosatana Campgrounds are approximately ten miles and fourteen miles, respectively, from Gold Beach on Forest Road 33 (Agness Road). Both campgrounds have boat ramps providing access to the Rogue River. Foster Bar campground, about 5 miles north of Agness, is the primary take-out for rafters that have floated through the Rogue Wild Section. There is a raft pad and a boat ramp used by both motorboats and rafters. Foster Bar is also a pick-up/drop-off point for commercial tour boat companies and Paradise Lodge clients.

In the lower Illinois, the Oak Flat gravel bar offers dispersed camping sites and a day use area for swimming. This site is also the take out point for Illinois River Wild Section floaters and a put in point for floating the Illinois from Oak Flat to the mouth. Most recreation use occurs in the summer, especially on weekends.

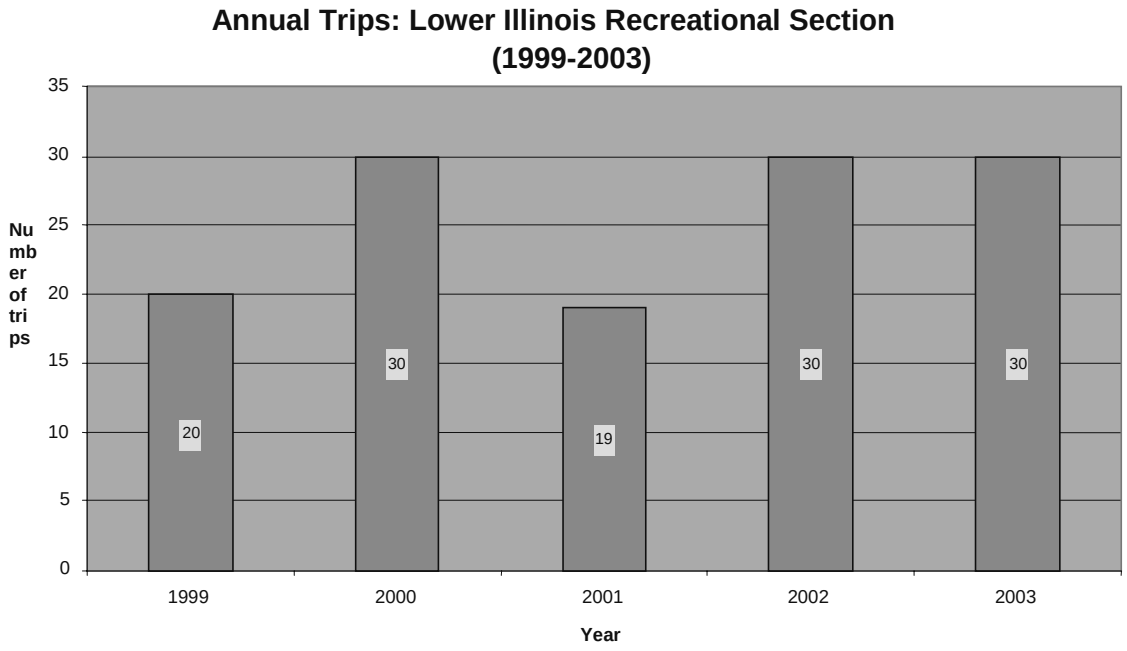
The 42-mile Rogue River Trail from Grave Creek to Big Bend was designated a National Recreational Trail in 1981. Within the Forest boundary, the trail is 14 miles long, starting at Big Bend meadow and continuing upriver to Marial. The trail parallels the north side of the river and in many places it was constructed through rock cliffs, providing spectacular river views below. The 13-mile lower Rogue River Trail from Agness to Silver Creek also parallels the north side of the river and offers river views downstream of the Agness area.

Current Permitted Use

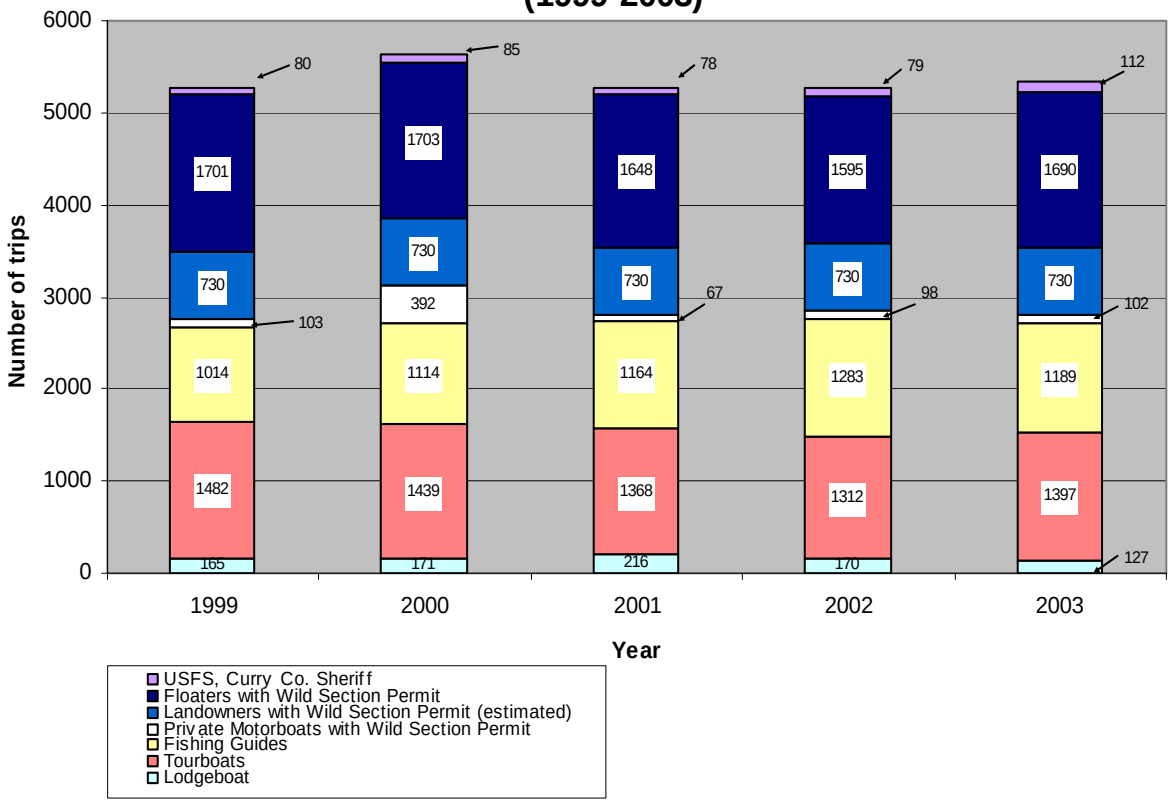
The number of people fishing has been growing steadily. In 2003, 2567 people fished with a commercial guide on the National Forest portion of the lower Rogue River. From 1999-2003, the average number of clients served by fishing guides was 2374, which includes trips on the lower Illinois River. Compared to the Rogue River, commercial fishing use on the lower Illinois River is low, with an average of 52 people fishing in the past five years. This is due in part to more limited river and fishing conditions on the lower Illinois River during the year.

The number of tour boat passengers each year has been relatively steady and averages 37,944 adults and 6,356 children for 1999-2003. In 2003, the number of passengers was close to this five-year average. Low water in 2001 caused the 104-mile trips to be cancelled for a month and accounted for the lowest number of passengers over the five-year period. Conversely, Paradise Lodge carried the most passengers in 2001 with 631 commercial passengers, primarily due to the tour boats not running. Paradise Lodge transported an average of 438 commercial passengers from 1999-2003. The following figures (Figures 10-13) show the annual outfitter/guide permitted use from 1999-2003. The source of this date is commercial permittee annual use reports.

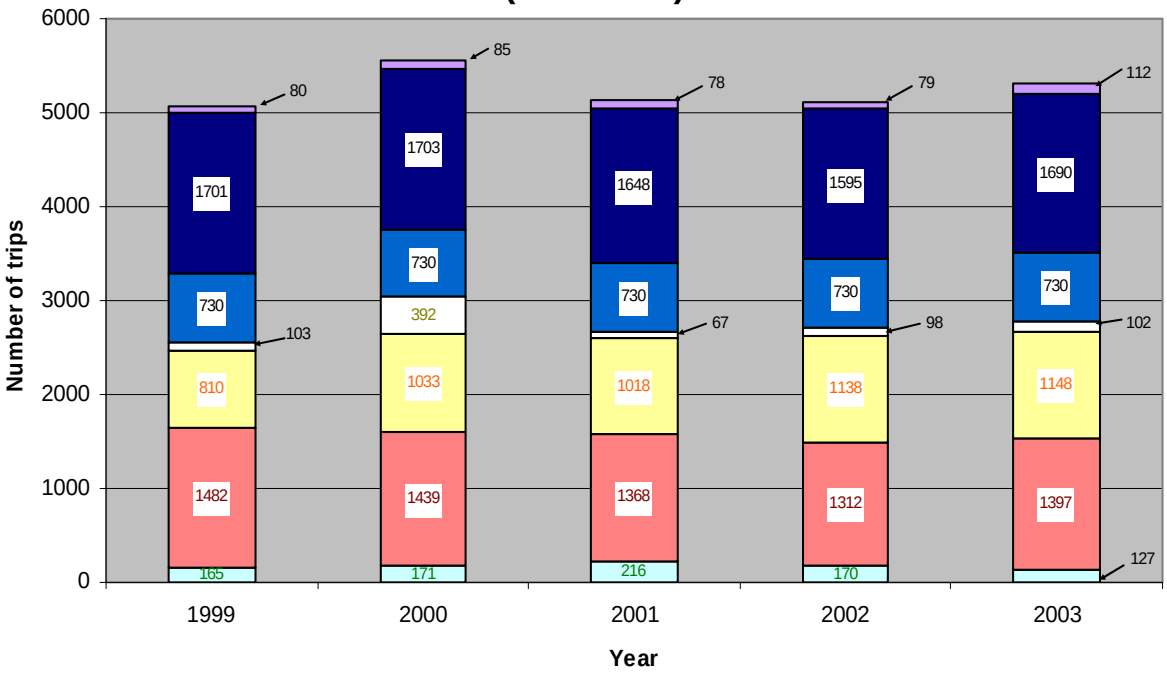
Figures 10-13: Annual Outfitter/Guide Permitted Use 1999-2003

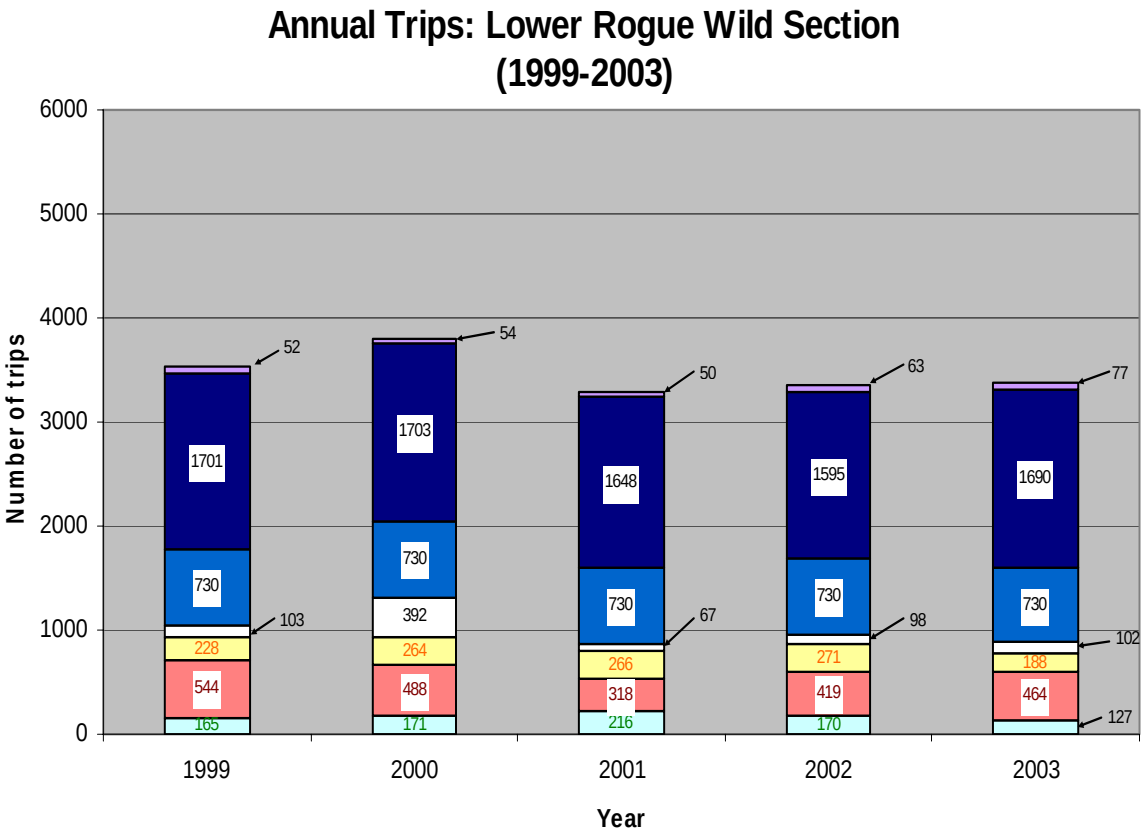


Annual Trips: All Lower Rogue River Sections (1999-2003)



Annual Trips: Rogue Scenic/Recreational Sections (1999-2003)





Wilderness

The nearly 36,000 acre Wild Rogue Wilderness, designated in 1978 under the Endangered American Wilderness Act, was established in part to provide watershed protection for the Wild Section of the Rogue River. Special provisions of the act applied to the management of the Wild Rogue River (see Wilderness in sections on Management Direction and Recreation Affected Environment). The entire wilderness is classified as semi-primitive non-motorized under the Recreation Opportunity Spectrum (ROS) (USDA Forest Service 1989a, III-125) and as semi-primitive under the Wilderness Recreation Spectrum (WRS), which is defined as a predominantly unmodified natural environment with infrequent encounters (five to seven encounters per day) with other users (USDA Forest Service 1989a, MA 1 – Wilderness). This semi-primitive classification provides a lower level of solitude and primitive experience when compared to opportunities offered in other wildernesses with areas classified as primitive or pristine.

The Wilderness affected environment occurs beyond ¼ mile on either side of the Rogue River between Blossom Bar Rapids and Watson Creek in the Wild Section. Wilderness also occurs beyond ¼ mile on the east side of the Recreational Section from Watson Creek downriver to about 1 mile north of Forest Service Road 23.

The steep canyon landscape of the wilderness area provides limited and challenging trail-based recreation. Cross-country travel is generally not feasible due to the steep terrain and heavy vegetation.

The Clay Hill and Mule Creek trails connect the lower Rogue River Trail with the high elevation Panther Ridge Trail along the north wilderness boundary. These trails receive limited use, infrequent maintenance and are steep forested routes with limited views that parallel creek canyons. Close proximity to a high-use National Recreation Trail (the Rogue River Trail) results in more frequent encounters with other, often larger groups, and a reduction of solitude and primitive experience.

The Panther Ridge Trail is farther from the river – a few miles north at an elevation of about 3,000 feet. It provides landscape views of the river, especially at the Hanging Rock vista, a popular day hike destination. The sights and sounds associated with roads are perceptible to the north outside the wilderness boundary. The Mount Bolivar Trail, located on the Powers Ranger District above 4,000 feet in the far northeastern tip of the wilderness, is even further removed from the river environment.

Socio-Economic Conditions

Economic return associated with levels of permitted use was identified as a significant issue in Chapter 1.

Gold Beach is a small town dependent on tourists to support businesses and employment for residents. Gold Beach, like other coastal communities, had a stronger economy in the 1970s and 1980s when the timber industry and commercial fishing were stronger. With the last sawmill closing in the early 1990s, employment opportunities are limited in Gold Beach and the economy is much more dependent on tourism. People traveling on Highway 101, visiting the ocean beaches, and visiting the Rogue River for fishing and riding the tour boats are big contributors to the local economy.

Commercial Tour Boats

There are three permits for two companies to operate tour boats providing scenic trips from Gold Beach. There are three types of trips and the permitted area is from Lobster Creek to Snout Creek (Agness) (64 miles, round trip), Watson Creek (where the Wild Section begins) (80 miles, round trip), or the pool below Blossom Bar Rapids (approximately 10 miles upriver in the Wild Section, 104 miles, round trip). Only two of the three tour boat permittees (Rogue Jets, Inc. and Mailboat Upriver, Inc.) are allowed to operate in the Wild Section (Watson Creek to below Blossom Bar Rapids). Commercial tour boat size is limited above Snout Creek to a maximum of 42 passengers. Tour boats also transport 25 to 40 percent of the clientele who stay at two lodges in the Wild Section.

Average total trips, revenue and wild trips from 1999 through 2004 are about 1400 total trips, $2,152,000 in revenue and about 460 trips into the wild section (Table 10). The data from this time period presents a mixed picture of tour boat use. There was a decrease in total trips during the first four years and increases in 2003 and 2004 as displayed in Figure 14. The wild section shows a decreasing trend during the first three years and increases in the last three years.

Both wild tour boat clients and total tour boat clients dropped dramatically between 2000 and 2001 as shown in Figure 15. There has been a general upward trend since 2001 with total clients reaching previous levels. Average revenue per client over the last six years, has been fairly constant. Total revenue follows the same general trend of total clients.

Since current operations are not at permit limits, and because past data do not exhibit strong trends for projecting different use levels into the future, the averages of the tour boat indicators over the past six years are used to project future use. Current use will be the basis for comparing alternative economic effects.

Table 10. Tour Boat Data, 1999 through 2004

Year	Total Trips	Total Clients	Total Revenue	Clients/Trip	Rev/ Client	Wild Trips	Wild Clients
1999	1,482	45,694	$2,011,000	31	$49	544	16,137
2000	1,439	47,544	$2,093,000	33	$49	488	16,024
2001	1,368	41,281	$1,739,000	30	$46	318	10,525
2002	1,312	42,340	$1,960,000	32	$48	419	13,663
2003	1,397	43,829	$2,061,000	31	$49	464	15,067
2004	1,480	46,284	$2,256,000	31	$49	519	15,116
Average	1,413	44,632	$2,152,000	31	$48	459	14,422

Figure 14: Tour Boat Total Trips and Wild Section Trips, 1999-2004

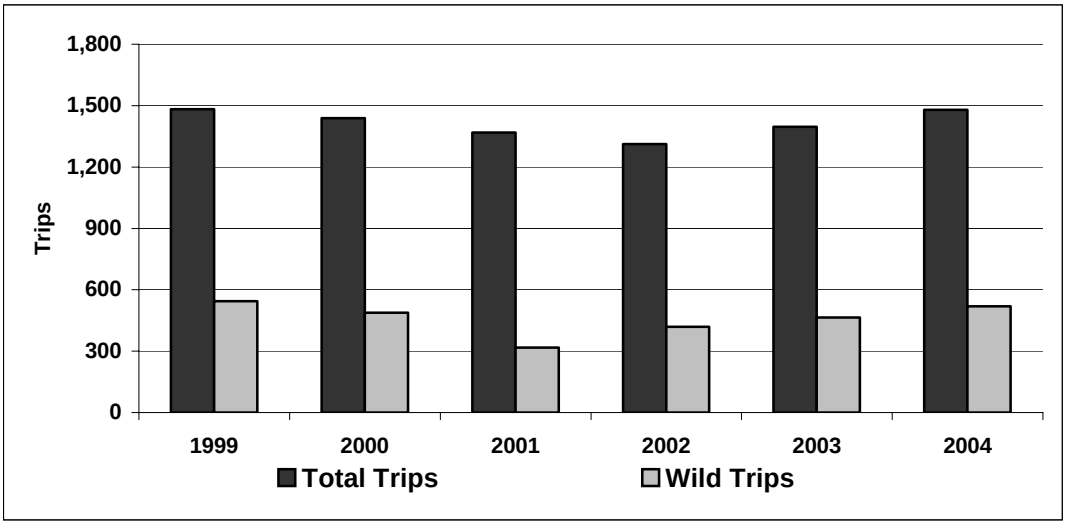


Figure 15: Tour Boat Total and Wild Section Clients, 1999-2004

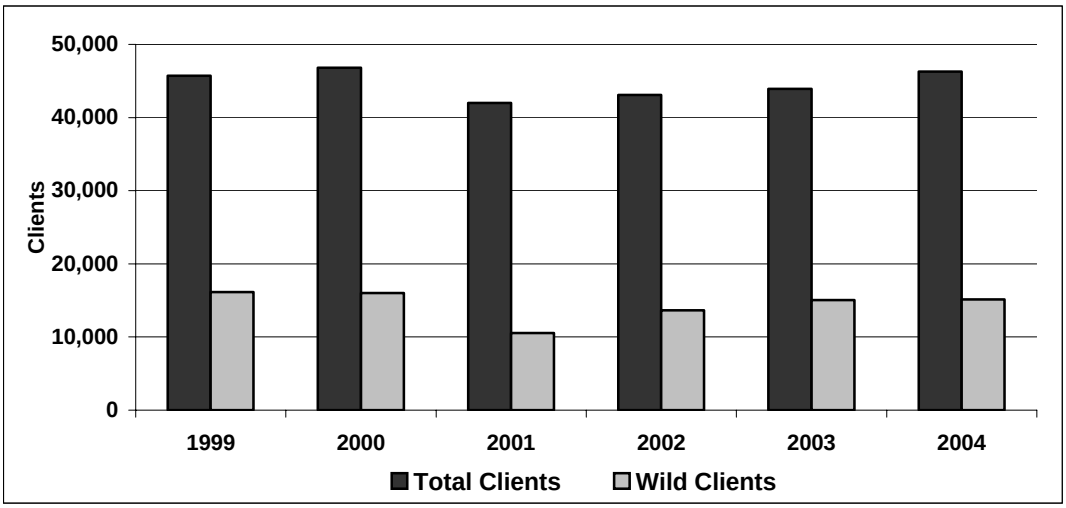
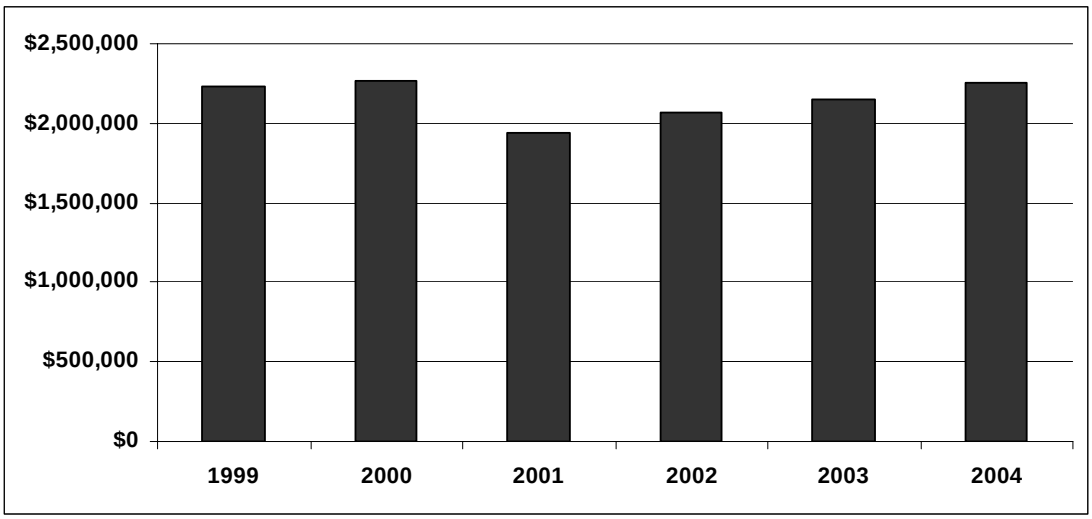


Figure 16: Tour Boat Annual Revenue, 1999-2004



Commercial Transport of Lodge Guests

There is one permit to transport lodge guests from Foster Bar to Paradise Lodge, Half Moon Bar Lodge, and Clay Hill Lodge all within the wild section of the river. A trip is defined as a round-trip from Foster Bar to the lodge and return. The maximum number of trips is 365 annually. Approximately 60 to 75 percent of lodge patrons arrive at the lodges by the lodge boat. The remaining 25 to 40 percent arrive on the tour boats. The lodge boat carries both paying hotel guests and non-revenue passengers such as employees.

Revenue per paying client averaged $42 during 1999 through 2004 as shown in Table 11. Total revenues over the same period averaged $17,300 generated by about 160 trips per year. The spike in trips, clients and revenue that occurred in 2001 was due to low water levels prohibiting operation of tour boats to transport clients to the lodges.

The indicators displayed in Table 11 as well as Figures 17-19, are highly variable and do not provide a strong basis for predicting trends in client demand. The average conditions of the past six years are projected as the likely conditions in the near future and are used as the base for comparing alternative economic effects.

Table 11: Lodge Boat Data, 1999 through 2004

Year	Trips	Total Revenue	Commercial Clients	Sum of Passengers	Revenue/ Client
1999	165	$22,200	548	1,234	$41
2000	171	$17,700	415	1,236	$43
2001	216	$25,900	631	1,287	$41
2002	170	$18,500	435	1,092	$43
2003	127	$6,600	159	708	$41
2004	133	$12,700	296	856	$43
Average	164	$18,200	414	1,069	$42

Figure 17: Lodge Boat Trips, 1999-2004

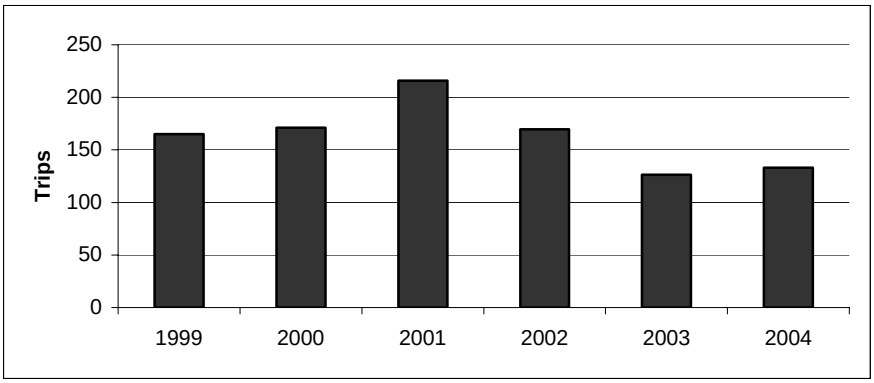


Figure 18: Lodge Boat Revenue, 1999-2004

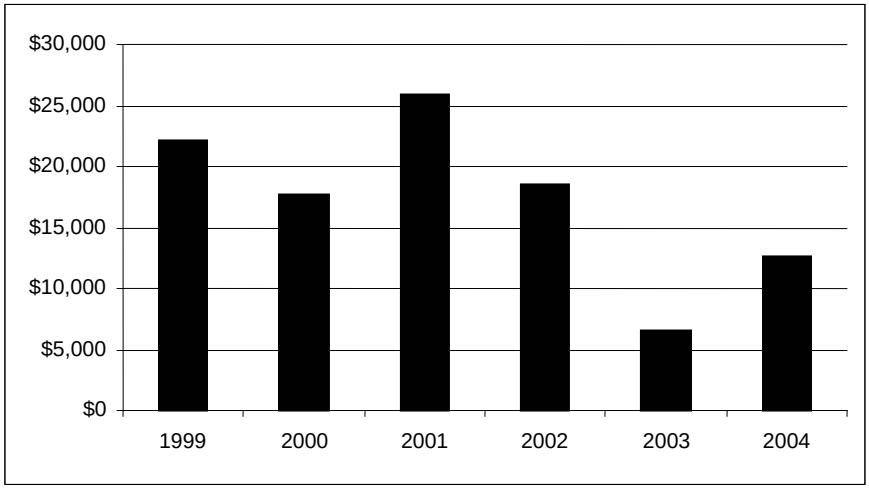
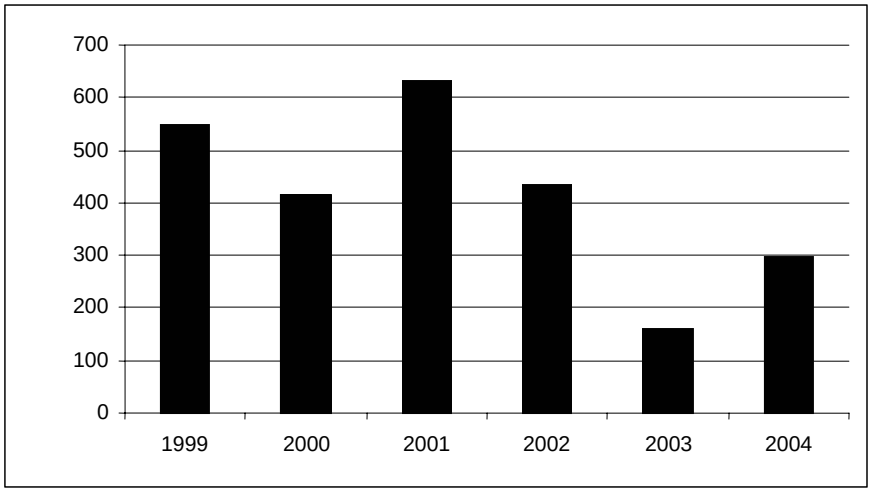


Figure 19: Lodge Boat Commercial Clients, 1999-2004



Fishing Guides

There are 59 guides permitted to operate guided fishing trips and other trips on portions of lower Rogue River and the lower Illinois River. These guides are identified in three categories: Lower Rogue fishing guides (R-Guide), Lower Medford Recreation Permit fishing guides (LMRP), and Illinois River fishing guides. Forty-six guides have no limit to the number of days the permit can be used. Nine of these 46 guides can operate on the lower Illinois River. None of these 46 guides are allowed to operate in the Rogue Wild Section above Watson Creek.

The remaining guides have a variety of permit limitations. Among these are eight guides who operate in the Rogue Wild Section year-round. These guides are limited to the number of trips and user days they are permitted, and on an annual basis, they cannot exceed 394 trips a year combined. An additional two guides can operate in the Rogue Wild Section during winter months only and they are limited to 57 trips per year.

Fifty of the total guides are R-Guides. The R-Guides conduct over 80 percent of the fish guiding operations and have the most documented use and revenue data. These guides are used to assess trends. The average trips, revenue and clients for the LMRP and Illinois fishing guides are added to the R-Guide statistics for a fishing guide total in Table 12.

R-Guide revenue averaged $130 per client from 1999 through 2004 (Table 10). Total revenues over the same period averaged $281,000 generated by about 1,048 trips per year. Most of the guide boats operate outside of the Rogue Wild Section where use is not limited. Unlike the tour and lodge boats, total R-Guide trips, clients and guide boat revenue increased through the first four years and have since leveled off. These statistics are displayed in Table 13 and Figures 20-22.

Past data on guide boat trips into the Rogue Wild Section of the river do not suggest increasing trends in demand. Increases noted in the middle part of the period were short term.

Since limits on current operations are not binding, the average conditions of the past six years (1999-2004) are projected as the likely conditions in the near future and are the base for comparing alternative economic effects.

Table 12: R-Guide Boat Data, 1999-2004

Year	Total Trips	Total Clients	Total Revenue	Clients/Trip	Rev/ Client	Wild Trips
1999	880	1,842	$210,700	2.1	$114	94
2000	988	2,127	$258,500	2.2	$122	125
2001	1037	2,099	$272,300	2.0	$130	129
2002	1150	2,328	$310,600	2.0	$133	123
2003	1118	2,332	$325,200	2.1	$139	92
2004	1114	2,172	$308,400	2.1	$142	101
Average	1,048	2,150	$281,000	2.1	$130	111

Table 13: All Fishing Guide Averages

Average	Total Trips	Total Clients	Total Revenue	Wild Trips
R-Guide	1,048	2,150	$281,000	111
LMRP	156	362	$53,500	24
Illinois	25	61	$9,000	0
Total	1,222	2,573	$343,500	135

Figure 20: Total R-Guide Trips and R-Guide Wild Section Trips, 1999-2004

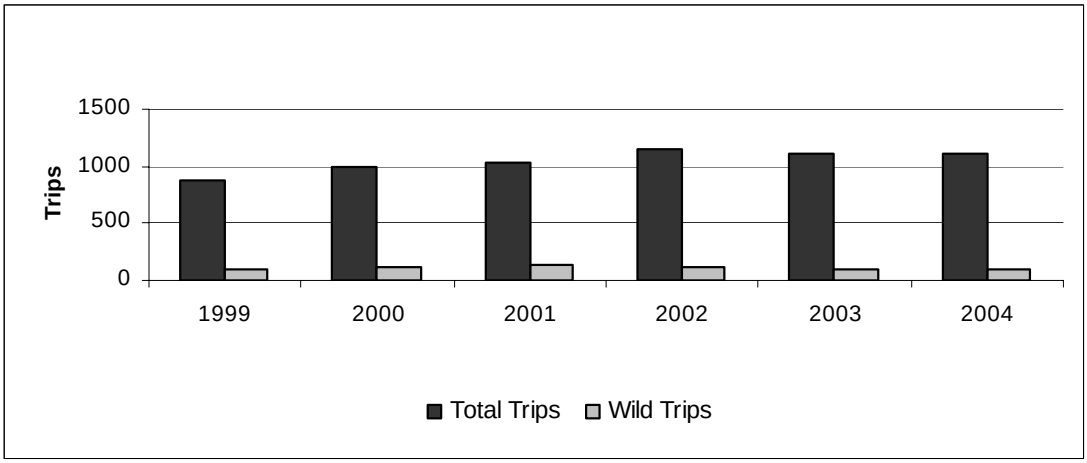


Figure 21: R-Guide Clients and R-Guide Wild Section Clients, 1999-2004

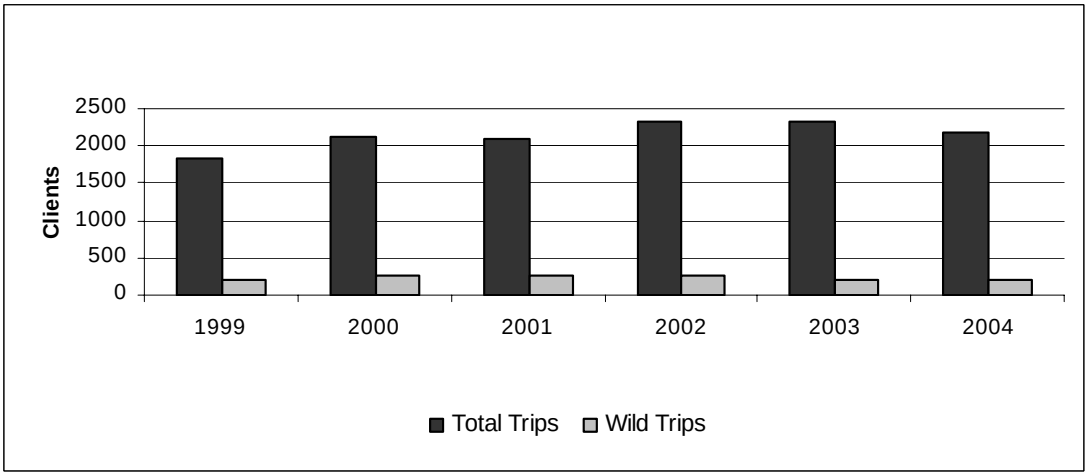
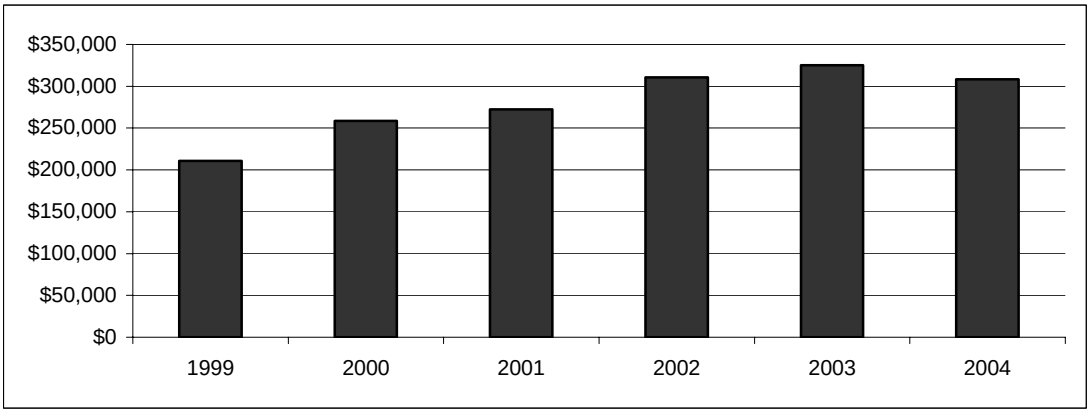


Figure 22: R-Guide Revenue, 1999-2004



Local Economic Activity

People come to Gold Beach, Agness and other locations in Curry County to participate in recreational activities offered by the outfitters and guides. The recreationists also stay in hotels, eat at restaurants, and buy goods and services. These purchases contribute to local economic activities. Based on the expenditure patterns of clients, employment and income associated with the tour boats, lodge boat and guide boats are estimated.

Expenditure patterns vary by whether the client is local or non-local, and whether they are day users or overnight users. Forest Service managers estimate the percent of the recreationists in each category (Table 14).

Table 14: Client Types by Use Category

Client Type	Tour Boat	Lodge Boat	Guide Boat
Local Day Tourist	20%	--	5%
Local Overnight Tourist	0%	15%	0%
Non-local Day Tourist	0%	--	5%
Non-local Overnight Tourist	80%	85%	90%

Based on the expenditure patterns and the number of clients in each category, the current jobs and income associated with existing tour, lodge and guide boat uses are estimated and displayed in Table 15.

The magnitude of the direct employment and income estimates need clarification. Although the job and income numbers include estimates based on full and part time employment, the amusement and recreation services industry sector in IMPLAN, which is used to estimate the jobs and income, is an aggregate of several types of businesses. Many of these businesses have jobs of much longer duration. However, the tour and guide boat business in general is comprised of short duration part time work. For example, the total average annual guide boat trips are 1,156 and the number of guides is 59. If these trips were distributed evenly among the guides each would work less than four weeks a year in the guide business in the project area.

Table 15: Current Jobs and Income by Use Category

	Direct		Total	
Use Type	Jobs	Income	Jobs	Income
Tour Boat	120	$1,701,500	145	$2,226,900
Lodge Boat	1	$10,700	1	$13,900
Guide Boat*	8	$117,200	10	$152,000
Total	129	$1,829,400	156	$2,392,800

***Guide boat jobs and income are reduced by 44 percent, which is the percent of guides estimated to be from outside of the Curry County impact area.**

Compared to the overall employment and income in Curry County in 2000, the total economic effect of the outfitter and guide businesses represents slightly more than one percent of the total employment of about 10,500 jobs and slightly less than one percent of total wage related income of about $260 million. Relative to current employment in the amusement and recreation services, and the hotel and motel employment and income, the total jobs and income associated with current client expenditures is over 20 percent. The outfitter and guide businesses associated with the project area are a key component of these tourism industries.

CHAPTER 4. ENVIRONMENTAL CONSEQUENCES

This chapter summarizes the physical, biological, social, and economic effects of implementing each alternative. The analysis of direct, indirect, and cumulative effects of the No Action, Proposed Action, and all other alternatives as described in Chapter 2, is also documented in this chapter.

Direct effects are those that may occur at the site as a result of the proposed activities. Indirect effects may occur at a distance from the site or at a later time. Cumulative effects are the result of the proposed activities in combination with other projects in the past, present, or reasonably foreseeable future, each of which may not affect the environment when considered alone, but could accumulate within watersheds or landscapes to create adverse or beneficial effects.

Changes Between Draft and Final: Effects of the two new alternatives have been added to each resource area. Effects on Wild and Scenic Rivers have also been added.

Effects on Water Resources

There are three potential pollution sources that can degrade surface water quality: petroleum products from motorboats (oil, gas, diesel, and propane), turbidity from beach erosion (due to boat wakes and human foot traffic), and turbidity from channel maintenance. None of the alternatives would have any effect on surface water quantity or distribution or on groundwater quality, quantity, or distribution because commercial boating activities have no effect on these properties. None of the alternatives would affect Rogue River water temperature or pH or Illinois River water temperature because commercial boating activities do not influence the variables that affect these properties.

Alternative 1 – No Action

Direct Effects

Under the actual use conditions of the past, there have been no documented petroleum tank ruptures. However, it is reasonable to assume there is a small probability of tank rupture and, thus, petroleum spillage, under actual use conditions. Because there have been no spills under actual use conditions, the probability of a spill cannot be estimated from the data; it is anticipated to be very small because of the large number of boat trips made with no spills. There is no reasonable method to project the decrease in the probability of a spill resulting from a decrease in use levels under the no action alternative, but it would be likely to decrease a very small amount. Also, because there would be fewer boats on the river, there would be a small decrease in turbidity from beach erosion. The decrease would only have a short-duration impact on water quality and this impact would be spatially localized to very small areas. Consequently, the reduction in beach erosion would not produce a measurable impact to the overall water quality.

Indirect Effects

There are no direct effects on water quality large enough to cause an indirect effect on water quality downstream of the project or at a later date. Petroleum product spills would be evaporated and/or diluted to very small concentrations in a relatively short distance downstream and over a relatively short period of time.

Cumulative Effects

This alternative would have a beneficial impact on water quality, but the cumulative effect would not be measurable because the water quality effects are negligible compared to natural water quality changes and water quality changes from upstream human impacts.

Alternative 2 – Proposed Action

Direct Effects - Petroleum Products

There are two sources of motorboat petroleum product that can affect water quality. One is a spill from a ruptured engine tank and the other is smaller boats with two-cycle engines that vent exhaust under water.

Tour boat tanks contain 130-160 gallons of fuel, fishing guide boats have 30-40 gallons, and small private boats have 6-12 gallons. Paradise Lodge and Half Moon Bar Lodge ferry 3,000 gallons of diesel fuel and 3,000 gallons of propane to their property annually in a series of trips. Clay Hill ferries less of both fuels. These deliveries represent the largest amounts of fuel that would be on the river at one time.

Petroleum spills generate both water and air pollution. Oil contamination interferes with gas exchange in water, coat plants and animals, imparts a taste to fish, and has a direct toxic effect on organisms. Twenty-five gallons of oil is enough to create a visible sheen on a square mile of water surface. One quart of oil is enough to contaminate two million gallons of drinking water (Topeka, Kansas Department of Public Works). A concentration as low as 0.01 milligrams/liter (mg/l) can produce strong odors, so water would become objectionable for drinking or contact before acute toxicity levels are reached.

There have been no petroleum spills in the project area. The long history of boat use and the lack of spills is a very strong indication that a fuel tank rupture is unlikely under current actual use. Factors that keep the probability of a tank rupture low include U.S. Coast Guard regulations that require tour boat tanks to be separate from the hull, baffled, and made of ¼" thick aluminum. Fishing boats with four-cycle engines have the engine centered in the boat, requiring the boat to be cut in two for a rupture. Boats with two-cycle engines are outboards, which would be more prone to a direct impact during an accident, however, most commercial fishing boats in the project area have four-cycle engines.

If actual use increased to the permitted levels of Alternative 2, the probability of accidents that result in petroleum spills would increase. Because there have been no spills under actual use conditions, the probability of a spill cannot be estimated from the data. However, it is reasonable to assume that there is a small probability of a petroleum tank rupture despite the fact that the data indicate a zero probability.

Because there is no reasonable method to obtain an estimate of tank rupture probability under actual use conditions, there is no reasonable method to estimate the increase in the probability of a spill resulting from use increasing to permitted levels. The lack of spills under actual use conditions is an indication that the probability of a spill under permitted conditions would also be small. If a tank ruptured, the petroleum products would spread quickly over a large surface area, but the spill would be broken up by river turbulence. Gasoline is more volatile than oil and would evaporate rapidly.

If boats transporting lodge fuel were involved in an accident that released fuel containers into the river, container rupture is unlikely. The steel diesel barrels would probably float, moving downstream with the river current, and creating an immediate navigation hazard to other boats. If they were to rupture, the contents would contaminate water, adjacent shorelines, and aquatic habitat. Some of the fuel would evaporate, decreasing the water quality impact. The remaining diesel would be noticeable until fully evaporated or diluted to undetectable levels.

Propane canisters would sink if released in an accident. They would move downstream with the current while submerged, creating a navigation hazard. Propane is extremely volatile and would be an explosion hazard if the tanks ruptured. Unexploded leaking propane would escape rapidly into the air and would not degrade water quality.

Because two-cycle boat engines are less common than four-cycle and are expected to become less common due to states passing regulations against their use, the effect of two-cycle engines on water quality will be small. EPA outboard engine emission standards enacted in 1996 (CFR 61.194) are also expected to decrease water quality effects of two-cycle engines even more.

Direct Effects - Beach Erosion

Beach erosion turbidity is unlikely to decrease water quality by a measurable amount River flows are the dominant factors controlling beach erosion, and only 11% of the riverbanks are composed of erodible material (Klingeman 2001, 2003). Flow adjacent to erodible beaches is normally low velocity during low summer flows. Consequently, beach erosion that does occur would impact water quality for only a short distance downstream. Any measurable increase in turbidity would be of short duration and limited spatial extent at each location, and the total area where this would occur would be a very small portion of the river.

Indirect Effects

There are no direct effects on water quality large enough to cause an indirect effect on water quality downstream of the project or at a later date.

Cumulative Effects

The direct effects are of short duration and limited spatial extent. Consequently, each direct effect dissipates before the water reaches the location of the next direct effect. The cumulative effects of this alternative are negligible compared to natural changes in water quality and water quality changes from upstream human impacts.

Alternatives 3, 4, 5, 6

Direct Effects

The direct effects of this alternative would be equal to or less than Alternative 2 because of the reduced permitted use in these alternatives.

Indirect Effects

Same as Alternative 2.

Cumulative Effects

Same as Alternative 2.

Docks

The docks are too small to obstruct river flow. Water near docks moves slowly and the surface is generally calm. There is little overnight moorage of boats at these facilities, minimizing the likelihood of gas/oil sheens on the water surface. There are no documented water quality tests at the docks to determine the concentration of petroleum products in the water column, and it is not believed to be a problem because the same factors that prevent and/or dissipate petroleum spills on the remainder of the river are also at work near the docks.

Without docks, assuming that the amount of loading and unloading does not change, there would be some additional erosion compared to what would occur with the docks in place. This additional erosion would be very minor and localized at a few sites. It would be negligible compared to natural background erosion rates and erosion from other human activities in the watershed.

Channel Maintenance

The effects are of short duration, localized at 10-15 sites per year, and the adverse impacts are negligible. This is because the materials moved during channel maintenance are primarily gravels and other sediments that drop out of the water column as flows decrease. A few small boulders are moved by hand at up to six locations. The materials moved, including the boulders that are moved by hand, are readily moved by winter flows. The channel maintenance operations reposition the materials, but do not affect the hydrology or free-flowing nature of the river. Riffle maintenance produces a plume of turbid water for approximately 100 feet downstream (B. Blackwell, pers. comm., June 2003). Illahe Island maintenance sediment is carried downstream with the river current; the turbidity dissipates rapidly and is not observed at Foster Bar, approximately one mile downstream. The distance from the Illahe Island riffle maintenance site to the next downstream riffle maintenance site is more than 6 miles and the distances between each of the remaining riffle maintenance sites are considerably greater than 100 feet. Consequently, the turbidity at each riffle maintenance site dissipates before the flow reaches the next site, preventing the development of a cumulative effect.

The heavy equipment that is brought down the right bank to work on the Illahe Island channel maintenance would disturb the riparian vegetation on the bank. The disturbed vegetation recovers quickly. The site shows no signs of permanent damage (e.g. an eroding bank) from infrequent past use.

The primary factors in the project area that keep the Rogue River from heating up are shadows cast by the steep topography, tall trees, and cool tributary inflow. Because of their orientation to the river, the willows at two of the five willow cutting sites do not cast a shadow in the direction of the water and therefore do not have any effect on stream temperature. At the other three sites, the willows cast only a short shadow on the water for a portion of the day.

The linear length of these willow cutting areas is negligible in comparison to the length of the river in the project area that is in shadow a portion of the day due to steep topography and tall trees. The net result of willow cutting at these three sites on water temperature is therefore negligible. Because repositioning of the bed material at riffles increases the hydraulic efficiency of the reach, which increases the average flow velocity in the reach, this could lower stream temperatures. However, this effect would be negligible due to riffle maintenance sites affecting only a small portion of the total river length in the project area.

Effects on Fisheries

Effects on Fisheries were identified as a significant issue in Chapter 1. The Fisheries Biological Evaluation is contained in FEIS Appendix F (incorporated by reference).

The proposed commercial boating activities are May Affect, Not Likely to Adversely Affect (NLAA) Southern Oregon/Northern California (SONC) coho, for the following reasons:

- Individuals may be harassed as motorboats pass directly over or within 5 meters, causing a startle or avoidance response. This effect is likely to be short in duration.
- Juvenile coho migrate at night and rest in stream margins during the day, therefore interactions with jet boats would be minimal.
- Motorboat activity occurs during months when juvenile and adult coho are using the lower Rogue River as a migration corridor.

A summary of effects for Threatened and USFS Sensitive Fish Species from commercial boating activities is contained in Table 16.

Table 16: Effects on Threatened and Sensitive Fish Species for All Action Alternatives

Species	Status	Management Indicator Species	Present within Project Area	Effect Determination
Coho Salmon	Threatened	No	Yes	NLAA
Fall Chinook Salmon	Sensitive (USFS)	Yes	Yes	MIIH
Spring Chinook	Sensitive (USFS)	Yes	Yes	MIIH
Winter Steelhead Trout	Sensitive (USFS)	Yes	Yes	MIIH
Summer Steelhead	Sensitive (USFS)	Yes	Yes	MIIH
Coastal Cutthroat Trout	Sensitive (USFS)	Yes -*Resident forms only*	Yes	MIIH

NLAA = Likely to Adversely Affect
MIIH = May Impact Individuals and/or Habitat but not likely to cause a trend toward federal listing or a loss of viability

Alternative 1

Direct Effects

There would be no measurable direct adverse or beneficial impacts on fisheries in the project area. Fish would be exposed to less motorboat activity, but drift boat, raft, kayak, and private motorboat traffic would remain the same. The majority of coho juvenile migration occurs during night and early morning, between the hours of 2100-0400 in river systems in British Columbia (Macdonald 1960, Meehan and Siniff 1962, Mace 1983, Groot and Margolis 1991). Coho juveniles in the Rogue River likely utilize a similar diel migration pattern. Satterthwaite (1995) studied the effects of boat traffic on juvenile salmonids and showed that steelhead and chinook juveniles responded more to drift boats or rafts passing overhead than to any other boat type on the Rogue River. Both motorboat and float traffic may cause startle responses in individual coho, Chinook, steelhead, and cutthroat trout.

Indirect Effects

Boat traffic may become more concentrated outside the project area in the lower Rogue River from the estuary to the mouth of Lobster Creek. This river section is important to juvenile salmonids. The estuary is where the salmon smolts finish the process of being able to process salt water after living in fresh water, an important stage in their development. Juvenile salmonids reside in the estuary from March through November, depending on the species and the run. Heavier boat use would have an adverse effect on juvenile salmonids because more boat encounters would increase the likelihood of fish being startled.

Cumulative Effects

With the exception of channel maintenance activities discussed at the end of the fisheries effects, the cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. There are several projects planned within the Rogue River drainage upstream of Grave Creek on Bureau of Land Management and National Forest lands. In the Illinois River basin there are a few projects planned for the future. Two major projects are the Illinois River Trail Reconstruction and Biscuit Fire Salvage. These projects are required to meet the Northwest Forest Plan Aquatic Conservation Strategy. To meet this strategy projects cannot degrade fish habitat, therefore these projects would not affect fish or fish habitat in the Rogue or Illinois Rivers.

Alternative 2

In addition to the tour boat and lodge boat use shown in Table 17, permitted annual fishing guide trip limits can be found in Table 18.

Direct Effects

Permitted boat use causes startle or avoidance responses in fish as boats passed within 5 meters of fish in the lower Rogue and Lower Illinois Rivers (Sattherthwaite 1995). Boat-fish collisions are unlikely because of this startle response. The majority of coho juvenile migration occurs during night and early morning (between 2100-0400) in British Columbia and coho juveniles in the Rogue River probably utilize a similar diel migration pattern. The lodge docks would not affect fish or fish habitat, as they are not disturbing spawning or rearing habitat in the river.

Indirect Effects

Startle responses may push fish out of thermal refugia or out of feeding and rearing areas, but the amount of energy expended is minimal. When juvenile fish move in response to boat traffic they also become more visible to predators. Startle responses are likely in predatory fish as well. Private motorboat activity from the mouth of the Rogue to Lobster Creek continues, but the overall use would be less concentrated than in the No Action Alternative.

Table 17: Permitted Tour Boat and Lodge Boat Use for Alternative 2

Month	Maximum Trips per Day	Maximum Trips per Month
January-April	4	32
May-June 15	16	496*
June 16-30	28	660
July-August	28	868
September	16	480
October	16	496
November-December	4	32
Total Yearly Permitted	4,244#	
Total Lodge Boat Trips Permitted	365	

***Trips for June 1-15 are in the June 16-30 total.**
#Total number of trips per year may not equal total numbers per month due to maximum trip levels changing after Labor Day.

Motorboats and oar boats (rafts, kayaks, and drift boats) cause either a startle response (motorboats) or an avoidance response. Both responses can cause an increase in cortisol in fish. (Cortisol indicates stress in fish). A study of jet boat effects on juvenile salmonids in the Rogue River (Satterthwaite 1995) concluded that cortisol did not differ substantially throughout the day in river sections with motorboat traffic. The months of heaviest motorboat traffic are July through September. During these months, most of the fish using the lower Rogue River are juvenile chinook, juvenile steelhead, adult fall chinook, adult coho, and summer steelhead. The effects of boat traffic on adults and juveniles during this time period are expected to be mainly startle responses. Fish will move quickly to avoid boats as they pass over. These effects are only anticipated if boats pass within 5 meters of a fish. Anything beyond 5 meters does not cause a response, probably due to acclimation of fish to motorboat traffic. Another part of this study looked at predation of juvenile salmonids by northern pikeminnow. An increase in juvenile salmonid predation was not found in conjunction with commercial tour boat traffic.

When juvenile and adult fish are moving through the Rogue River canyon section (Grave Creek to Agness), the fish use tributary confluences as resting areas. These areas typically have infusions of colder water from the tributaries. Reid (2002) found that jet boat wakes increased the average temperatures in these refugia by 0.24ºF, with little effect on salmonids. Jet boat traffic (tour boat and jet sled) did not elicit a startle response in juvenile chinook holding in these thermal refugia. The physiological effects of jet boat activity on migrating salmonids in the lower Rogue River found in the thermal refugia was determined to be minor. A bioenergetics model was used to calculate the effect of the increase in temperature on fish physiology. The minor increase in temperature over time would not affect the ability of a fish to survive where boat activity and warm water temperatures were present.

A preliminary 2003 study found that jet boat traffic had no effect on green sturgeon in the Rogue River. Adult green sturgeon were monitored using radio telemetry over a 24 hour period. No movements were recorded during times when motorboats passed over tagged individuals (Wildlife Conservation Society unpublished data).

Cumulative Effects

Same as Alternative 1.

Alternatives 3, 4, and 6

Monthly maximum trips per day and trips per month are the same as Table 17. In addition to the tour boat and lodge boat use shown in Table 17, permitted annual fishing guide trip limits can be found in Table 18.

Table 18: Permitted Tour Boat and Lodge Boat Use by Month for Alternatives 3, 4, and 6

	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Total Yearly Permitted Tour Boat Trips	3,516	3,363	2,000	1,201
Total Lodge Boat Trips Permitted	261	246	246	130

Direct and Indirect Effects

Same as Alternative 2. Reductions in use would not reduce the impacts of motorboat activity overall as boat activity would still occur below the Rogue Wild Section and on the lower Illinois. These alternatives would reduce the total number of tour boat trips per year, but the number of trips allowed per month would not change until the annual quota was met.

The reduction in tour boat traffic in the Wild Section would reduce the probability of startle or behavioral responses occurring in the project area.

Cumulative Effects

Same as Alternative 1.

Alternative 5

Monthly maximum trips per day and trips per month are the same as Table 17. In addition to the tour boat and lodge boat use shown in Table 17, permitted annual fishing guide trip limits can be found in Table 19

Table 19: Permitted Tour Boat and Lodge Boat Use by Month for Alternative 5

	Alternative 5
Total Yearly Permitted Tour Boat Trips	2,000
Total Lodge Boat Trips Permitted	246

Direct and Indirect Effects

Same as Alternative 2. Reductions in use would not reduce the impacts of motorboat activity overall as boat activity would still occur below the Rogue Wild Section and on the lower Illinois. These alternatives would reduce the total number of tour boat trips per year, but the number of trips allowed per month would not change until the annual quota was met.

This reduction in tour boat and fishing guide boat traffic throughout the project area would greatly reduce the probability of startle or behavioral responses occurring in the project area.

Cumulative Effects

Same as Alternative 1.

Channel Maintenance

Habitat for USFS Sensitive Species and Essential Fish Habitat (EFH) would be affected by channel maintenance. The Sustainable Fisheries Act of 1996 (P.L.104-267), amended the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act) to require federal agencies to consult with National Oceanic and Atmospheric Administration Fisheries (NOAA) on activities that may adversely affect "Essential Fish Habitat". The Act defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" and includes all freshwater streams accessible to anadromous fish, marine waters, and intertidal habitats.

Prop wash occurs at up to 15 riffles annually. These 15 prop wash locations would temporarily modify 26,250 square feet of habitat in the lower Rogue River and would deepen the channel up to 1.5 feet. Illahe Island maintenance modifies 583-873 square feet. The amount of riffle habitat in the lower Rogue is unknown, but if one assumes that 50% of the available habitat within the lower Rogue is riffle habitat, the overall percentage of riffle habitat modified by channel maintenance in the lower Rogue would be 0.23%. ([35 river miles from the mouth to Watson Creek x 5,280 feet/mile x 125 feet average river width] x 0.5 = 11,550,000 square feet of riffle habitat). The effect of maintenance is minimal, as the overall amount of riffle habitat temporarily altered is small.

Channel maintenance temporarily converts small sections of riffle habitat to a deeper habitat type more like a run. The deepened habitat could change the macroinvertebrate community within the channel where the maintenance occurs, but a shift in macroinvertebrate communities is not anticipated. These insects drift into areas with slower velocity water, where they are preyed upon by fish. The amount of habitat affected is very small and a detrimental effect is unlikely as the percentage of riffle habitat altered is very small. The thalweg deepening (the line defining the lowest points along the length of a river bed) may make it easier for larger fish, such as green sturgeon, to pass through these riffles during lower flow periods in the summer months.

Essential fish habitat will be modified. The timing of modification does not affect migration or rearing habitat. The macroinvertebrate communities will likely be unaffected. The effects for this activity category have been previously assessed and determined to *may adversely affect* Essential Fish Habitat (EFH).

The mitigation measures, and the Northwest Forest Plan Standards and Guidelines would adequately minimize the type, frequency, duration, timing, and intensity of potential adverse effects to EFH. Adequate conservation measures were incorporated into the proposal to protect EFH. Therefore, no further conservation measures are recommended.

Effects on Wildlife

Effects on wildlife and wildlife habitat were identified as a significant issue in Chapter 1. The Wildlife Biological Evaluation is contained in FEIS Appendix G (incorporated by reference).

Formal consultation with U.S. Fish and Wildlife Service has been completed: Biological Opinion Log #1-14-03-F-511 10 October 2003 (USDI FWS 2003). None of the alternatives or channel maintenance necessitate re-initiation of consultation. Table 20 identifies the species considered and summarizes the project effect determinations.

The total number of permitted motorboat trips for Alternatives 2, 3, 4, and 6 exceeds the current use by 7-10 times. If this increased use were to occur, the effects on wildlife might increase and opportunities to observe wildlife while recreating on the Rogue and Illinois Rivers would decline. The amount of use that could result in adverse effects and/or reduced wildlife observation is unknown. On-going monitoring within the project area will need to continue as actual use increases to determine if these effects are occurring.

This analysis is separated into two parts – effects on habitat and effects on species. Habitat impacts from motorboats and docks are limited to the water and the shoreline. Noise disturbance to individuals can extend beyond the shoreline. The area described for wildlife habitat in this section is generally limited to the river and 300 feet beyond the shoreline.

The alternatives differ in their potential for impacts primarily as a function of permitted use level; the greater the permitted use, the greater the potential for measurable effects. Most of the effects are in the form of noise disturbance from boats. Boat noise levels were measured in May and November 2001. The ambient noise level for the Rogue River was 50-80 decibels. Motorboat noise ranged from 60-92 decibels. This noise levels is not considered to be substantially different from ambient levels in the project area. Smaller boats consistently generated more noise than the larger tour boats, but smaller boats were audible for a shorter period of time than the tour boats (2.8 minutes versus 4.2 minutes).

Alternative 1

Under the No Action alternative, effects from non-commercial recreation would continue in the form of potential noise disturbance and presence disturbance by roads, motorboatboats, rafts, and people. This has been occurring in the project area for decades and would be expected to continue without commercial boating.

Effects Common to All Action Alternatives - Habitat Effects

Marbled Murrelet Critical Habitat

About 20 acres of the project area are in critical marbled murrelet habitat. The large conifers used as nesting habitat by this species are located above the high water line between Lobster Creek and Agness and would not be affected by the boating activities. All alternatives are consistent with Project Design Criteria (USDI FWS 2003) that prevent removal or degradation of suitable habitat, so there is *No Effect* on critical habitat.

Northern Spotted Owl Critical Habitat

Critical habitat occurs in the project area from approximately Waters Creek to Billings Creek. The late-successional habitat used by northern spotted owl for roosting and foraging occurs above the high waterline between Lobster Creek and Brushy Bar. This project does not modify critical habitat constituent elements or impair its function, so there is *No Effect* on northern spotted owl critical habitat.

Direct Effects on Wildlife Habitat

Direct habitat alteration can occur as a result of commercial boat clients trampling vegetation, disturbing sandy beach areas, and using downed wood for campfires. These effects are all negligible since they occur on a very small area (less than 1% of the riparian acres in the project area) and they occur primarily below the high water mark, so high winter flows have a much larger effect on these habitat areas and features than human activities. They are also negligible because it is uncommon for commercial clients to go onshore – most of the onshore activities are from non-commercial recreationists.

Indirect Effects on Wildlife Habitat

Since there are minimal direct effects there are no indirect effects.

Cumulative Effects on Wildlife Habitat

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring the project area for decades and is expected to continue at some level with or without commercial boating.

There are no cumulative effects because the direct effects of this project on habitat are negligible and do not measurably increase any cumulative effects of other projects in the past, present, or reasonably foreseeable future.

Effects on Species of Concern

Table 20 shows the project effect determinations for each wildlife species of concern noted in Chapter 3. Project effect determinations for each species are the same for each alternative. Disturbance from private residences, businesses, roads, noncommercial motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without the commercial boating.

Endangered and Threatened Species

Three federally-listed species occur in the project area: bald eagle, marbled murrelet, and northern spotted owl. The effect determination for these species is *May Affect Not Likely to Adversely Affect (NLAA)* for all alternatives because of the potential disturbance from noise and from the presence of people, motorboats and rafts.

One Endangered species (Steller sea lion) and one Threatened species (brown pelican) are found outside the project area in the Rogue River estuary (below RM 5) where they feed on fish. Both tour boat companies launch their trips from the estuary. Because there would continue to be motorboat activity in the estuary, and the additional effects due to tour boats are negligible in comparison, the effects determination for these two species is *No Effect*.

Table 20: Species Effects Determinations for All Alternatives

SPECIES	DETERMINATION OF EFFECTS
Proposed, Endangered, or Threatened Species	
Bald eagle	May Affect, Not Likely to Adversely Affect
Marbled murrelet	May Affect, Not Likely to Adversely Affect
Marbled murrelet CRITICAL HABITAT	No Effect
Northern spotted owl	May Affect, Not Likely to Adversely Affect
Northern spotted owl CRITICAL HABITAT	No Effect
Steller Sea Lion	No Effect
Brown Pelican	No Effect
Sensitive Species	
American peregrine falcon	May Impact Individuals and/or Habitat but not likely to cause a trend toward federal listing or loss of viability (MIIH)
California wolverine	MIIH
Pacific fisher	MIIH
Pacific fringe-tailed bat	MIIH
Pacific pallid bat	MIIH
Pacific shrew	MIIH
Del Norte salamander	MIIH
Siskiyou Mountains salamander	No Impact - Outside the known species distribution
Common kingsnake	MIIH
Northwestern pond turtle	MIIH
Black salamander	No Impact - Outside the known species distribution range
California slender salamander	No Impact - Outside the known species distribution range
Southern Torrent salamander	MIIH
Foothill yellow-legged frog	MIIH
Protection Buffer Species	
Bats using caves, mines, and abandoned wooden bridges and buildings	May affect some individuals or some habitat but effect is minimal
Flammulated owl	May affect some individuals or some habitat but effect is minimal
Neotropical Migratory Birds	
All birds in this category	May affect some individuals or some habitat but effect is minimal

Bald Eagle - Direct Effects

Project activities would occur when bald eagles are present in the project area. Eagles are disturbed less than 5-10% of the time by boating activities (both commercial and non-commercial) and they are generally tolerant of and ignore human presence. Human presence and noise have not been associated with any nesting failures in the project area, and most eagles in the project area show some level of noise desensitization, so the direct effects are minor and not measurable.

Bald Eagle - Indirect Effects

Due to the abundant quantity and variety of fish in the Rogue and Illinois Rivers, commercial sport fishing would have no adverse effect on bald eagle prey and would not require eagles to expend extra energy locating prey.

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area.

Bald Eagle - Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring the project area for decades and is expected to continue at some level with or without commercial boating.

There are no cumulative effects because the direct effects of this project on habitat are negligible and do not measurably increase any cumulative effects of other projects in the past, present, or reasonably foreseeable future.

Marbled Murrelet - Direct Effects

Project activities would occur when marbled murrelet are present in the project area. Involuntary displacement due to commercial boat noise is unlikely, but if it occurs, the adverse effects can include nest abandonment by adults, reduced nest attentiveness (leading to increased predation vulnerability), aborted feeding visits, premature fledging, and avoidance of otherwise suitable habitat (Hamer 1998). However, Long and Ralph (1998) report that murrelets generally appear undisturbed by human noise and they are not easily disrupted from nesting, and both Hamer (1998) and Long and Ralph (1998) report that many bird species, including murrelets, can habituate to relatively high levels of disturbance over time.

Marbled Murrelet - Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area.

Marbled Murrelet - Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with Project Design Criteria (USDI Fish and Wildlife Service, 2003), therefore these projects would not affect murrelets in the lower Rogue or lower Illinois River corridor.

Northern Spotted Owl - Direct Effects

Project activities would occur with northern spotted owl are present in the project area. Involuntary displacement from noise and presence of people, motorboats, rafts and vehicles is unlikely. Dillingham (1997) reports that northern spotted owl in the Rogue River corridor show desensitization to motorboat noise; therefore there is a low likelihood of a measurable effect of disturbance on owls and/or on owl reproduction.

Northern Spotted Owl - Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area.

Northern Spotted Owl - Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with Project Design Criteria (USDI Fish and Wildlife Service 2003), therefore these projects would not affect spotted owls in the lower Rogue or lower Illinois River corridor.

Forest Service Sensitive Species

The effects determinations for Siskiyou mountain salamander, black salamander, and California slender salamander are *No Impact* because they are not likely to occur in the project area.

The effects determinations for all other species is *May Impact Individuals or Habitat* (MIIH), *but not likely to cause a trend toward federal listing or a loss of viability* because of potential disturbance to individuals.

American Peregrine Falcon - Direct Effects

Project activities occur when this species is present in the project area. There are no nest sites in the project area and the likelihood of displacement of peregrines and/or their prey due to noise and/or the presence of people, motorboats, rafts and vehicles in is negligible. Monitoring shows peregrines in the Rogue River corridor are desensitized to motorboat noise, hence the low likelihood of actual disturbance or measurable effects on reproduction (Pagel 1988, Dillingham 1997). Peregrines have been observed to be unaffected by the noise and other activities associated with Rogue River jet boat races.

Peregrine Falcon - Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area.

Peregrine Falcon - Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects would not affect peregrines in the lower Rogue or lower Illinois River corridor.

Sensitive Mammals (Wolverine, Fisher, Bats, Shrews) - Direct Effects

Wolverine and Fisher: These species are unlikely to be present in the project area because they avoid human contact and appear to be very sensitive to human activity and the associated noise. Roads and human activity are common in the project area and noise from motorboats may decrease habitat suitability or quality, with a net result of decreased habitat use. The project does not include any habitat alteration, but the activities occur at a time of year when these species could be present in the project area.

Bats: The project does not modify bat habitat and is sufficiently removed from known roost, nursery, and/or hibernation sites, so effects are negligible. Collisions between bats and boats are unlikely, even when boating activity overlaps with twilight bat activity periods.

Shrew: The project does not alter habitat, but occurs at a time of year when this species could be present in the project area. Shrews are unlikely to be trampled or impacted directly by a boat if a commercial client comes ashore.

Sensitive Mammals - Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area. This additional traffic also results in increased collision potential, but this is also not likely to be large enough to have a measurable effect.

Sensitive Mammals - Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Sensitive Amphibians (salamanders and frogs) - Direct Effects

The project area is outside the range of the Siskiyou mountain salamander, black salamander, and California slender salamander. Project activities would occur when Del Norte salamander, southern torrent salamander, and foothill yellow-legged frog would be in the project area. No habitat modification is proposed – Del Norte salamander habitat occurs above the high water line and southern torrent salamander habitat is unlikely to be found below the high water line. These species are unlikely to be trampled or impacted directly by a boat if a commercial client comes ashore.

Depending on the season of year, yellow-legged frog eggs, egg masses, and/or tadpole/juvenile amphibians could be lifted by boat wake-generated wave action and deposited on shore and thereby become subject to desiccation and/or predation. Based on the Klingeman beach erosion studies (2001, 2003), boat wake-generated waves are not powerful enough to cause extensive beach erosion, so it is unlikely that these waves would have an impact on salamander and/or frog eggs and/or individuals. The Forest Service is continuing to monitor this.

Boat transportation on roads and loading/unloading activities at boat ramps are unlikely to result in salamanders or frogs being injured or killed, and this is unlikely to have a measurable effect.

Sensitive Amphibians - Indirect Effects

None identified.

Sensitive Amphibians - Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects would not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Sensitive Reptiles (kingsnake, western pond turtle) - Direct Effects

Kingsnake: No habitat modification is proposed in areas likely to be used by the common kingsnake. Boat transportation on roads and loading/unloading activities at boat ramps are unlikely to result in kingsnakes being injured or killed, and this is unlikely to have a measurable effect.

Western pond turtle (WPT): The proposed activities occur when WPTs can be found along the shoreline and/or in the river. Boat activity between April and September has a greater likelihood of causing WPT impacts because this is when WPT are most likely to be in the river or on the river bank. There is no apparent correlation between commercial boat use levels and western pond turtle populations on the lower Rogue and lower Illinois Rivers. Turtle-boat collisions are unlikely, and examined turtles (148 of them) commonly showed signs of attempted predation (tooth scrapes and indentations) and no evidence of boat collisions.

Boat wake-generated wave action could splash basking turtles and/or displace them, but the Klingeman studies (2001, 2003) indicate that the wave energy is low and this is unlikely to occur except when the largest boats (tour boats) are "plowing" (vs. "on-plane") and generate the largest waves, so this effect is likely to be small. If it does occur, Holland (2003) notes that "motorized watercraft can interfere with normal foraging, basking, movement, reproductive and other behaviors for all age and size classes of WPT. …[M]otorized watercraft can [also] interfere with normal development of eggs in gravid females by altering basking behavior, altering basking site selection and/or deep body temperatures by wave action, and /or by creating noise that disturbs them. After two years of monitoring, WPT are seldom (<5% of the time) seen altering their behavior in response to motorboats and non-motorized boats have generated at least as much, if not more, involuntary displacement as motorized boat activity. The lack of evasive action may be explained by desensitization (Holland, 1994), but each event is unique to the individual turtle and particular circumstances (e.g., boat-turtle proximity).

Motorboat wakes are unlikely to affect turtle microhabitat such as shorelines, vegetation, pools, floor composition, basking sites, and other areas because these areas are subjected to much greater levels of impact from high winter flows and any microhabitat effects are limited in extent and duration and likely to be unmeasurable.

Habitat degradation from trampling, excavation, soil loss, and undercut bank collapse from commercial clients going ashore are also of limited extent and duration and likely to be unmeasurable in the long term because of the greater impact of high winter flows.

During times of year when turtles are more likely to be using terrestrial habitats, boat transportation on roads and loading/unloading activities at boat ramps are unlikely to result in turtles being injured or killed. Since most known turtle locations are in the Rogue Wild Section where there are no roads, road-injured and/or killed turtles are unlikely to have a measurable effect on overall population levels.

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area. This additional traffic also results in increased collision potential, but this is also not likely to be large enough to have a measurable effect.

Sensitive Reptiles - Indirect Effects

Shoreline litter accumulation from human activity can attract turtle predators such as bear, raccoon, and gray fox. The effect to kingsnakes and turtles would be minor from the proposed activities, as most shoreline litter is associated with non-commercial recreationist campsites and commercial outfitter/guides are required to pick up all litter associated with their activities.

Sensitive Reptiles - Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects would not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Protection Buffer Species

The effects determination for flammulated owl and bats that use caves, mines, and abandoned wooden bridges and buildings is *may have an adverse effect to some individuals or some habitat, but effect is minimal*.

Direct Effects

Flammulated owl: Large snags would not be affected by the proposed activities. Involuntary displacement of flammulated owl due to motorboat noise and/or human presence is unlikely.

Bats: The proposed activities would not modify bat habitat and they are sufficiently removed from known roost, nursery, and/or hibernation sites so as not to pose an impact. Collisions between bats and boats are unlikely, even when boating activity overlaps with twilight bat activity periods.

Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area.

Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects would not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Management Indicator Species

The determination for these species is *may have an adverse effect to some individuals or some habitat, but effect is minimal* because there may be some disturbance, but otherwise all proposed activities comply with LRMP Standards and Guidelines related to these species.

Osprey - Direct Effects

No habitat modification is proposed. Osprey populations in the project area are reproducing at a sustainable rate and any direct effects from involuntary displacement and/or vehicle-osprey collisions are not likely to have a measurable effect on osprey populations.

Osprey - Indirect Effects

Smaller fish injured as a result of commercial fishing may provide a more readily available source of prey for osprey, but this effect is likely to be small due to the quantity and variety of fish in the lower Rogue and lower Illinois Rivers.

Osprey - Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects would not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Woodpeckers and Marten - Direct Effects

The woodpecker group includes pileated, acorn, black-backed, down, hairy, Lewis', and white-headed woodpeckers, as well as northern flickers and red-breasted sapsuckers. White-headed and black-backed woodpeckers are unlikely inhabitants of the project area.

Woodpeckers and Marten - Direct Effects

No habitat modification is proposed. Involuntary displacement and/or disturbance is unlikely to occur unlikely to have a measurable effect if it does occur because their habitat (mature forest for pileated and pine marten, snags for other woodpeckers) occupies a relatively large area when compared to the river corridor, allowing them to readily avoid the disturbance.

Woodpeckers and Marten - Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area and the pileated woodpecker and marten have ample habitat away as mentioned under direct effects.

Woodpeckers and Marten - Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects would not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Blacktail Deer and Roosevelt Elk - Direct Effects

No habitat modification is proposed. Boat noise is unlikely to cause involuntary displacement and/or disturbance that could have a measurable impact for the same reasons as those mentioned for woodpeckers and pine martens above.

Blacktail Deer and Roosevelt Elk - Indirect and Cumulative Effects

Same as woodpeckers and pine marten.

Neo-Tropical Migrant Birds

The determination for these species is *May affect some individuals or some habitat but effect is minimal.*

Direct, Indirect, and Cumulative Effects

Same as woodpeckers and pine marten.

Channel Maintenance

The Endangered brown pelican utilizes habitat below where channel maintenance occurs, therefore there would be *No Effect* to brown pelicans. In comparison to ongoing activities in the estuary, channel maintenance impacts are negligible and the effects determination for Steller sea lion is *No Effect*.

One channel maintenance site (Illahe Island) occurs in northern spotted owl critical habitat (OR-67). One channel maintenance site (Coffee Pot) occurs in marbled murrelet critical habitat (OR-07-b). Late-successional habitat occurs above the high waterline at these locations and would not be affected by channel maintenance. Channel maintenance would have *No Effect* to northern spotted owl or marbled murrelet critical habitat.

Channel maintenance effects to the bald eagle, northern spotted owl and marbled murrelet are *May Affect, Not Likely to Adversely Affect* due to the potential for disturbance from noise and/or presence of people, boats, and equipment.

All but one channel maintenance site (Illahe Island) occurs outside the area where western pond turtles have been observed in the project area. Western pond turtle are present near the mouth of Billings Creek, which is approximately 1,000 feet downstream from Illahe Island, so the effect on western pond turtle is *May Impact Individuals or Habitat* (MIIH), *but will not likely contribute to a trend towards Federal listing or cause a loss of viability to the population or species*.

There are no known foothill yellow-legged frog sightings where channel maintenance would occur, and there is un-surveyed suitable habitat at some of these sites. Juvenile and adult frogs could be temporarily displaced from pools. Channel maintenance effects for this species is MIIH because the impacted area is limited to a small portion of the suitable habitat within the project area, the species occurs at other locations in the project area, watershed and Forest, this activity has been occurring in the project area for decades, and the species is reproducing.

For Endangered species, northern spotted owl and marbled murrelet critical habitat are not affected by channel maintenance, and involuntary displacement or disturbance is unlikely. There would also be no impact to the American peregrine falcon. Although not known to be present in the project area, sensitive mammals (wolverine and fisher), and bats and shrews may be impacted by disturbance associated with channel maintenance, but this would not likely to lead a trend towards loss of habitat viability. Effects on Management Indicator Species from channel maintenance may cause temporary displacement but are not likely to lead a trend towards loss of habitat viability because of disturbance associated with channel maintenance.

Effects on Botanical Resources

The Botanical Resources Biological Evaluation is contained in FEIS Appendix H (incorporated by reference).

Effects Common to All Action Alternatives

No sensitive plants were found or are known from the immediate edge of, or in the lower Rogue or lower Illinois Rivers at boating season water levels. Drooping bulrush is found on rocks above the summer water level near Brushy Bar and is probably affected only by seasonal flooding. There would be no effect on known sensitive plant populations as a result of implementation of the action alternatives. The lower Rogue and lower Illinois Rivers Special Use Permits would not impact individuals, but may impact habitat. The proposed project activities are not likely to contribute to a trend towards federal listing or cause loss of viability to sensitive species.

Sensitive Plants

Direct Effects

There are no known sensitive plant sites within the area impacted by jet boat wakes. *Scirpus pendulus* grows on the river banks above the wake level. No direct adverse effects on sensitive species are anticipated from this project for any alternative.

Indirect Effects

There are no indirect effects because there are no sensitive species within the area impacted by jet boat wakes.

Cumulative Effects

Throughout their range, sensitive plants have been impacted to varying degrees by past management activities such as fire suppression, timber harvest, road and landing construction. Natural events, such as wild fire and landslides, have also contributed to changes in habitat and loss of sensitive plants. The impact intensity and duration varied considerably and has not been tabulated, but given the magnitude of these actions over the past 150 years of human settlement and intervention, it is likely that plants have been destroyed and populations extirpated. Other projects within the Rogue River corridor were considered and cumulative effects for all alternatives of this proposal are not considered to be of sufficient magnitude to result in a trend toward federal listing or loss of viability for the sensitive plant species listed in Chapter 3 – Botanical Resources.

Noxious Weeds

Direct and Indirect Effects

Ground disturbance while installing the Clay Hill dock or when removing the Clay Hill dock prior to seasonal flooding would not cause subsequent spread of noxious weed seeds if mitigations for noxious weeds are followed (see Mitigation Measures Common to All Action Alternatives in Chapter 2).

Noxious weed populations are present near Paradise and Half Moon Bar Lodges, but are not adjacent to or affected by docks or dock removal for winter flooding.

Cumulative Effects

Human travel through river corridors can increase the risk of noxious weed spread within the riparian corridor. This travel can be along roads or trails on land or via boats and rafts on water. This type of travel has been part of the Rogue River corridor since prior to settlement. Jet boat traffic distributes people upstream, but has little effect on increasing the spread of noxious weeds when considered with other forms of human travel along the corridor. It is unlikely that the wave action caused by jet boats is as effective at moving plants as the seasonal high water flows.

Considering the other projects in the Rogue River Corridor, the cumulative effects of constructing new boat docks are not likely to spread existing noxious weed populations during placement and/or seasonal removal for high water events, if mitigations for noxious weeds are followed (see Chapter 2).

Channel Maintenance

Channel maintenance would not impact any sensitive plants or habitat because the activities associated with channel maintenance are confined to the river, with the exception of maintenance at Illahe Island. At Illahe Island, an excavator is driven from near Billings Creek along the edge of the river to the maintenance site. There are no known sensitive plant sites where the excavator is driven. If there is exposed mineral soil above the high water mark, native grass straw and native grass seed will be used to minimize erosion and revegetate the disturbed area. Mitigation measures would require all Illahe Island maintenance equipment to be washed before crossing and working within National Forest System lands to minimize the invasive and noxious weed spread. All other channel maintenance sites are accessed by boat.

Effects on Port-Orford-Cedar

This analysis documents project-specific effects and mitigations related to the spread of *Phytophthora lateralis* (PL), the pathogen that causes Port-Orford-cedar (POC) root disease. Application of the Port-Orford-cedar Risk Key and the management practices (if any) indicated by the Risk Key will make the project consistent with the mid- and large-geographic and temporal scale effects described in the FSEIS and ROD for Management of Port-Orford-cedar in Southwestern Oregon (USDA Forest Service and USDI Bureau of Land Management 2004a, USDA Forest Service 2004).

The POC Risk Key (Figure 23) is a site-specific analysis tool to determine where risk reduction management practices would be applied. The risk key identifies where new infections should be avoided, and guides the application of one or more management practices until the risk is acceptably mitigated.

Figure 23: Port-Orford-Cedar Risk Key for All Action Alternatives

1a. Are there uninfected POC within, near[1], or downstream of the activity area whose ecological Tribal, or product use or function measurably contributes to meeting land and resource management plan objectives?

Yes; POC contributes to the visual objectives in the LRMP for both of these Wild and Scenic Rivers.

1b. Are there uninfected POC within, near[1], or downstream of the activity area that, were they to become infected, would likely spread infections to trees whose ecological Tribal, or product use or function measurably contributes to meeting land and resource management plan objectives?

Yes; POC contributes to the visual objectives in the LRMP for both of these Wild and Scenic Rivers.

1c. Is the activity area within an uninfested 7th field watershed[2] as defined in Attachment 1?

Yes; the project area is within the 22M01F, 22M09W, 23L03W, and 23L06W 7th field watersheds.

2. Will the proposed project introduce appreciable additional risk[3] of infection to these uninfected POC? [If no, then risk is low and no POC management practices are required.]

No; there will not be enough infested soil or organic matter attached to boats, trailers, or vehicles to spread the disease since boat ramps are constructed of either rock, concrete or asphalt. Also, both rivers already contain *Phytophthora lateralis* are considered to be infected, so any introduction of additional *P. lateralis* into the rivers would not have a measurable effect. There is also no POC near the boat ramps, so the introduction of *P. lateralis* to the boat ramp areas would not increase the risk of infection either.

(from USDA Forest Service and USDI Bureau of Land Management 2004a).

[1]In questions 1a and 1b, "near" generally means within 25 to 50 feet downslope or 25 feet upslope from management activity areas, access roads, or haul routes; farther for drainage features; 100 to 200 feet in streams.

[2]Uninfested 7th field watersheds are defined and listed in Attachment 1, and are those with at least 100 acres of POC stands, are at least 50% federal ownership, and are free of PL except within the lowermost 2 acres of the drainage.

[3]Appreciable additional risk does not mean "any risk." It means that a reasonable person would recognize risk, additional to existing uncontrollable risk, to believe mitigation is warranted and would make a cost-effective or important difference (see Risk Key Definitions and Examples for further discussion).

Effects Common to All Action Alternatives

There are no POC management practices required and there are no anticipated direct, indirect and cumulative effects from alternatives with this project on the spread of PL because both the Illinois and Rogue Rivers are considered to be infested with Phytophthora lateralis. The risk of additional infection from this project is low and not anticipated to add to the existing infection for the reasons noted in Figure 23.

Channel Maintenance

There are no POC management practices required and there are no anticipated direct, indirect and cumulative effects from alternatives with this project on the spread of PL because both the Illinois and Rogue Rivers are considered to be infested with Phytophthora lateralis. The risk of additional infection from this project is low and not anticipated to add to the existing infection.

Effects on Fire

Direct Effects

The commercial motorboats on the lower Rogue and Illinois Rivers are not a concern to fire managers, because the boats travel up and down the river and commercial passengers spend little time on the river banks (where fires start) in comparison to other river users.

Indirect Effects

The boat presence offers a benefit in the form of fire prevention and detection. The Forest Service does not have the ability to continually patrol the river corridor during fire season, whereas commercial motorboats are generally present daily during fire season. The operators are generally aware of fire prevention concerns and they often report violations of closure orders and/or the abuse of fire use by other river users. They also have the ability to report wildfires via radio.

When a wildfire occurs in the Rogue Wild Section, firefighting resources would need to be deployed in the area. Currently, if a wildfire incident escalates into a multi-shift, project-size fire, tour boats can provide transportation and support of firefighting resources that would reduce the level of risk firefighters are exposed to.

Alternatives that reduce or eliminate commercial motorboats increase the risk of an undesirable wildfire situation developing in the Rogue Wild Section.

Alternative 1 would eliminate the benefits of fire prevention and detection provided by tour boats, while not reducing the risks presented by other river users. Motorboats would not be available as firefighting support resource if the tour boats are no longer in business, resulting in wildfires that would grow larger, be of higher severity, and be more expensive to manage and/or suppress.

Alternatives 2, 4 and 5 meet or exceed the current level of fire prevention and detection capability. Alternative 2 provides the greatest potential benefit to fire management and provides the least risk of a wildfire growing larger and more expensive to suppress.

Alternative 3 meets or exceeds the current level of fire prevention and detection capability, but reduces detection capabilities during two high-risk days of the week. This alternative would be similar to Alternative 1 if a fire occurred on a Sunday or Monday.

Alternatives 6 minimally meets the current level of fire prevention and detection capability. Tour boats would be available for fire suppression needs.

Cumulative Effects

There would be no beneficial or adverse cumulative effects on fires or fire management resources over what has already been described. Fuels reduction projects downriver and upriver of the Rogue Wild Section would reduce the fire hazard in those areas but the effects of a fire start in the Rogue Wild Section would remain the same as described. If fuels reduction projects do not occur, the risk of a fire growing larger and more catastrophic would increase.

The presence or absence of docks at the lodges is not a fire management concern.

Effects on Air Quality

Motorboat traffic effects on air quality in the Rogue Wild and Scenic River corridor were analyzed by the Bureau of Land Management in the *Rogue National Wild and Scenic River: Hellgate Recreation Area Proposed Recreation Area Management Plan and Final Environmental Impact Statement* (USDI Bureau of Land Management 2003), p. 6-7. Although the Hellgate Recreation Area is upstream of the project area, it is part of same river corridor and also designated as a Wild and Scenic River.

In addition to analyzing alternatives designed to decrease or maintain recreation use on the Rogue River, the BLM studied the effects of increased use on the river (p. 31-38). Under the BLM scenario, 30 commercial motorized angling permits with up to two trips per day would have been authorized, as well as four commercial motorized tour boats with up to 26 round trips (in the Applegate Reach) or up to 16 round trips (in the Dunn Reach) per day. This scenario would have been similar to Alternative 2 in this document. The BLM's analysis of the effect of motorboat traffic on air quality found no substantial effect on regional or local air quality based on historical or future motorboat traffic. There would be little to no effect on air quality for all alternatives.

The Forest Service testified in *Riverhawks v. Zepeda* that Rogue River tour boat engines are four-cycle, inboard, fuel injection marine engines. These engines are more efficient, and do not generate as much pollution as an outboard engine. Diesel engines are not used.

It is unknown how many of the outfitter/guide motorboats use two-cycle versus four-cycle engines, although the industry is voluntarily transitioning to four-cycle outboards. The more efficient four-cycle engines have been an EPA requirement for new manufactured gasoline marine engines since 1997. For those outfitter/guides still operating with two-cycle engines, exhaust is localized and only present at engine start up or during slow trolling. Slow-moving floaters would certainly notice exhaust fumes if they are directly behind a two-cycle engine boat.

In addition, stable air within the river canyons is uncommon. Daily off-shore winds blow up canyon almost daily, mixing air and dispersing pollutants within the river corridors.

Direct Effects

To estimate emissions generated by motorboats, "A Desk Reference for NEPA Air Quality Analysis," prepared for the USDA Forest Service by CH2MHill, April 1995, was used. The category "Emission Factors for Uncontrolled Gasoline Powered Industrial Engines" was used as the closest match (Table 3.3.-2). Annual usage figures were obtained from Table 1 to calculate trips per day averaged across the entire year, regardless of the noted season of use. There are no usage figures for jet boats that travel to and from the lodges and the private cabins in the Rogue Wild Section, and these trips are not included in this analysis.

Tour boats have three 360 hp engines and the lodge boat is powered by two 360 hp engines. Private boats have a single engine configuration of about the same power. Trip times were estimated using non-stop cruising speeds and a Load Factor of 75%, based on the stops and starts required and the effort needed to attain and maintain cruising speeds.

The primary emissions in Table 21 are Exhaust Hydrocarbons (HC) and Nitrogen Oxides (NOx). The HC factors do not include crankcase emissions, as they are controlled (Positive Crankcase Ventilation), or fueling emissions, because no fueling takes place in the Rogue Wild Section.

The figures in Table 21 below are estimated daily emissions in grams.

Table 21: Estimated Daily Emissions

ALL MOTORBOAT USE - LOBSTER CREEK TO BLOSSOM BAR RAPIDS									
Alt. 2		Alt. 3		Alt. 4		Alt. 5		Alt. 6	
HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)
205,749	152,092	186,113	137,574	180,699	133,571	45,744	33,819	142,025	104,980

(See Appendix I for a full display of the analysis)

The figures for Alternative 1 would not be zero, since there would still be motorboats on the river. These boats have a mix of four-cycle and two-cycle engines, and emissions from this user group were not analyzed. This user group is not regulated, has not been studied, and accurate data is not available for analysis.

The tour boat engines currently in use meet the California Air Resources Board (C.A.R.B.) rating of "3 Star – Ultra Low Emission" with maximum combined emissions (HC and NOx) of 16.0 g/kilowatt-hour. The analysis in the table above uses 16.3 g/kW-h, which excludes 0.66 g/kW-h of fueling emissions, so the values in the table are probably somewhat high. Engine manufacturers are currently working with the tour boat companies to develop engines which will meet the 2007 emissions goal of 5.0 g/kW-h.

Indirect and Cumulative Effects

Based on testimony in *Riverhawks v. Zepeda* and the analysis and conclusion made by the BLM in the Hellgate Recreation Area RAMP/FEIS, there would be little to no indirect or cumulative effects to air quality for any of the alternatives.

Channel Maintenance

There would also be no direct, indirect, or cumulative effects on air quality due to the infrequent maintenance at Illahe Island and the small, localized riffle maintenance areas.

Effects on Cultural Resources

Water-based activities involving the use of river craft, such as tour boats, drift boats, and rafts, on the lower Rogue and lower Illinois Rivers are considered to have "no effect" on the Heritage Resource. These activities are considered non-undertakings in the *Programmatic Agreement Among the United States Department of Agriculture, Forest Service, Pacific Northwest Region, the Advisory Council on Historic Preservation, and the Oregon State Historic Preservation Officer Regarding Cultural Resource Management on National Forests in the State of Oregon.*

A non-undertaking is defined as: "an action having little or no potential to affect historic properties and is considered to be excluded from case-by-case review." The Non-Undertakings List, a supplement to the Programmatic Agreement, includes #13, "Issuance of special-use permits, easements and other agreements where no surface disturbance is authorized and where no properties greater than 50 years old are involved" and #14, "Renewals, assignments and conversions of existing special-use permits, easements and other agreements where existing stipulations in the permit are sufficient to protect historic properties which may be involved."

Although activities on the water do not have an effect on the Heritage Resource, those associated activities which take place off-river on terraces and gravel bars such as camping, exploring, and recreational collecting do have the potential to disturb the sites. Tour boats and the lodge boat usually only unload passengers at lodges and developed facilities and therefore have little potential effect on the resource. Fishing guides are also primarily day users, with little to no off-river use. Each alternative would result in little to no off-river activities and therefore, would have no impact on archeological sites.

Direct, Indirect, and Cumulative Effects

Although river use itself has little to no effect on archeological sites, use of gravel bars, river terraces and trails has the potential for site disturbance. Monitoring known sites will help prevent casual collection or looting. Limiting river usage by permit or other means also limits the potential for site disturbance. Interpretation and education regarding certain sites or features will not only enhance the visitor experience but can offer a diversion from the more sensitive sites. Heritage Resource sites contain information important to the development of human activities in the Wild and Scenic Rogue and Illinois Rivers, are a non-renewable resource, and cannot be lost due to complacency.

Channel Maintenance

For channel maintenance taking place within the river corridor, there would also be no direct, indirect, or cumulative effects on cultural resources.

Effects on Recreation

Recreation user conflicts in the lower Rogue Wild Section were identified as a significant issue in Chapter 1.

Alternative 1

Direct Effects

Over 46,000 people use outfitter/guide services on the lower Rogue and lower Illinois Rivers annually. People who do not have the time, equipment, or experience to engage in these river activities without an outfitter/guide would not be able to have this recreation experience.

The loss of commercial motorboat transportation would affect more than half of the lodge clients. They would have to either forgo the experience or hire an outfitter/guide to float them down to the lodges from the upper Rogue River, and then float down to Foster Bar when they leave. These float trips would be more expensive, take multiple days and include more whitewater. People who want a short trip, are intimidated by whitewater, or cannot afford the float trip would not have the opportunity to vacation at the lodges.

New/inexperienced boat owners would have to learn whitewater motorboat skills from friends who have jet boat experience, learn by experience, or receive training on other rivers. This would affect only a few people since only six training trips were reported from 2000-2004.

People without a boat or river-running experience would not be able to take scenic trips to take photos or view wildlife. Scenic trips are booked by people who want to have the flexibility to stop at their leisure and that is generally not possible on tour boats. There were 19 of these trips between 2000 and 2004.

People without rafts, equipment, or river-running experience would not be able to take float trips below Foster Bar. There were 13 of these trips between 2000 and 2003.

Some non-motorized boaters (rafts, kayaks, drift boats, etc.) do not like motorboats in the Rogue Wild Section for a variety of reasons, including safety, motorboat wakes, noise, exhaust smells, and sharing the river with another user group. Non-motorized users do not like tour boat passengers taking pictures of them or looking at their camps, as it adversely affects their recreational experience (Laitner, Knapp, Sally, McDonald, Higgins, Ludwig, and Flotho declarations in Riverhawks 2001 lawsuit). For non-motorized boaters, Alternative 1 would have beneficial effects, but there would still be non-commercial motorboats on the river, so not all of the adverse effects would be eliminated. Inexperienced and/or unknowledgeable private motorboaters can cause conflicts with floaters by going too fast or too close to their boats. This can also occur accidentally if the people in the different boats do not see each other.

Private motorboats and floaters would have less motorboat traffic to negotiate with commercial motorboats no longer on the river. Conflicts would be reduced accordingly.

Under this alternative, there would be a shift to 100% private motorboat recreation on the lower Rogue and Illinois Rivers within the National Forest boundary. No commercial motorboat recreation use or services use would occur.

Safety for Paradise and Half Moon Bar Lodge guests and staff would be reduced due to dock removal. Guests would have to step in and out of boats on an uneven gravel or sand bar. Lodge staff would have to lift heavy supplies and equipment in and out of boats on uneven gravel bars. There would be no room to use hoists to lift the loads in and out of the boats. Safety conditions at Clay Hill Lodge would not be changed because they currently do not have a dock.

Indirect Effects

With no commercial livery service, private landowners without road access would have to make more boat trips to get supplies and they would have to buy a motorboat if they did not already own one. Commercial livery services made 269 trips from 2000-2004.

Some people who would have taken commercial trips above Lobster Creek would use commercial fishing guides and tour boats to take trips below Lobster Creek. They would have a different recreation experience because the river banks are more developed below Lobster Creek and the river is much slower and straighter. Others would go to another river or on the upper Rogue River near Grants Pass and would not get to experience the unique qualities of the lower Rogue River. People vacationing on the coast or those locals who do not have the time or money to travel to other areas would forgo the experience.

Many outfitter/guide clients use other recreation facilities in or near Gold Beach, including Forest Service campgrounds and trails, during their stay in Gold Beach. Use of these facilities would decline as these commercial clients move to other areas for recreation.

Cumulative Effects

No cumulative effects were identified.

Alternative 2

Direct Effects

At the full permitted level, adverse recreation impacts are likely on the lower Rogue and lower Illinois Rivers. The overuse threshold in terms of commercial boat traffic is not clear. The recreation experience would be protected from this effect of overuse by required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring. Outfitter/guide clients would have the most opportunities to book a trip on the lower Rogue and lower Illinois Rivers when compared to other alternatives.

When compared to other alternatives, lodge guests would have the most opportunities to get to the lodges in the Rogue Wild Section under this alternative. The number of trips would more than double current actual use at the full permitted level and the number of lodge guests would increase in response to demand.

Livery service, whitewater boat training, scenic trips, and raft trips (Foster Bar to Agness) would expand to the full permitted level in response to demand.

Lower Rogue River motorboat traffic would increase around tenfold to 32,818 trips if use expanded to the full permitted level. There would be an increase in conflicts between non-motorized and motorized users, and all motorboats would experience high levels of boat traffic. The recreation experience would be protected from these effects by the required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring.

More motorboats would mean more noise and increased boat traffic and noise would impact hikers on the Rogue River Trail because they would hear and see more boat traffic than at current levels of use.

Lower Illinois River motorboat traffic would increase over a hundredfold to 4380 trips from an average 2 highest years use of 30 trips (2000-2004) if use expanded to the full permitted level. There would be more noise and traffic and crowding of popular fishing holes. The recreation experience would be protected from these effects by the required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring.

Safety for lodge guests and staff would be maintained at Paradise and Half Moon Bar Lodges. Safety would be improved at Clay Hill Lodge with the addition of a dock. This could be especially beneficial to people who have difficulty keeping their balance or difficulty walking. Lodge staff would have less difficulty loading and unloading materials and supplies and would have the opportunity to use hoists to assist them in lifting heavy objects.

Indirect Effects

People who do not like motorized use in the Rogue Wild Section and float the river at current use levels would stop floating the Rogue Wild Section as motorized boat use increases beyond historical levels. The number of displaced users would depend on their tolerance for motorized use. Most users who dislike motorized use would stop floating the lower Rogue Wild Section if motorized use reaches the permit limits.

The risk of motorized boating accidents would increase on the lower Rogue River at the permit limits since the number of motorboat trips would be greatly increased over the 2000-2004 actual use levels.

During periods of good fishing, boat ramps would be crowded with both commercial and non-commercial fishing boats if full permit levels were reached.

Cumulative Effects

Private boats and floaters would have a cumulative impact. Private motorboats and floaters, in addition to the commercial traffic, would increase traffic and noise. An increase in demand for commercial recreation would likely mirror an increase in demand for private recreation as well. This would add to the direct and indirect effects listed above.

Alternative 3

Direct Effects

Commercial recreational use would be able to expand with demand but would be limited to Tuesday through Saturday in the Rogue Wild Section, limiting the number of people with the opportunity to recreate in that section. Saturday demand for Rogue Wild Section trips would be higher since most commercial demand is on the weekend and there would be no Wild Section trips on Sunday/Monday.

It is possible that at the fully permitted level the tour boat recreational experience would be diminished for some clients since they would see more boats and people on the river than at current levels. It is not clear where the threshold of overuse, in terms of too much commercial boat traffic, would occur. The recreation experience would be protected from this effect by the required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring.

Lodge boat use would expand with demand. At full permitted use there would be 54% more trips than the current use level.

Livery service, whitewater boat training, scenic trips, and raft trips would be more difficult to schedule in the Rogue Wild Section due to the Tuesday through Saturday only restriction.

There would be a nearly a tenfold increase in commercial boat traffic at the full permitted level. There would be an increase in motorized vs. non-motorized conflicts in the lower Rogue Wild Section, and the conflicts would occur Tuesday through Saturday, but this could be mitigated if people who don't like motorized use would schedule their float trips so they would float between Blossom Bar Rapids and Foster Bar on Sunday or Monday. All motorboats would experience high levels of boat traffic in the Recreational and Scenic Sections of the lower Rogue River. The recreation experience would be protected from these effects by the required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring.

High levels of motorized traffic would increase noise and the increased traffic and noise would impact hikers on the Rogue River Trail on Tuesday through Saturday. On Sunday and Monday they would continue to see and hear private motorboats.

Effects of commercial motorboat use on the lower Illinois would be the same as Alternative 2.

Safety for lodge guests and staff would be the same as Alternative 2.

Indirect Effects

The Rogue Wild Section would receive more Tuesday through Saturday use by people displaced from the Sunday and Monday trips.

Float permits with starts of Friday and Saturday would have increased demand so floaters can be on the Rogue Wild Section on Sunday and Monday when commercial motorized use is prohibited.

The Recreational and Scenic Sections of the lower Rogue River would receive more Sunday/Monday use by people who were displaced from the Rogue Wild Section.

The risk of motorized boating accidents would be the same as Alternative 2.

Cumulative Effects

The cumulative effects would be the same as Alternative 2.

Alternative 4

Direct Effects

Commercial motorboat use would be able to expand with demand until it reached the permit limit. Effects in the Recreational and Scenic sections of the lower Rogue and lower Illinois rivers would be the same as described in Alternative 2.

It is unlikely that there would be an increase in motorized vs. non-motorized conflicts or adverse impacts to recreation in the lower Rogue Wild Section. The additional permitted increase in use by commercial boat traffic on the river would not exceed a 25% increase above the two highest years use from 2000-2004 and the District Ranger would have the ability to restrict the additional use to a lower level or deny it. It is not clear where the threshold of overuse, in terms of too much commercial boat traffic, would occur. If the threshold were below the 25% additional use, the recreation experience would be protected from this effect of overuse by the required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring.

Tour boat and fishing guide clients would have the same opportunities to book a trip in the lower Rogue Wild Section in 2000 to 2004. If future demand is higher than the high 2 year average, those opportunities would increase as much as 25% if additional use were approved. Opportunities on the Recreational and Scenic Sections would be the same as those described in Alternative 2.

Lodge boat use would expand with demand until it reached permit limits. At full permitted use there would be 42% more trips than at the current use level.

Livery service, whitewater boat training, scenic trips, and raft trips would expand with demand until they reached permit limits.

Safety for lodge guests and staff at Paradise and Half Moon Bar Lodges would be the same as in Alternative 2. The effects at Clay Hill Lodge would be the same as those described in Alternative 1.

Indirect Effects

It is expected that some people who do not like motorized use in the Rogue Wild Section and float the river at current use levels would stop floating the Rogue River to Foster Bar if the additional use were approved. It is difficult to determine the threshold of additional use where this effect would occur because of the variation in individual tolerance to motorized use.

The risk of motorboat accidents in the lower Rogue Wild Section would increase slightly if the 25% additional use were approved. Risk of motorboat accidents in the Scenic and Recreational Sections would be the same as in Alternative 2.

Cumulative Effects

Same as Alternative 2

Alternative 5

Direct Effects

Commercial recreation use, whitewater boat training, and livery service would be similar to 2000 through 2004 on the lower Rogue River because permitted use is based on the high 2 year average use for that period. If future demand for services is higher than the high 2 year average, the use would increase as much as 25% if additional use were approved.

It is unlikely that there would be an increase in motorized vs. non-motorized conflicts or adverse impacts to recreation in the lower Rogue Wild, Scenic or Recreational Sections. The additional permitted increase in use by commercial boat traffic on the river would not exceed a 25% increase above the two highest years use from 2000-2004 and the District Ranger would have the ability to restrict the additional use to a lower level or deny it. However, it is not clear where the threshold of overuse, in terms of too much commercial boat traffic, would occur. If the threshold were below the 25% additional use the recreation experience would be protected from this effect of overuse by the required mitigation that would reduce the permitted number of commercial trips if adverse impacts to recreation were occurring.

Effects on safety for lodge guests and staff would be the same as Alternative 2.

Indirect Effects

Use of the lower Rogue River by floaters who dislike motorboats would be expected to continue at a level similar to the past five years (2000-2004) because commercial motorboat use is based on the high 2 year average.

The low risk of motorboat accidents on the lower Rogue River would continue because commercial motorboat use would be similar to the past 5 years (2000-2004).

Cumulative Effects

Same as Alternative 2.

Alternative 6

Direct Effects

If demand remains the same as from 2000-2004 levels there would be more demand than available trips on tour boats in three of the next five years. The recreation experience may be enhanced for some of the clients since they would see fewer boats and people on the river than at current use levels but fewer people would have the opportunity to take a tour boat trip.

Opportunities to fish with a guide on the lower Rogue River would be the same as in Alternative 2. Opportunities to fish with a guide on the lower Illinois would expand with demand to the limit of 30 trips per guide per year.

In three of the next five years there would be more demand than available lodge boat trips. Those guests would either have to forgo a stay in the lodges or find alternative transportation as described in Alternative 1.

Effects on livery service, whitewater boat training, raft trips, and safety for lodge guests and staff would be the same as Alternative 2.

Conflicts between motorized and non-motorized users would be less than in the past five years (2000-2004) because the motorboat use would be lower than average.

Indirect Effects

Use of the lower Rogue River by floaters who dislike motorboats would be expected to increase slightly since commercial motorboat trips would be limited to the average of the two lowest years use (2000-2004).

The low risk of motorboat accidents would continue.

Cumulative Effects

Same as Alternative 2.

Channel Maintenance

Direct Effects

More people are able to recreate on the lower Rogue River with tour boat trips and guided fishing trips, especially during the summer recreation season when water flows are lowest. More private trips can also occur as a result of channel maintenance. Increased riffle depth would reduce the probability of boats hitting bottom and would provide a wider channel for boats to maneuver, reducing the risk of accidents during low summer flows. Cutting willows would increase sight distance at several riffles and would reduce the risk of accidents and reduce user conflicts during low flows.

Indirect Effects

A longer section of the river could be used by motorboats during the maximum recreation use period, lessening crowding on the lower Rogue River.

Cumulative Effects

None identified.

Effects on Wild and Scenic Rivers_____

Effects on Outstandingly Remarkable Values - Rogue River

Under all alternatives, the Fisheries Outstandingly Remarkable Values (ORVs) would be protected because commercial motorboat use is not likely to adversely affect southern Oregon/northern California coho salmon. For Forest Service Sensitive Species, motorboat use may impact individual fish but it not likely to cause a trend toward federal listing or a loss of viability. Refer to the Fisheries section in Chapter 4 (and FEIS Appendix F) for an in depth discussion of effects.

Under all alternatives, the Scenic ORV would be protected because there are no activities in this project that would change or modify views from the river except dock installation. The proposed docks are in compliance with the Rogue Wild and Scenic River Management Plan because they existed at the time of the Wild and Scenic River designation in 1968.

All alternatives except Alternative 1 would protect the Recreation ORV. All components of recreational opportunity would be retained. The required mitigation to monitor effects on the Recreation ORV would protect this ORV from the adverse impacts of overuse. Alternative 1 would not protect the Recreation ORV because commercial motorboat use, one of the major components of recreation opportunity on the lower Rogue River now and at the time it was designated Wild and Scenic, would be eliminated. Additional information on the effects on recreation can be found in the Recreation section of Chapter 4.

Effects From Channel Maintenance

Under all action alternatives, the Fisheries ORV would be protected because the amount of fish habitat affected is small and the effect is temporary. Channel maintenance is not likely to affect individual fish. The increased channel depth would make it easier for larger fish to pass through these riffles during low flow periods. Refer to the channel maintenance effects discussion in the Fisheries section of Chapter 4 for an in depth discussion of effects.

Cutting willows to improve sight distance would not affect the Visual Quality Objective (VQO) of Retention because the cutting would occur in areas where the river would normally knock them down or wash them away during high flows. The cuttings would be scattered among the remaining willows and would not be visible from the river. The cut willows quickly resprout from the remaining steams and leaf-out conceals the cut stems. This activity would be subordinate to the character of the landscape and would not be apparent to the average visitor because the areas are small in size (0.01 to 0.13 acre), and short in length (40 to 200 feet) and the view duration would be very short as people float by or pass by in motorboats. The Scenic ORV is protected because the channel maintenance activities meet the VQO of retention.

Channel maintenance would enhance the Recreation ORV because it would allow more people to recreate on the lower Rogue during low flows. Refer to the channel maintenance discussion in the Recreation section of Chapter 4 for more in depth discussion of effects.

Effects on Outstandingly Remarkable Values - Illinois River

The Fisheries ORV would be protected. Commercial motorboat use is not likely to adversely affect southern Oregon/northern California coho salmon. For Forest Service Sensitive Species, motorboat use may impact individual fish but is not likely to cause a trend toward federal listing or a loss of viability. Refer to the effects to fisheries discussion in Chapter 4 for details.

The Scenic ORV would be protected because there would be no activities occurring that would change views from the river.

The Water Quality and Botanical ORVs would be protected because the proposed activities would have no measurable adverse effect on these values.

The effects on the Recreation ORV are described below. Additional information on recreation effects can be found in the recreation section of Chapter 4.

Effects on Recreation Outstandingly Remarkable Values

Alternative 1 – No Action

Eliminating commercial fishing guides would have little effect on the Recreation ORV because there are only a small number of guided trips each year. The Recreation ORV would be protected.

Alternatives 2, 3, 4, and 5

All components of recreational opportunity would be retained. The required mitigation to monitor effects on the Recreation ORV would protect it from the adverse impacts of overuse by commercial fishermen.

Alternative 6

All components of recreational opportunity would be retained. The Recreation ORV would be protected from over use by commercial fishermen because permitted use for each guide would be limited to 30 trips per year.

Effects on Wilderness

Wilderness values potentially at risk from motorized use (commercial or private) on the Rogue Wild Section include opportunities for solitude and primitive experience due to the sound of motors and the sight of motorized boats. Historical motorized use on the Rogue Wild Section has had limited influence on these wilderness values due to distance and screening of these trails from the river. There are no records of complaints from wilderness hikers about motorboat activity on the Rogue River.

The presence of docks on the river would not have an influence on wilderness values.

Alternative 1

Direct Effects

Private recreational and landowner boats would continue their use in the Rogue Wild Section.

There would be less noise heard from within the wilderness and less chance to see motorboats from a distance since there would be fewer motorboats in the Rogue Wild Section. This would provide greater opportunities for solitude in the wilderness. Noise would also be less on trails closest to the river, such as the Clay Hill Trail. Wilderness users would continue having encounters with numerous groups along the high use Rogue River Trail before heading into the wilderness, which would compromise opportunities for solitude.

Other wilderness trails would be too far away to be affected by the noise from non-commercial motorboat use. Some of the motorboat use would be visible from the Panther Ridge Trail. The visual impact would be minor due to the small size of the boats from that distance.

All wilderness trails would maintain wilderness-related opportunities consistent with the semi-primitive WRS classification.

Indirect Effects

Those people expecting solitude and a primitive experience in the wilderness are not likely to achieve that 100 percent of the time due to the private use and the existing semi-primitive classification of the area. These people would either not return to this area or would seek wilderness opportunities elsewhere.

Cumulative Effects

There are no known adverse cumulative effects on the wilderness resource when considering the other projects that may occur in the area because the effect of this alternative would be to reduce the sight and sound of motorized activity.

On-going activities would continue over time, such as routine non-motorized trail maintenance on the wilderness trails and routine motorized maintenance on the Rogue River Trail.

Alternatives 2 and 6

Direct Effects

Some boat noise would extend into the Wilderness, and this has been the existing condition since wilderness designation. The effect would dissipate as distance from the river increased. Motorboat noise would be most noticeable on the lower portion of the little-used Clay Hill Trail. Trail users transitioning from outside the wilderness on the Rogue River Trail to the Clay Hill Trail would have less expectation of solitude initially until they were further away from both the river and national recreation trail.

Motorboat noise on the river would not affect other wilderness trails due to the distance from the river. Boat activity would be visible from the higher elevation Panther Ridge Trail, but boats would appear very small from that distance.

All wilderness trails would maintain wilderness-related opportunities consistent with semi-primitive WRS classification.

Indirect Effects

Those people expecting solitude and a primitive experience in the wilderness are not likely to achieve that 100 percent of the time due to the number of motorboats and the existing semi-primitive nature of the area. People with expectations for complete solitude and isolation from motorized activity would either not return to this area or would seek wilderness opportunities elsewhere.

Cumulative Effects

Same as Alternative 1.

Alternative 3

Direct Effects

There would be less noise in the wilderness on Sundays and Mondays. On Tuesday through Saturday, noise effects on wilderness would be the same as Alternative 2.

Indirect Effects and Cumulative Effects

Same as Alternative 2.

Alternatives 4 and 5

Direct Effects

Reduced tour boat use in the Rogue Wild Section compared to Alternative 2 would reduce noise in the wilderness. Effects on the Clay Hill and Panther Ridge Trails would be the same as in Alternative 2. Effects on wilderness would be the same as Alternative 2.

Indirect and Cumulative Effects

Same as Alternative 2.

Channel Maintenance

There are no effects on wilderness from channel maintenance because it would only occur outside the wilderness in the Wild River corridor.

Effects on Socio-Economic Conditions

The alternatives result in changes to the amount of access to different segments of the rivers for commercial tour boats, fishing guides, and for the transport of customers to lodges in the Wild section of the Rogue River. Businesses that supply goods and services for outfitters and their customers are also affected. The potential economic effects to communities and businesses due to changes in commercial outfitter purchases and the associated recreation expenditures are discussed. The effects to communities are focused on Curry County identified as the primary economic impact area.

The types of permitted special use activities on the Rogue River analyzed are:

- commercial tour boats offering scenic trips and transport of guests to lodges in the Wild section
- commercial transport of lodge guests to Paradise Lodge and Half Moon Bar Lodge
- fishing guides using both float craft and motorboats

The key indicators used to assess the effects are:

- Alternative annual operations by operator type (Tour Boats, Lodge Boats and Fishing Guides)
  - Trips
  - Clients
  - Revenue
- Alternative annual community and business impacts by operator type (Tour Boats, Lodge Boats and Fishing Guides
  - Employment
  - Income

These indicators are measured using the permitted outfitter and guide operations and revenue trends under each alternative for the years 2005 to 2009. The projections are based upon recorded business activity over the years 1999 to 2004.

  - The effects of issuing or not issuing permits for docks are also considered. They are primarily assessed for qualitative differences associated with safety. They are addressed in the recreation section.

Methods and Assumptions

The economic methods and assumptions use trip and revenue data from the three types of operators. Commercial tour boat and lodge boat data covers the years 1999 to 2004. Fishing guide boat data is developed from the years 1999 to 2004, and 2000 to 2004. The revenue histories are not adjusted for inflation since the Bureau of Labor Statistics' Consumer Price Index for the Recreation Expenditure Class averaged about one percent annually from 1999 through 2005.

Fees paid to the Forest Service are either based on a flat rate or 3 percent of gross revenue, or vary by permit year to year. The difference in the fees paid does not vary substantially between the two fee schedules. The compiled historical data does not specify the fee plan by operator. All federal receipts are assumed to be 3 percent of reported gross revenue.

Past operation and revenue data for operators is evaluated to estimate rates of growth or decline in use demand. Permit use restrictions would limit future operations and could result in differences in the economic effects. If permitted use exceeds projected demand, economic effects are not expected to be different from the current situation.

Ticket prices were not reported by all operators, but are likely to be competitive with the prices that are reported. Table 22 identifies average ticket prices for the years 1999 through 2003 used in this analysis.

Table 22: Ticket Prices for Tour Boats (1999-2003)

Year	64-Mile		80-Mile		104-Mile	
	Adult	Child	Adult	Child	Adult	Child
1999-2000	$30	$12	$45	$20	$75	$35
2001-2003	$34	$14	$49	$24	$75	$35

Estimates for employment and income effects are based on user expenditures. These are direct purchases for outfitter/guide services, lodging, food and beverages and other needs. Expenditures for lodging include hotels and motels in the local communities and lodges on the river. Indirect and induced employment and income effects are also estimated. Indirect effects are purchases by businesses from other businesses supporting them. An example is purchases of gas, oil, and boat supplies by tour boat operators and fishing guides. Induced effects result from employees of these businesses spending their income on goods and services such as housing, clothing, food and medical services.

Expenditure patterns to estimate river use spending are based on National Recreation Use Monitoring (NVUM) profiles as documented in *Spending Profiles of National Forest Visitors, 2000 Update* (Stynes and White 2004). The expenditure profiles were modified to reflect current outfitter/guide fees in the project area.

The affected environment for socio-economic conditions (Chapter 3) discusses the existing commercial tour boats, commercial transport of lodge guests and fishing guides. In addition, the effects of these commercial operations are discussed in the context of the local economic activity for Gold Beach and Agness.

The economic effects of the alternatives are primarily based on the potential differences in the limits on the number and timing of trips. In order to affect current and projected uses, these limits must be binding. Table 23 displays actual use and permitted use under each alternative. Given current and projected use, only the No Action alternative, Alternative 3, and Alternative 6 limit current use levels in the near term. The economic effects of each alternative are discussed below and summarized in Table 23.

Alternative 1

Under the No Action alternative the existing special use permits are allowed to expire under their own terms. No new permits would be issued.

Economic Effects

Elimination of special use permits for commercial tour, lodge and guide boats means that this type of commercial recreational use on the lower Rogue and Illinois Rivers would cease. The current number of trips and clients would drop to zero. The outfitter and guide businesses that are dependent on these clients would cease business activity in the project area. The purchases by the outfitter and guides from other local business will decrease. Client purchases in other businesses such as lodging, food and services will also decrease.

Alternative 1 reduces trips, clients, revenues to the outfitter and guides along with the associated business activity, employment, and income. Table 23 displays these results by the economic indicators.

Table 23: Projected Use and Economic Effects by Alternative

Economic Indicator	Current Actual Use	Alt 1	Alt 2 Projected Use	Alt 3 No Substitution	Alt 3 With Substitution	Alt 4	Alt 5	Alt 6
Clients								
Tour Boat Totals	44,632	0	44,632	40,511	44,632	44,632	44,632	37,936
Lodge Boats	414	0	414	296	414	414	414	328
Guide Boat Total	2,573	0	2,573	2,369	2,573	2,573	2,573	2,573
Revenue								
Tour Boat Totals	$2,152,000	0	$2,152,000	$1,953,300	$2,062,300	$2,152,000	$2,152,000	$1,829,100
Lodge Boats	$18,200	0	$18,200	$13,000	$13,000	$18,200	$18,200	$14,400
Guide Boat Total	$343,500	0	$343,500	$316,300	$343,500	$343,500	$343,500	$343,500
Total Jobs	156	0	156	139	153	156	156	134
Total Income	$2,392,800	0	$2,392,800	$2,128,400	$2,341,700	$2,392,800	$2,392,800	$2,055,800

Alternative 2

Under the Proposed Action, the existing special use permits continue. Based on current use levels, demand would need to increase by almost 200 percent in the Wild Section for trip limits to become binding. Increases in demand of this magnitude are not expected.

Economic Effects

The current levels of use, revenues and associated jobs and income continue (Table 23). The existing outfitter and guide business can expand or contract services to meet demand.

Alternative 3

This alternative issues the 63 special use permits but excludes commercial motorized boats from the Wild Section on Sunday and Monday. This alternative results in a possible range of outcomes depending on the level of substitution with non-Wild Section trips and movement to different days of the week. Under complete substitution, the reduction in operable days lowers the cap so that growth in user demand is reduced to about 70 percent for tour boats and 60 percent for lodge boats until the limit becomes binding. Guide boat operations can still expand over 100 percent if other days can be substituted for Sundays and Mondays.

Economic Effects

The current levels of use, revenues and associated jobs and income can generally continue with full substitution (Table 23). Without substitution, and if use is distributed evenly across the week, 2 days out of 7 days, or 28% of Wild Section visits are lost. This equals a potential reduction of 4,120 tour boat clients if no substitution occurs and about nine percent of tour boat revenue.

The full impact of this loss is displayed in Table 23 in the column identifying Alternative 3 without substitution. With substitution to other sections of the river, there is a four percent revenue loss. Lodge boat clients cannot substitute, and fishing guides are considered to be able to substitute completely. Implementation of this alternative would result in effects that lie somewhere between the indicators displayed Table 23 by the no substitution and substitution columns for Alternative 3.

Alternative 4

This alternative issues the 63 special use permits, but modifies the permitted use levels in the Wild Section to more closely reflect actual use during the last five years. Under these limits, tour boats are able to expand by about 40 percent, lodge boats by about 50 percent and guide boats are able to expand by about 60 percent in the Wild Section.

Economic Effects

The current levels of use, revenues and associated jobs and income continue (Table 23). The existing outfitter and guide business can expand or contract services to meet demand.

Alternative 5

This alternative issues the 63 special use permits, but modifies the permitted use levels in all sections of the river to reflect the two highest years of actual use during 2000 through 2004. Under these limits, tour boats are able to expand by about 40 percent, lodge boats by about 50 percent and guide boats are able to expand by over 100 percent in the Wild and non-wild sections of the river.

Economic Effects

The current levels of use, revenues and associated jobs and income continue (Table 21). The existing outfitter and guide business can expand or contract services to meet demand.

Alternative 6

This alternative issues the 63 special use permits, but modifies the permitted use levels in all sections of the river to reflect the two lowest years of actual use during 2000 through 2004. Under these limits, tour boats trips and clients would decline by about 25 percent in the Wild Section and 10 percent in other sections of the river. The reduction in trips means about a 15 percent declined in revenues. Lodge boat trips and revenues decline by about 20 percent and there is no reduction in guide operations.

Economic Effects

The current levels of use, revenues and associated jobs and income are reduced (Table 23). The existing outfitter and guide operations will need contract services and provide fewer opportunities to clients. The reduction in guide operations and loss of client expenditures supports about 20 fewer jobs and about $340,000 less income in the local economy.

Channel Maintenance

Channel maintenance activities would have beneficial effects on the economics of all the action alternatives. Without channel maintenance commercial outfitter/guide opportunities, private boating and recreation use within the river corridor would be reduced with an adverse effect on economics.

Aquatic Conservation Strategy Effects

Application of the standards and guidelines in the Northwest Forest Plan, including those relating to the Aquatic Conservation Strategy, significantly limits the potential adverse effects that may result from the design and implementation of individual projects. As a result, an individual project (or individual management activity) would rarely, if ever, have a sufficient scope and duration to preclude or achieve any of the Aquatic Conservation Strategy objectives at fifth-field watershed and larger scales. Decision makers are not able or required to assess the contribution of a site-specific project to achieving Aquatic Conservation Strategy objectives. The Aquatic Conservation Strategy objectives are not to be interpreted as standards and guidelines applicable to individual projects (USDA Forest Service and USDI Bureau of Land Management 2004c).

ACS components are designed to operate together to maintain and restore the productivity and resiliency of riparian and aquatic ecosystems. If a project is in compliance with the requirements stated in the RODs (USDA Forest Service and USDI Bureau of Land Management 1994, 2004c) for each of these *components*, it will be in compliance with the ACS.

Riparian Reserves ACS Component

Chapter 3, Water Resources section, describes the existing condition, including the important physical and biological components of the fifth-field watersheds in which the project lies. Chapter 4, Effects on Water Resources, also describes the effect of the project on the existing condition. The project record demonstrates that in designing and assessing the project, relevant information was used from the applicable watershed analyses.

Riparian Reserve Standards and Guidelines

Standards and Guidelines (NWFP pages #-31 to 3-38) were reviewed to determine which were applicable to this project. Recreation Management Standards and Guidelines RM-1 and RM-2 are the only ones that apply to activities in this project.

RM-1 – New recreational facilities within Riparian Reserves, including trails and dispersed sites, should be designed to not prevent meeting Aquatic Conservation Strategy objectives. For existing recreation facilities within Riparian Reserves, evaluate and mitigate impact to ensure that these do not prevent, and to the extent practicable, contribute to attainment of Aquatic Conservation Strategy objectives.

Compliance: Only Alternatives 2, 3, 5, and 6 propose a new facility, Clay Hill dock. Construction of the dock with the required mitigations in Chapter 2 would have no adverse effects on resources as described in Chapter 4 and would not retard or prevent attainment of ACS objectives. Alternatives 1 and 4 would not build any facilities.

RM-2 – Adjust dispersed and developed recreation practices that retard or prevent attainment of Aquatic Conservation Strategy objectives. Where adjustment measures such as education use limitations, traffic control devices, increased maintenance, relocation of facilities, and/or specific site closures are not effective, eliminate the practice or occupancy.

Compliance: Alternative 1 would not issue permits and no motorboat use would occur. Alternatives 2, 3, 4, 5, and 6 would issue permits that would control the amount of commercial boat traffic and monitor use levels. These alternatives and the required mitigation (terms and conditions) are designed so they would not retard or prevent attainment of ACS objectives.

Key Watersheds, Watershed Analysis, and Watershed Restoration ACS Components

The project is not in a key watershed, and watershed analyses have been completed on the Rogue River from the mouth to Marial (USDA Forest Service 1999, 2000a, 2000b). This project does not propose any changes to Riparian Reserve widths, and no timber harvest or new road construction is planned as a part of this project. This project is therefore in compliance with the key watersheds and watershed analysis components of the ACS.

No instream restoration actions are planned for this project, consequently, it is in compliance with the watershed restoration component of the ACS.

Summary of Cumulative Effects

Council of Environmental Quality (CEQ) regulations require that federal agencies assess the cumulative effects of proposed actions. This requires a review of all environmental effects that may result, not from the direct effects of a proposal, but from a combination of existing stresses and additional effects of other actions.

Cumulative effects are defined as those impacts that result from identified actions when they are added to other past, present, and reasonably foreseeable future actions (such as salvage logging or road maintenance) regardless of who undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over time.

The area of consideration for cumulative effects varies by resource. Effects on aquatic resources such as sediment, water quality, and fisheries, accumulate within the stream systems and are analyzed by watershed. Effects on terrestrial resources, such as wildlife, accumulate at various scales. Scales range from the 1.3 mile mean home radius around known spotted owl activity centers to the Rogue River/South Coast Province scale.

When considering the cumulative effects, projects in the Rogue and Illinois River watersheds described in the Rogue River-Siskiyou National Forest's Schedule of Proposed Actions (SOPA) Report for 4/1/2004 through 6/30/2004 and the Medford District Bureau of Land Management's Medford's Messenger for Winter 2004 are listed in Table 24. These projects may occur in the reasonably foreseeable future within the area that includes the watersheds from the Forest Boundary at Marial to the Forest Boundary at Lobster Creek.

All these projects must meet their Land and Resource Management Plan and Northwest Forest Plan Standards and Guidelines. For water quality, all these projects must meet Aquatic Conservation Strategy. As a result, the projects would not affect the Rogue or Illinois water quality, and downstream effects on the project area would not occur. Since water quality is not adversely affected, these projects would not adversely affect the listed and other fish species found in the project area.

For wildlife, these projects would follow the terms and conditions of the Biological Opinions resulting from Consultation with U.S. Fish and Wildlife Service and the Forest Plan Standards and Guidelines. As a result there would be no adverse cumulative effects from these projects to the Threatened, Endangered, and Sensitive species and Management Indicator Species within the project area.

For recreation, management direction for motorized and non-motorized boat recreation is in the Hellgate Recreation Area Management Plan (RAMP) for the Rogue River, from the confluence of the Applegate River to Grave Creek. Management direction related to non-motorized boat travel from Grave Creek to Blossom Bar Rapids is in the Wild and Scenic Rogue River Management Plan and regulations adopted by the Oregon State Marine Board, Bureau of Land Management and Forest Service. Adverse cumulative effects on the recreation resource from the proposed projects would not occur due to the projects meeting Forest Plan standards and guidelines and project-specific mitigation measures.

Table 24: Past, Current and Future Projects in the Lower Rogue and Lower Illinois Watersheds

Project Type	Project Name	Watershed	Extent	Status
Timber Sale, including road construction	Too Wild	Illinois-Lawson Rogue-Gold Beach	526 acres	Under Contract
Timber Sale, including road construction	Southwest	Rogue-Gold Beach	19 acres	Under Contract
Timber Sale	Black Cat	Lobster Creek	120 acres	Decision Notice Signed
Road Reconstruction	Agness Road Reconstruction	Rogue-Illahe and Rogue-Gold Beach	22 miles	Work in Progress
Road Reconstruction	Illahe Road Reconstruction	Rogue-Illahe	3 miles	Work in Progress
Road Damage Site Repair, Fish Passage, Road Decommissioning	Several	Rogue-Illahe Rogue-Gold Beach Lobster Creek	3 sites 10 sites 12 sites	EA Completed, Some Portions Under Contract
Road Decommissioning and Stormproofing	Road 3313150	Rogue-Gold Beach	4.9 miles	EA Completed, Not currently Funded
Trail Reconstruction	Illinois River Trail, Oak Flat to Silver Creek	Illinois-Lawson	8 miles	EA Completed, Contract Being Prepared
Trail Maintenance	Rogue River Trail, Marial to Big Bend	Rogue-Illahe	16 miles	Spot maintenance planned for Summer 2005
Trail Maintenance	Lower Rogue River Trail	Rogue-Illahe Rogue-Gold Beach	13 miles	Spot maintenance as needed
Road Maintenance	Various Locations	Rogue-Illahe, Rogue-Gold Beach, Illinois-Lawson, Lobster Creek	Varies by year	Blading, brushing, ditch debris and small slide removal
Placer Mining	Three mining claims on Lobster Creek	Lobster Creek	1,000 feet	Suction dredging, panning, sluicing
Shaded Fuel Breaks	Along existing roads	Rogue-Illahe, Rogue-Gold Beach, Illinois-Lawson	7 miles	Planned, unknown implementation date

The past, current and reasonably foreseeable future projects that are listed in Table 24 were included in the cumulative effects analysis for each resource area in Chapter 4.

In addition to these specific projects, the following activities may take place in the foreseeable future within project area watersheds:

- Timber harvest, road maintenance, and road reconstruction on private timber company lands
- Meadow restoration on Forest Service managed lands.
- Fish habitat restoration in small to medium streams, including placing large wood or brush bundles, or planting trees in riparian areas of fish-bearing streams
- Pre-commercial thinning of crowded young trees
- Special forest products permits for harvest of mushrooms, boughs, and other vegetation
- Residential tree removal, vegetative clearing and earthmoving in Agness, Illahe, and scattered residences and agricultural areas along the river
- Gravel extraction from depositional bars in the Rogue River
- Road maintenance of Forest Service, County, and private roads and driveways
- Motorized traffic on roads in the watershed.

Cumulative effects for each alternative are addressed in Chapter 4. Incremental impacts from multiple actions over time are assessed for each resource.

The cumulative effects of the past and potential future effects of the Biscuit Fire and logging in the watershed were addressed in the Biscuit Fire EIS. The Biscuit Fire effects only affect the Rogue River below the confluence of the Illinois River. The impacts on the watershed from all of the alternatives in this EIS are minor and negligible compared to natural changes in the watershed and to impacts caused by many of the projects listed above.

Due to the inherent level of precision in cumulative effects analysis, a more detailed cumulative effects analysis that include these activities could only assume that approximately zero additional impacts would result from all alternatives. Consequently, a more detailed cumulative watershed effects analysis beyond what has already been done for the Biscuit Fire EIS was not justified.

Short-term Uses and Long-term Productivity

NEPA requires consideration of "the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity" (40 CFR 1502.16). As declared by Congress, this includes using all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans (NEPA Section 101).

Short-term land use includes the day-to-day and even year-to-year activities that visitors, permittees and Forest Service land manages engage with the Rogue and Illinois Wild and Scenic River Corridors. This includes activities that remove resources from the land, such as hunting and fishing: and activities that do not, such as rafting, motorboating, scenery viewing, hiking and photography. Short-term actions include management activities, such as vegetation management, facility improvements, road and trail maintenance.

Long-term productivity refers to the land's continuing ability to produce commodities, such as fish, wildlife, plant products, recreation opportunities, scenery for future generations. This includes management practices and uses that do not impair soil productivity and water quality and that provide habitat without altering the natural landscape to recover, or impair geologic features to the extent they lose identity.

The Wild and Scenic Rivers Act provides for federal protection of designated rivers to be free-flowing and preserving them and their immediate environments. The Rogue National Wild and Scenic Management Plan and the Illinois Wild and Scenic River Management Plan outline management objectives. These objectives maintain short-term uses and enhance long-term productivity of the river corridors.

Unavoidable Adverse Effects

Implementing any alternative would result in environmental effects. Effects are lessened by following the mitigation measures intended to keep the extent and duration of these effects acceptable and by following the standards and guidelines outlined within the Rogue and Illinois Wild and Scenic River Management Plans, the Siskiyou National Forest LRMP, and by following applicable laws and regulations. Unavoidable adverse effects for each of the alternatives are discussed below.

Alternative 1

There would be adverse effects to the economy of Curry County. Trips, clients, and revenues to the outfitter and guides would be reduced along with associated business activity, employment and income. The total estimated reduction in total revenue would be $2,392,800 and an estimated 156 jobs would be lost.

Commercial motorboat use, one of the major components of the recreation Outstandingly Remarkable Value on the Wild and Scenic Rogue River would be eliminated in the lower Rogue River (Lobster Creek to the pool below Blossom Bar rapid).

There would be startle or avoidance responses in fish as private boats pass within 5 meters. There would be temporary displacement of wildlife with no measurable loss of habitat by private recreation use.

Benefits of fire prevention and detection provided by tour boats would be eliminated while not reducing the risks presented by other private river users. Safety for Paradise and Half Moon Bar Lodge guests and staff would be reduced due to dock removal.

Effects Common to All Action Alternatives

There would be startle or avoidance responses in fish as commercial and private boats pass within 5 meters. There would be temporary displacement of wildlife with no measurable loss of habitat by commercial and private recreation use.

Alternative 3

There would be adverse effects to the economy of Curry County. Trips, clients, and revenues to the outfitter and guides would be reduced along with associated business activity, employment and income.

The total estimated reduction in total revenue would be $264,400 and an estimated 17 jobs would be lost. Fire detection capabilities by tour boats would be reduced during two high-risk days each week.

Alternative 6

There would be adverse effects to the economy of Curry County. Trips, clients, and revenues to the outfitter and guides would be reduced along with associated business activity, employment and income. The total estimated reduction in total revenue would be $337,000 and an estimated 22 jobs would be lost.

Channel Maintenance

Habitat for USFS Sensitive Species and Essential Fish Habitat would be affected by channel maintenance (MAA = May Adversely Affect). The effect is minimal as the overall amount of riffle habitat altered is small.

Irreversible and Irretrievable Commitments of Resources

Irreversible resource commitments are those that cannot be regained, such as species extinction, critical habitat loss, cultural site disturbance or mined ore removal.

- Whether or not to issue new special use permits for commercial outfitter/guide opportunities would have no irreversible commitments of resources.

Irretrievable commitments are those that are lost for a time, such as the temporary loss of developed recreational opportunities where wildlife management is the emphasis or loss of timber productivity in forested areas that are kept clear for use as a power line rights-of-way or road.

- Special use permits for commercial outfitter/guides are issued for five-year periods or terms. Modifications to permitted authorizations can be implemented if temporary impacts to other resources are identified and confirmed. There are no irretrievable commitments with this Proposed Action and alternatives.

Environmental Justice

Under Executive Order No. 12898 (1994), Environmental Justice ensures that, to the greatest extent practicable and permitted by law, all populations will have the opportunity to comment before decisions are rendered on, are allowed to share in the benefits of, are not excluded from, and are not affected in a disproportionately high or adverse manner by government programs and activities affecting human health or the environment.

One goal of Environmental Justice is to provide, to the greatest extent practicable, the opportunity for minority and low-income populations to participate in planning, analysis, and decision-making that affects their health or environment, including identification of program needs and designs.

This EISA process has been conducted under USDA Departmental Regulation 5600-2 (1997) including the Environmental Justice Flowchart. The Proposed Action and alternatives, purpose and need, and area of potential effects have been clearly defined. Scoping under the National Environmental Policy Act and comment periods defined in 36 CFR 215 have used multiple ways to communicate.

The Proposed Action and alternatives do no appear to have a disproportionately high or adverse effect on minority or low-income populations. The scoping and previous comment period did not reveal issues or concerns with the principles of Environmental Justice. No mitigation measures to offset or ameliorate adverse effects on these populations have been identified. All interested and affected parties will continue to be involved with the comment and decision process.

The Forest Service does not regulate prices or charges for services offered by permitted commercial outfitter/guide businesses. The price ranges for services are determined by demand and competition. All permittees are required to provide professional and reasonable services without discrimination.

Among the alternatives, there would be no discernable effects on Native Americans, women, other minorities, or the Civil Rights of any American Citizen. No adverse effects on the agriculture or transportation sectors are expected from implementing any of the alternatives.

Other Potential Effects

Effect on Prime Farmland, Rangeland, and Forestland

All alternatives are in keeping with the intent of the Secretary of Agriculture Memorandum 1827 for prime farmland. The project area does not contain prime farmland or rangelands. Prime forestland does not apply to lands within the National Forest System. In implementation of any alternative, Forest Service lands would be managed with sensitivity to the effects on adjacent lands.

Recreation Opportunity Spectrum

Rogue National Wild and Scenic River (the project area) is within the *semi-primitive*, *semi-primitive motorized, rural* and *roaded natural* Recreation Opportunity Spectrum (ROS) classifications. The Illinois Wild and Scenic River within the project area has ROS classifications of *rural* and *roaded natural*. The existing classifications would not be changed under any of the alternatives.

Wetlands and Floodplains

The environmental effects of commercial outfitter/guiding within the lower Rogue and lower Illinois Wild and Scenic River corridor wetlands and floodplains are consistent with the Standards and Guidelines of the Rogue National Wild and Scenic Management Plan, the Illinois Wild and Scenic River Management Plan, and the Siskiyou National Forest Land and Resource Management Plan. No adverse effects are anticipated to occur in wetlands and floodplains with the no action or action alternatives. Refer to the Water Resources section and Aquatic Conservation Strategy Objectives for further discussion regarding action alternatives.

Threatened and Endangered Species

No alternatives would have adverse effects on Threatened or Endangered fish, plant, or wildlife species. Refer to the Fisheries, Botanical, and Wildlife sections of this FEIS and appropriate FEIS appendices for further discussion.

Cultural Resources

The project proposal is considered a No Effect undertaking relative to Heritage Resources. Refer to the FEIS Cultural Resources section for an additional discussion.

CHAPTER 5. CONSULTATION AND COORDINATION

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The Forest Service consulted the following individuals, Federal, State, and local agencies, tribes and non-Forest Service persons during the development of this environmental assessment:

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Environmental Impact Statement Distribution

Copies of the Final Environmental Impact Statement (FEIS) have been distributed to the following organizations and government agencies in the form of hard copy, compact disc, or have been notified that the document is available on the Internet. Those individuals specifically requesting a copy of the Final EIS have also been mailed a hard copy or compact disc. Other parties on the project mailing list have been mailed a Summary document.

Copies of the Final EIS are available for review at the following locations:

Rogue River – Siskiyou National Forest
Supervisor's Office
333 West 8th St.
P.O. Box 520
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Rogue River – Siskiyou National Forest
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Federal Agencies

Federal Railroad Administration

USDA-Forest Service, Pacific Northwest Region

Natural Resources Conservation Service

USDA National Agricultural Library

National Marine Fisheries Service

Army Corps of Engineers – Northwestern Division

Environmental Protection Agency

US Department of the Interior

Bureau of Land Management - Oregon State Office

Bureau of Land Management – Medford District

National Park Service – Pacific West Region

Northwest Power Planning Council

US Department of Transportation – US Coast Guard

Federal Aviation Administration – Northwest Mountain Region

Federal Highway Administration – Western Region

State Agencies

Oregon Department of Fish and Wildlife

Oregon Parks and Recreation Department

Oregon Water Resources Department

Oregon Division of State Lands

Oregon Department of Geology and Mineral Industries

Oregon Department of Environmental Quality

Oregon Department of Land Conservation and Development

Oregon Economic and Community Development

Oregon State Economist

Oregon Department of Forestry Resources Library

Oregon Governor's Natural Resource Policy Director

Oregon Governor's Forest Advisor

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Organizations

Friends of Living Oregon Waters (FLOW)

Siskiyou Regional Education Project (SREP)

Association of O&C Counties

Rogue River Alliance

Greenpeace

Riverhawks

Headwaters

Klamath Siskiyou Wildlands Center

Sierra Club, Rogue Group

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APPENDIX A: REFERENCES

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APPENDIX B

Lower Rogue River Channel Maintenance Permit under Section 7

The Forest Service is the administering agency for the lower Rogue and lower Illinois Rivers. The Regional Forester will make a determination, based on the effects analysis documented in this FEIS, about whether channel maintenance would have a direct and adverse effect on the free flowing nature of the river, and whether or not this activity would invade the area or unreasonably diminish the Rogue Wild and Scenic River Outstandingly Remarkable Values as defined under Section 7 of the *Wild and Scenic Rivers Act* of 1968.

Channel maintenance is needed in the lower Rogue River to maintain safe passage for commercial, private, and public boats (e.g. Sheriff's Office, BLM, and Forest Service boats). Channel maintenance consists of cutting willows for sight distance and re-positioning small boulders, cobbles, gravels, and lesser amounts of sands and silts within the channel to maintain safe boat passage. Channel maintenance requires permits from the Army Corps of Engineers (ACOE) and the Oregon Department of State Lands (DSL) because the materials are excavated from and discharged into portions of the channel that lie below the ordinary high water level. These permits are required under provisions of Section 404 of the Clean Water Act.

A description of the channel maintenance activities is contained in FEIS Chapter 3, Water Resources, and the effects of channel maintenance are discussed in FEIS Chapter 4 for each affected resource area.

Channel maintenance activities have occurred since 1935 on the Rogue River at or below Agness (see Table 1 and Figure 1), and since 1962 at Illahe Island. Channel maintenance does not occur and is not authorized in the Illinois River.

Boulders, cobbles, gravels, sands, and silt are moved and deposited in response to stream flow. Channel maintenance needs occur when enough of these materials build up to restrict boat travel at riffles or near Illahe Island, or when willows reduce sight distance. Channel maintenance activities include moving accumulated cobbles and gravels and lesser amounts of sand and silt at selected riffles and Illahe Island, moving small boulders by hand at selected riffles, and cutting willows at specific locations to improve safety.

Most channel maintenance consists of repositioning small boulders, cobbles, gravels and lesser amounts of sands and silts within the channel. This is accomplished at most riffles with a boat engine propeller. A boat is tethered to the shore, and the boat propeller creates enough water force to suspend cobbles and smaller material in the flowing water so they can be redeposited to one side and/or carried downstream to be redeposited in deeper parts of the channel. This technique is referred to as the “prop wash” method. Thirty-three maintained riffles are in the Scenic/Recreational Section and the remaining 11 are below Lobster Creek. Maintenance generally occurs at 10-15 riffles each year whenever and wherever needed (and possibly more than once a year). The riffles that require channel maintenance vary from year to year, depending on the size and number of high winter flows and the sediment supply for that year.

Riffle maintenance by prop wash is done where the water depth is 1-1.5 feet or less, and there is a hazard to safe boat passage. Maintenance deepens the channel about 1.5-2.5 feet in an area about 8-12 feet wide and 50-300 feet long at each riffle. The amount of material moved varies from ~22 to 333 cubic yards for each riffle (median amount = 130 cubic yards). Most of the material moved (~80%; median amount = 104 cubic yards) is transported downstream to a deeper section of the river. The remaining 20% is pushed to the sides of the riffle.

These deeper river sections (pools) are generally about 100 feet wide, 100 feet long, and 7 feet deep during summer flows (about 2,600 cubic yards of water). The median amount of material moved by prop wash into a pool represents about 4 percent of the summer pool volume. Assuming that half of the 29 river miles from the uppermost prop wash location to the Rogue mouth consist of pools, prop wash at 15 sites would fill in about 0.003 percent of the total pool volume.

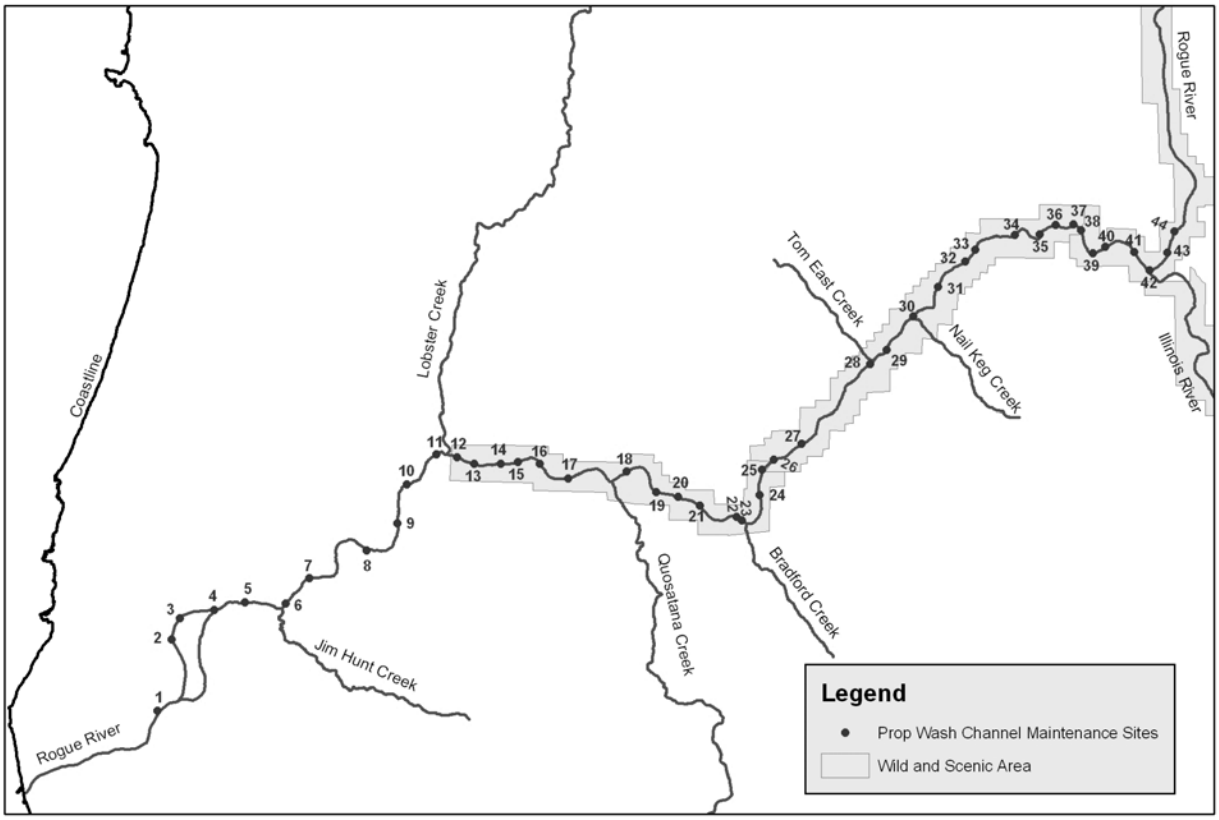
Table 1: Lower Rogue River Riffles where Prop Wash Channel Maintenance Occurs

Riffle Name	Map Number	Riffle Name	Map Number	Riffle Name	Map Number
Alder	1	William Miller	16	Nail Keg	30
Snag Patch	2	Hawkins	17	New	31
Cannery	3	Silver Creek	18	Bear	32
Ferry	4	Lowery	19	Bean	33
Canfield	5	Bacon Flat	20	Boiler/Mixer	34
Coyote/Jim Hunt	6	Big Fish	21	Peterman	35
Wakeman/Four Seasons	7	Fry's Landing	22	Twin Sisters/Smithers	36
Bill Ash	8	Bradford Creek	23	Crooked	37
Gillespie	9	Coal/Lower Coal	24	Upper Crooked	38
Jimmy Davis	10	Upper Coal	25	Wee	39
Coffee Pot	11	Slide Creek	26	Smith	40
Lobster	12	Sherman	27	Hotel	41
Shallow	13	Auberry	28	Illinois	42
Scow	14	Tom East	29	Milkmaid	43
Jennings	15			Mermaid	44

The deepened portion of the riffles would have a greater hydraulic efficiency, resulting in a lower water surface for a given flow. However, there is no or very little visual change in flow width due to the fact that the width of the channel on which maintenance is performed is small in comparison to the total width. Consequently, change in wetted perimeter due to change in flow width is insignificant. The deepening of a portion of the riffle results in an increase in both the wetted perimeter and the average depth. Consequently, there is little change in wetted perimeter to depth ratios.

An average of five maintained riffles have additional prop wash two to three times per summer as flows decrease. The amount of material moved is small in comparison to that described above for the initial maintenance at each site. The turbidity is also much less than for the initial maintenance at each location, as fines that produce turbidity have been washed out during the initial maintenance.

Figure 1. Lower Rogue River riffles Where Prop Wash Channel Maintenance Occurs



Note: riffle Names are found in Table 1.

Maintenance at Illahe Island occurred in 1974, 1986, 1992, 1994, and 1996-2000. This maintenance is not annual and is not done more than once a year. Channel maintenance at Illahe Island uses an excavator, tractor, or bulldozer to excavate or push material out of the channel and onto a gravel bar in the river. The equipment is brought down the right bank near Illahe Lodge. The maintenance takes about one-half day and the material moved varies from 389 to 583 cubic yards. The discussion above about changes in flow width and wetter perimeter to depth ratios also applies to the Illahe Island maintenance. This maintenance has no impact on pools, as the material is placed on a gravel bar.

At up to four to six riffles each year, small boulders are removed from the boating channel by hand. This does not occur every year, and, when it does occur, usually only 1-2 riffles are affected. The boulders are placed along the outside edge of the passable channel to mark the area safe for boat travel. Water continues to flow on both sides of these boulders. Roughly 40-60 small boulders are removed from the boating channel by hand at each location.

Due to relatively large hydraulic forces, particularly during winter flows, the bed material deposited and subsequently moved by channel maintenance activities is composed primarily of cobbles and gravels. The winter flows have enough hydraulic force to redistribute all materials moved by channel maintenance, including the small boulders moved by hand.

Willows would be cut using hand pruners and chain saws to improve sight distance for boater safety. The cut material would be thrown further back onto the river bar among the other willows. During most winters high water knocks down or removes these willows. When there are unusually low flows the willows are not knocked down or removed by high water and reduce the sight distance. Willows are removed from five areas (Foster Creek Rapid, Watson Creek Rapid, Burns Rapid, Peyton Rapid, and Clay Hill Island). Willow cutting areas are 15-30 feet wide and 40-200 feet long (0.01 to 0.13 acre).

Effects on Water Resources

The effects are of short duration, localized at 10-15 sites per year, and the adverse impacts are negligible. This is because the materials moved during channel maintenance are primarily gravels and other sediments that drop out of the water column as flows decrease. A few small boulders are moved by hand at up to six locations. The materials moved, including the boulders that are moved by hand, are readily moved by winter flows. The channel maintenance operations reposition the materials, but do not affect the hydrology or free-flowing nature of the river. Riffle maintenance produces a plume of turbid water for approximately 100 feet downstream (B. Blackwell, pers. comm., June 2003). Illahe Island maintenance sediment is carried downstream with the river current; the turbidity dissipates rapidly and is not observed at Foster Bar, approximately one mile downstream. The distance from the Illahe Island riffle maintenance site to the next downstream riffle maintenance site is more than 6 miles and the distances between each of the remaining riffle maintenance sites are considerably greater than 100 feet. Consequently, the turbidity at each riffle maintenance site dissipates before the flow reaches the next site, preventing the development of a cumulative effect.

The heavy equipment that is brought down the right bank to work on the Illahe Island channel maintenance would disturb the riparian vegetation on the bank. The disturbed vegetation recovers quickly. The site shows no signs of permanent damage (e.g. an eroding bank) from infrequent past use.

The primary factors in the project area that keep the Rogue River from heating up are shadows cast by the steep topography, tall trees, and cool tributary inflow. Because of their orientation to the river, the willows at two of the five willow cutting sites do not cast a shadow in the direction of the water and therefore do not have any effect on stream temperature. At the other three sites, the willows cast only a short shadow on the water for a portion of the day.

The linear length of these willow cutting areas is negligible in comparison to the length of the river in the project area that is in shadow a portion of the day due to steep topography and tall trees. The net result of willow cutting at these three sites on water temperature is therefore negligible. Because repositioning of the bed material at riffles increases the hydraulic efficiency of the reach, which increases the average flow velocity in the reach, this could lower stream temperatures. However, this effect would be negligible due to riffle maintenance sites affecting only a small portion of the total river length in the project area.

Effects on Fisheries

Habitat for USFS Sensitive Species and Essential Fish Habitat (EFH) would be affected by channel maintenance. The Sustainable Fisheries Act of 1996 (P.L.104-267), amended the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act) to require federal agencies to consult with National Oceanic and Atmospheric Administration Fisheries (NOAA) on activities that may adversely affect "Essential Fish Habitat". The Act defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" and includes all freshwater streams accessible to anadromous fish, marine waters, and intertidal habitats.

Prop wash occurs at up to 15 riffles annually. These 15 prop wash locations would temporarily modify 26,250 square feet of habitat in the lower Rogue River and would deepen the channel up to 1.5 feet. Illahe Island maintenance modifies 583-873 square feet. The amount of riffle habitat in the lower Rogue is unknown, but if one assumes that 50% of the available habitat within the lower Rogue is riffle habitat, the overall percentage of riffle habitat modified by channel maintenance in the lower Rogue would be 0.23%. ([35 river miles from the mouth to Watson Creek x 5,280 feet/mile x 125 feet average river width] x 0.5 = 11,550,000 square feet of riffle habitat). The effect of maintenance is minimal, as the overall amount of riffle habitat temporarily altered is small.

Channel maintenance temporarily converts small sections of riffle habitat to a deeper habitat type more like a run. The deepened habitat could change the macroinvertebrate community within the channel where the maintenance occurs, but a shift in macroinvertebrate communities is not anticipated. These insects drift into areas with slower velocity water, where they are preyed upon by fish. The amount of habitat affected is very small and a detrimental effect is unlikely as the percentage of riffle habitat altered is very small. The thalweg deepening (the line defining the lowest points along the length of a river bed) may make it easier for larger fish, such as green sturgeon, to pass through these riffles during lower flow periods in the summer months.

Essential fish habitat will be modified. The timing of modification does not affect migration or rearing habitat. The macroinvertebrate communities will likely be unaffected. The effects for this activity category have been previously assessed and determined to *may adversely affect* Essential Fish Habitat (EFH).

The mitigation measures, together with Best Management Practices and the Northwest Forest Plan Standards and Guidelines would adequately minimize the type, frequency, duration, timing, and intensity of potential adverse effects to EFH. Adequate conservation measures were incorporated into the proposal to protect EFH. Therefore, no further conservation measures are recommended.

Effects on Wildlife

The Endangered brown pelican utilizes habitat below where channel maintenance occurs, therefore there would be *No Effect* to brown pelicans. In comparison to ongoing activities in the estuary, channel maintenance impacts are negligible and the effects determination for Steller sea lion is *No Effect*.

One channel maintenance site (Illahe Island) occurs in northern spotted owl critical habitat (OR-67). One channel maintenance site (Coffee Pot) occurs in marbled murrelet critical habitat (OR-07-b). Late-successional habitat occurs above the high waterline at these locations and would not be affected by channel maintenance. Channel maintenance would have *No Effect* to northern spotted owl or marbled murrelet critical habitat.

Channel maintenance effects to the bald eagle, northern spotted owl and marbled murrelet are *May Affect, Not Likely to Adversely Affect* due to the potential for disturbance from noise and/or presence of people, boats, and equipment.

All but one channel maintenance site (Illahe Island) occurs outside the area where western pond turtles have been observed in the project area. Western pond turtle are present near the mouth of Billings Creek, which is approximately 1,000 feet downstream from Illahe Island, so the effect on western pond turtle is *May Impact Individuals or Habitat* (MIIH), *but will not likely contribute to a trend towards Federal listing or cause a loss of viability to the population or species*.

There are no known foothill yellow-legged frog sightings where channel maintenance would occur, and there is un-surveyed suitable habitat at some of these sites. Juvenile and adult frogs could be temporarily displaced from pools. Channel maintenance effects for this species is MIIH because the impacted area is limited to a small portion of the suitable habitat within the project area, the species occurs at other locations in the project area, watershed and Forest, this activity has been occurring in the project area for decades, and the species is reproducing.

For Endangered species, northern spotted owl and marbled murrelet critical habitat are not affected by channel maintenance, and involuntary displacement or disturbance is unlikely. There would also be no impact to the American peregrine falcon. Although not known to be present in the project area, sensitive mammals (wolverine and fisher), and bats and shrews may be impacted by disturbance associated with channel maintenance, but this would not likely to lead a trend towards loss of habitat viability. Effects on Management Indicator Species from channel maintenance may cause temporary displacement but are not likely to lead a trend towards loss of habitat viability because of disturbance associated with channel maintenance.

Effects on Botanical Resources

Channel maintenance would not impact any sensitive plants or habitat because the activities associated with channel maintenance are confined to the river, with the exception of maintenance at Illahe Island. At Illahe Island, an excavator is driven from near Billings Creek along the edge of the river to the maintenance site. There are no known sensitive plant sites where the excavator is driven. If there is exposed mineral soil above the high water mark, native grass straw and native grass seed will be used to minimize erosion and revegetate the disturbed area. Mitigation measures would require all Illahe Island maintenance equipment to be washed before crossing and working within National Forest System lands to minimize the invasive and noxious weed spread. All other channel maintenance sites are accessed by boat.

Effects on Port-Orford-Cedar

There are no POC management practices required and there are no anticipated direct, indirect and cumulative effects from alternatives with this project on the spread of PL because both the Illinois and Rogue Rivers are considered to be infested with Phytophthora lateralis. The risk of additional infection from this project is low and not anticipated to add to the existing infection.

Effects on Air Quality

There would also be no direct, indirect, or cumulative effects on air quality due to the infrequent maintenance at Illahe Island and the small, localized riffle maintenance areas.

Effects on Cultural Resources

For channel maintenance taking place within the river corridor, there would also be no direct, indirect, or cumulative effects on cultural resources.

Effects on Recreation

Direct Effects

More people are able to recreate on the lower Rogue River with tour boat trips and guided fishing trips, especially during the summer recreation season when water flows are lowest. More private trips can also occur as a result of channel maintenance. Increased riffle depth would reduce the probability of boats hitting bottom and would provide a wider channel for boats to maneuver, reducing the risk of accidents during low summer flows. Cutting willows would increase sight distance at several riffles and would reduce the risk of accidents and reduce user conflicts during low flows.

Indirect Effects

A longer section of the river could be used by motorboats during the maximum recreation use period, lessening crowding on the lower Rogue River.

Cumulative Effects

None identified.

Effects on Wild and Scenic Rivers

Under all action alternatives, the fisheries ORV would be protected because the amount of fish habitat affected and the effect is temporary. Channel maintenance is not likely to affect individual fish. The increased channel depth would make it easier for larger fish to pass through these riffles during low flow periods. Refer to the channel maintenance effects discussion in the Fisheries section of Chapter 4 for an in depth discussion of effects.

Cutting willows to improve sight distance would not affect the Visual Quality Objective (VQO) of Retention because the cutting would occur in areas where the river would normally knock them down or wash them away during high flows. The cuttings would be scattered among the remaining willows and would not be visible from the river. The cut willows quickly resprout from the remaining steams and leaf-out conceals the cut stems. This activity would be subordinate to the character of the landscape and would not be apparent to the average visitor because the areas are small in size (0.01 to 0.13 acre), and short in length (40 to 200 feet) and the view duration would be very short as people float by or pass by in motorboats. The scenic ORV is protected because the channel maintenance activities meet the VQO of retention.

Channel maintenance would enhance the recreational opportunity ORV because it would allow more people to recreate on the lower Rogue during low flows. Refer to the channel maintenance discussion in the Recreation section of Chapter 4 for more in depth discussion of effects.

Effects on Wilderness

There are no effects on wilderness from channel maintenance because it would only occur outside the wilderness in the Wild River corridor.

Effects on Socio-Economics

Channel maintenance activities would have beneficial effects on the economics of all the action alternatives. Without channel maintenance commercial outfitter/guide opportunities, private boating and recreation use within the river corridor would be reduced with an adverse effect on economics.

United States Department of Agriculture | **Forest Service** | **Pacific Northwest Region**

333 SW First Avenue (97204)
PO Box 3623
Portland, OR 97208-3623
503-808-2468

File Code: 2350 **Date:** March 25, 2005
Route To:

Subject: Rogue Wild and Scenic River Channel Maintenance Section 7 (a) Determination, Wild and Scenic Rivers Act

To: District Ranger, Chetco and Gold Beach Ranger Districts

This letter is to provide you with status information regarding the Wild and Scenic Rivers Act (WSRA) Section 7 Determination for channel maintenance proposals for the Rogue Wild and Scenic River (Rogue WSR). The WSRA Section 7 (a) determination is the responsibility of Linda Goodman, PNW Regional Forester.

As you are aware, Section 7(a) of the WSRA requires evaluation of all water resource projects on rivers designated into the National Wild and Scenic Rivers System. Proposed channel maintenance within the Rogue WSR corridor is evaluated to determine if it has a direct and adverse effect on the values for which the river was designated. Within the Rogue WSR corridor, channel maintenance is analyzed on the channel and water quality conditions, riparian and floodplain conditions, hydrologic and biologic processes, free-flowing conditions, time scale of effects, outstandingly remarkable values, and management goals of the river. No upland and off-site conditions are affected by the proposed channel maintenance. Portions of the proposal below Lobster Creek are outside the WSR corridor. These portions are being evaluated to determine whether they invade the Rogue WSR area or unreasonably diminish its scenic, recreational, fish or wildlife values as of the date of its addition to the National System. The procedure being used for this analysis is described in Forest Service Manual 2354, Washington Office Amendment 2300-94-4.

Rogue Mail Boat Services, Inc. and Rogue River Jet Boats have requested permits for channel maintenance from the US Army Corps of Engineers (ACOE). The Rogue Mail Boat Services, Inc. permit (ACOE Action Number 000006415) proposes channel clearing using prop-wash at 44 sites within and below the Rogue WSR corridor. The Rogue River Jet Boats permit (ACOE Action Number 199500281) proposes removal of gravel in the channel on the north side of Illahe Island at approximately river mile 38, and depositing the gravel adjacent to the channel, blading to smooth the contour and restore natural appearance.

The channel maintenance permit application from Rogue Mail Boat Services, Inc. has been accepted by ACOE as complete, subject to completion of consultation with the National Marine Fisheries Service under the federal Endangered Species Act. However, the permit application from Rogue River Jet Boats to date has not been accepted as complete by ACOE. Therefore, final WSRA Section 7 Determination cannot be completed until all channel maintenance permit applications are accepted as complete by ACOE. I anticipate that the permit applications will be completed in the near future, that no new activities will be proposed in the final permit applications, and that a WSRA Section 7 Determination will be issued shortly by the Regional Forester.

Because I have closely coordinated the preliminary WSRA Section 7 (a) Determination with your preparation of the *2005 Final Environmental Impact Statement Prepared for the Special Use Permits for Outfitter Guide Operations on the Lower Rogue and Lower Illinois Rivers* (FEIS), I believe that, unless there are some unanticipated changes in the permit applications, all effects on the Rogue WSR from the proposed channel maintenance activities have been addressed and disclosed in the FEIS. Because the effects to the classified rivers as discussed in the FEIS, in the ACOE permit applications and in the Forest Service specialist's analyses are comparable to the effects considered in past years, I expect I will be able to recommend to the Regional Forester a determine that there are no direct or adverse impacts or unreasonable diminishment of the designated Rogue WSR.

Sincerely,

/s/Susan Sater

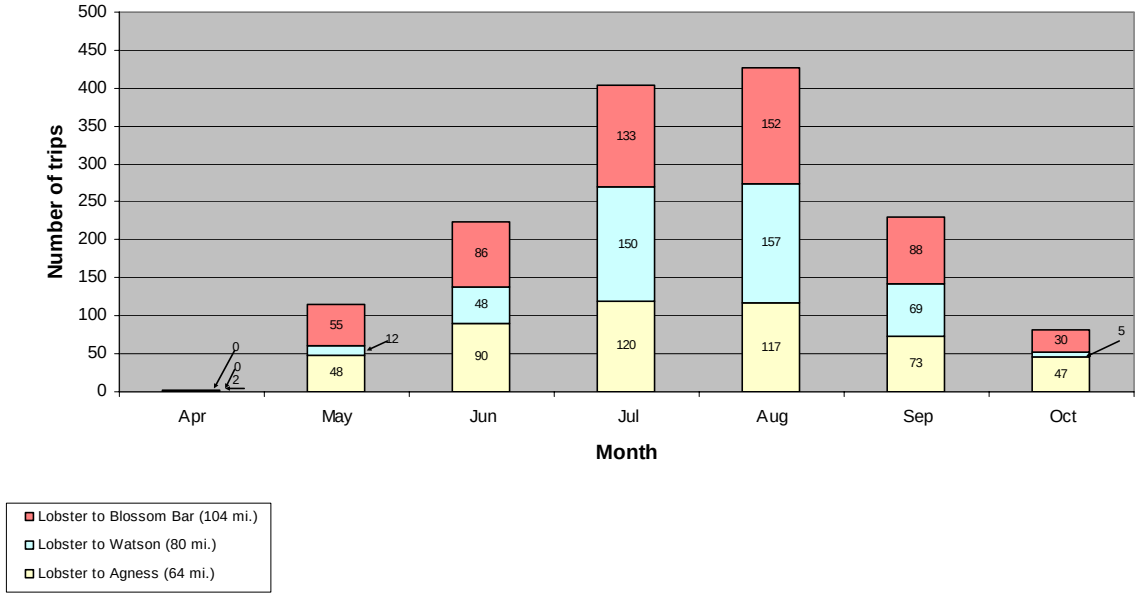
Pacific NW Region Wild and Scenic River Program Manager

cc: Susan Sater, Susan Zike, Jill Dufour, Michael Heilman

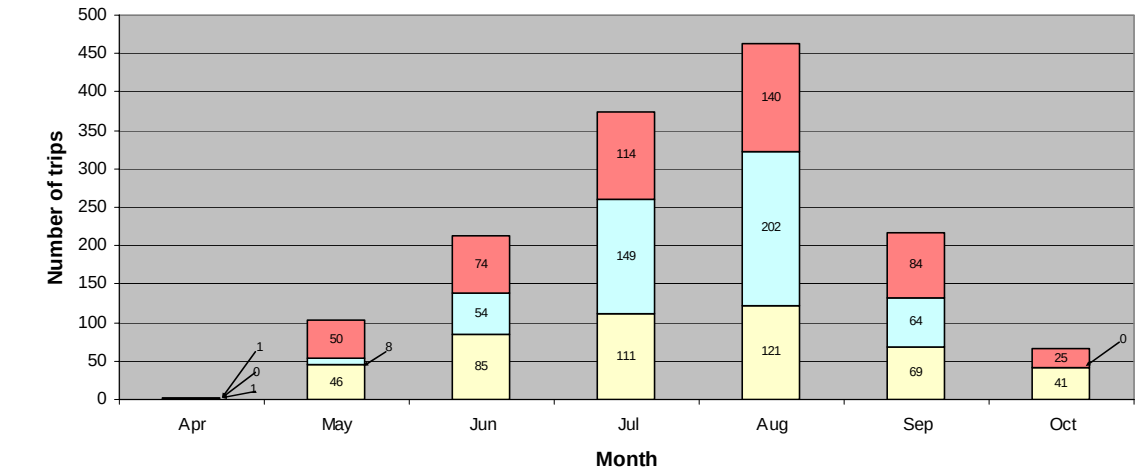
APPENDIX C: OUTFITTER AND GUIDE USE

The figures included in this appendix show the actual use on the lower Rogue and lower Illinois Rivers by year, permit type, and river section. They are provided so that interested readers can compare past actual use with the proposed permitted use under each Alternative. The source of this information is the Commercial Permittee Annual Use Reports.

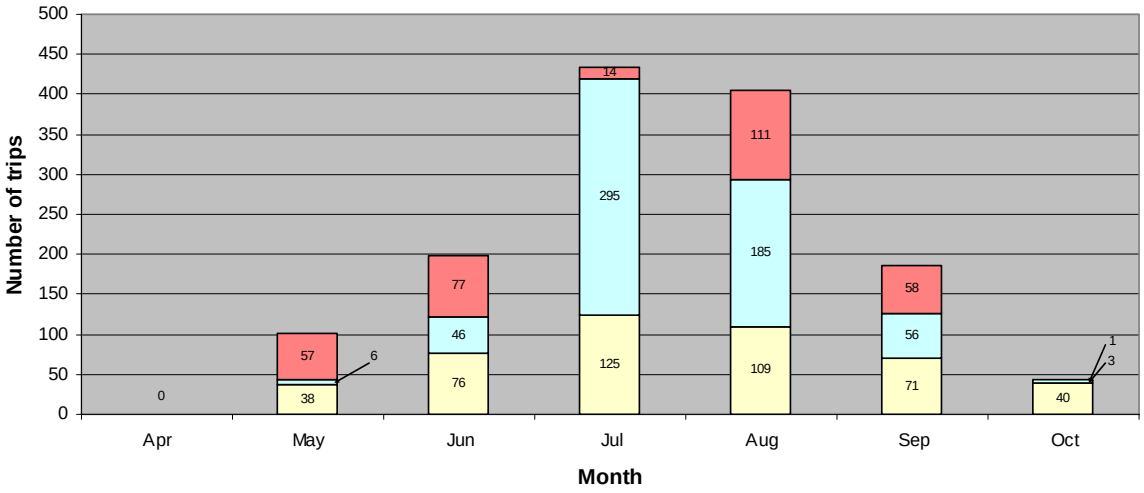
1999 Tour Boat Trips



2000 Tour Boat Trips



2001 Tour Boat Trips



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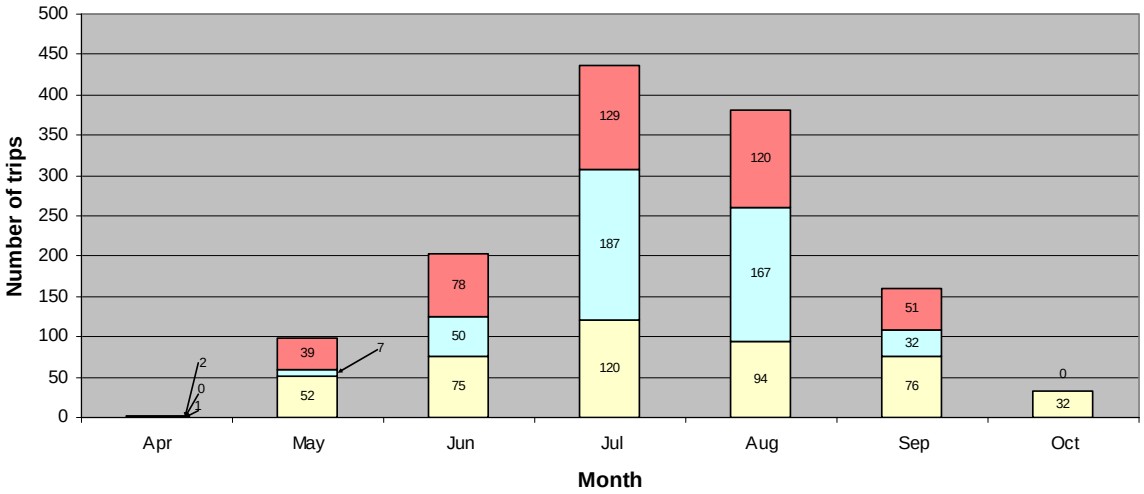
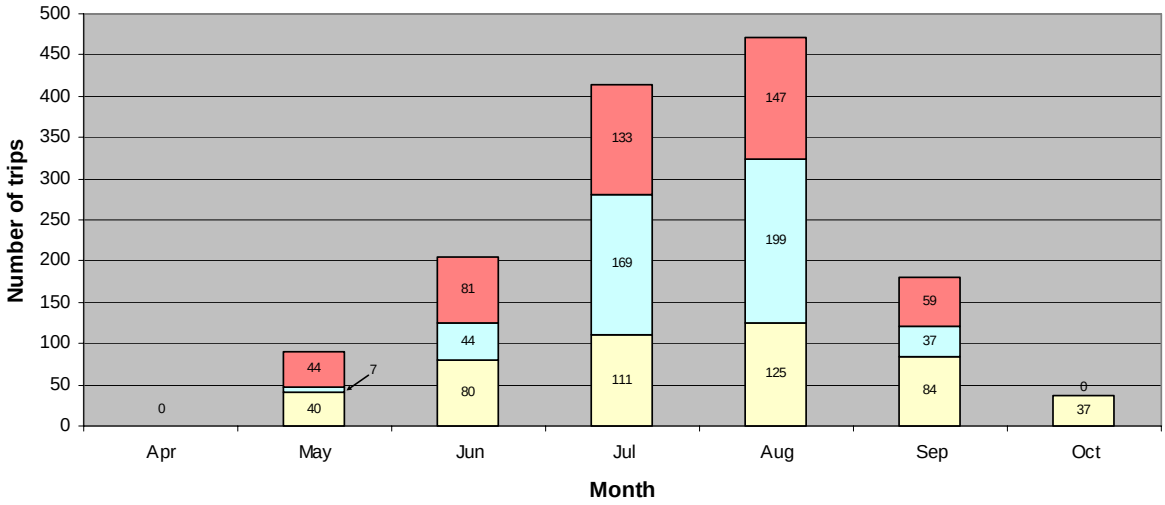
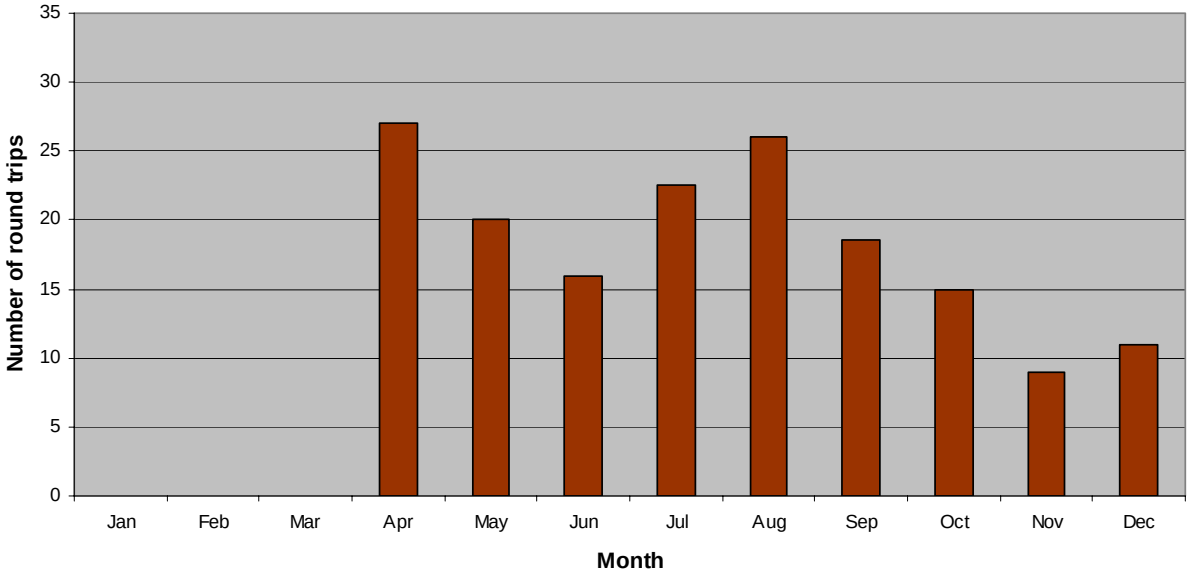


2003 Tour Boat Trips

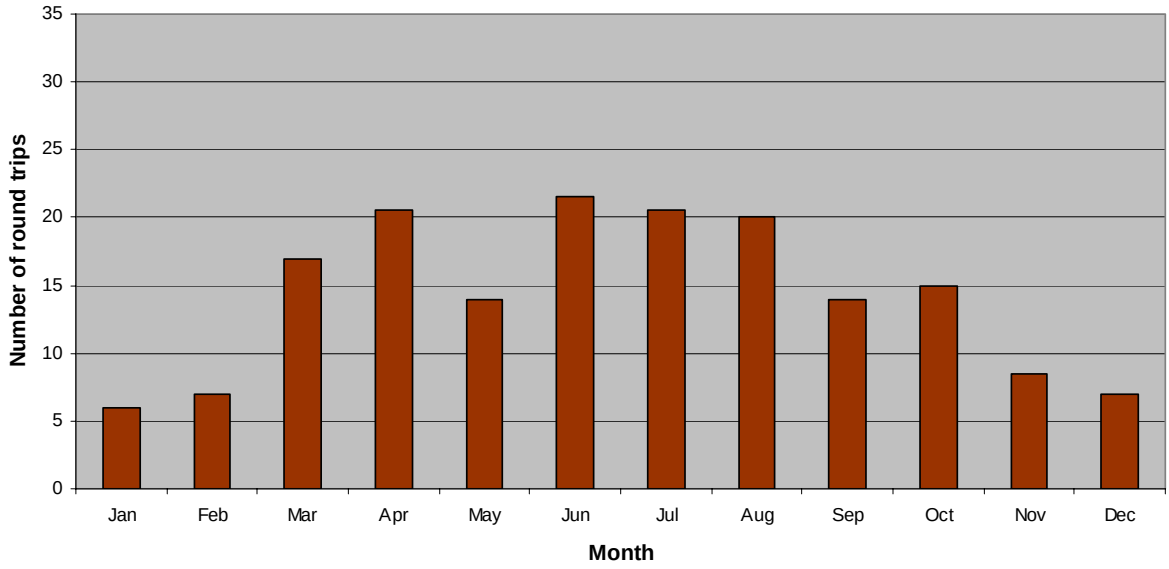


1999 Paradise Lodge Trips

Foster Bar to Blossom Bar (Wild Section)



2000 Paradise Lodge Trips
Foster Bar to Blossom Bar (Wild Section)



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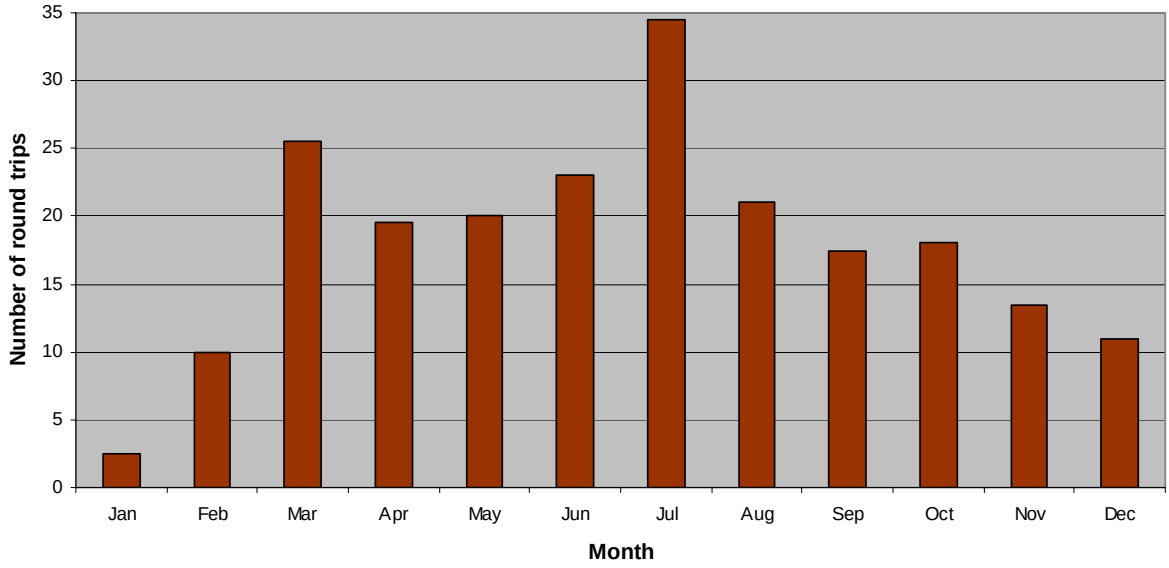

2002 Paradise Lodge Trips
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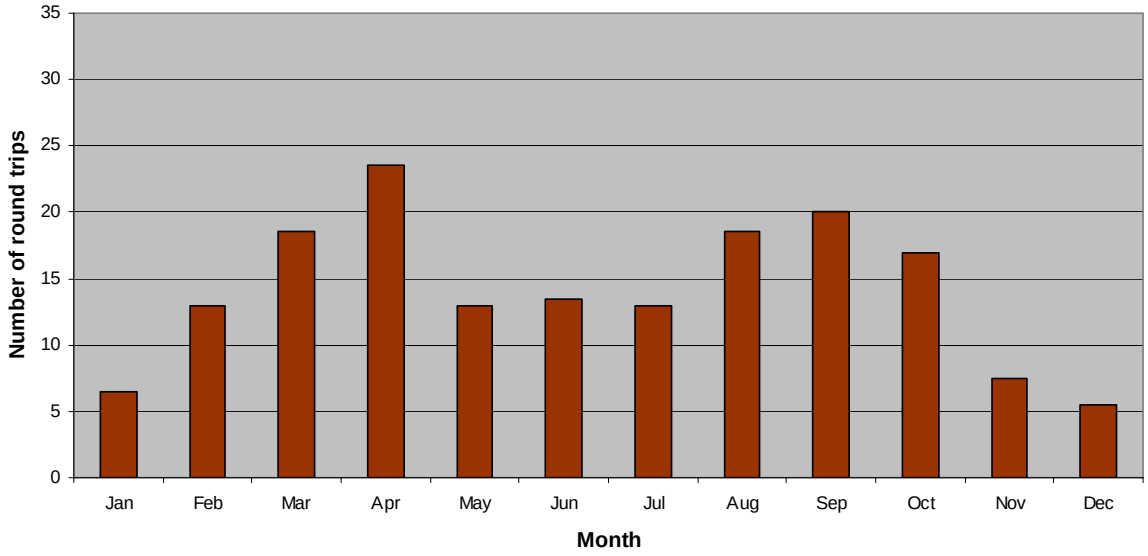
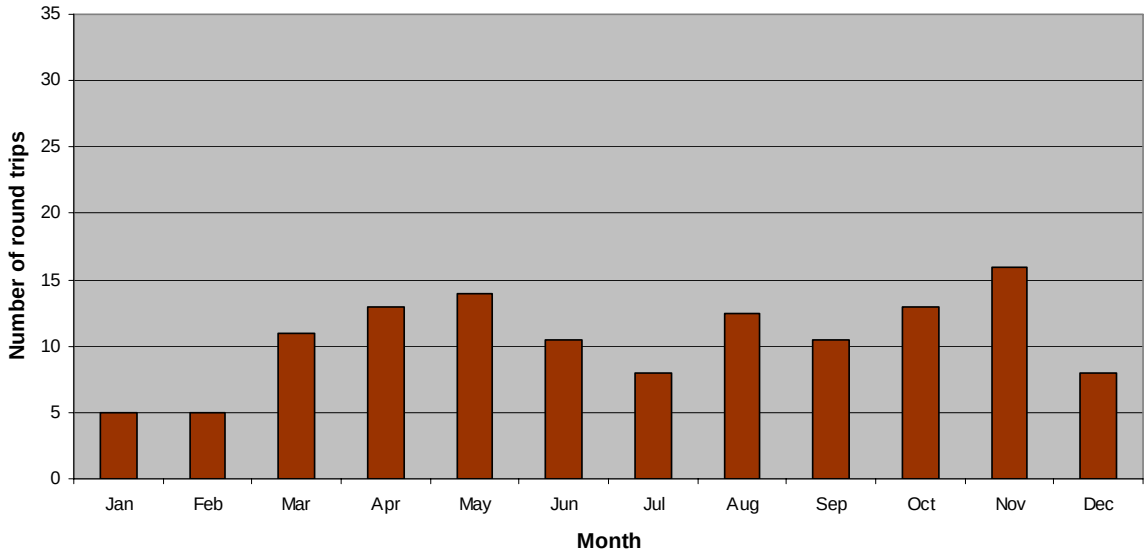
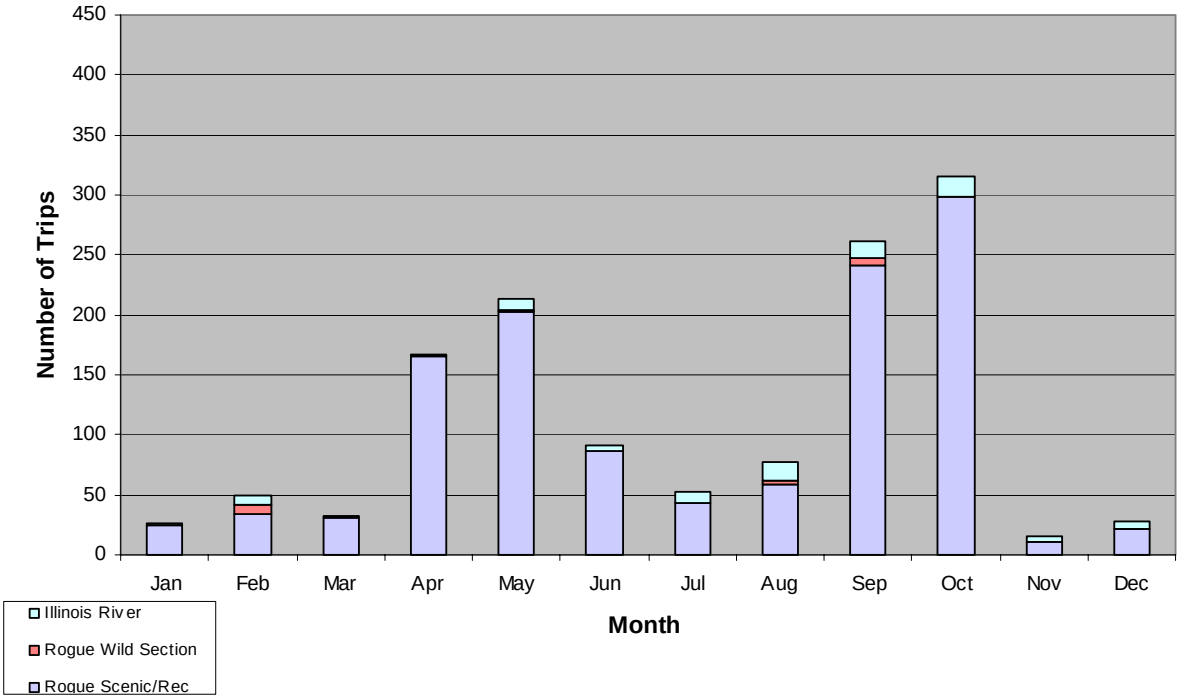


2003 Paradise Lodge Trips
Foster Bar to Blossom Bar (Wild Section)



1999 Fishing Guide Trips



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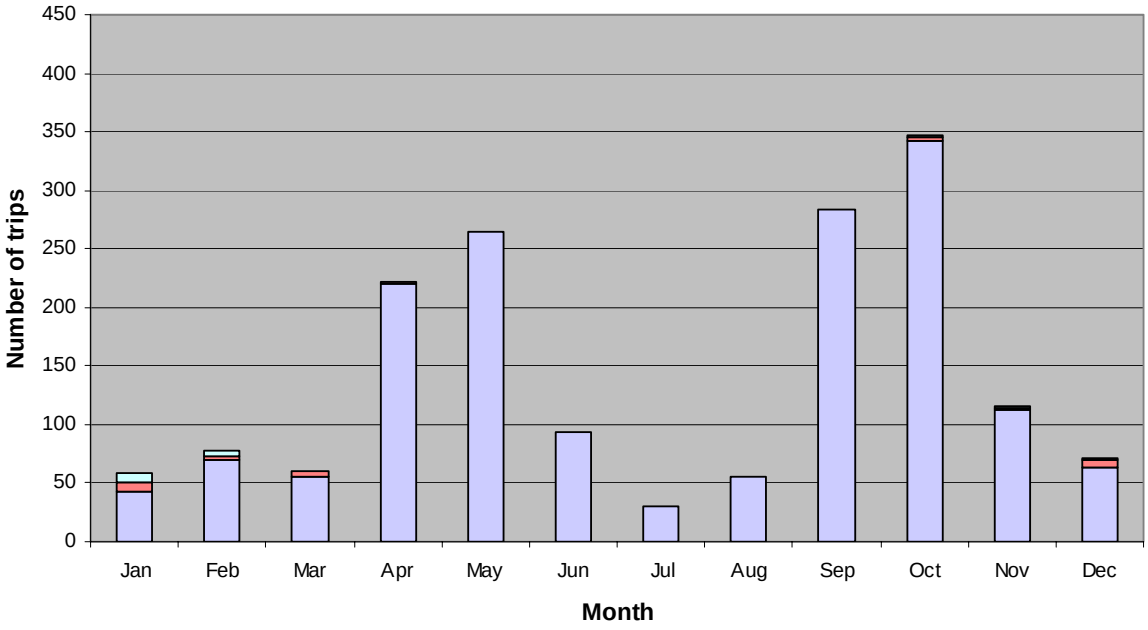

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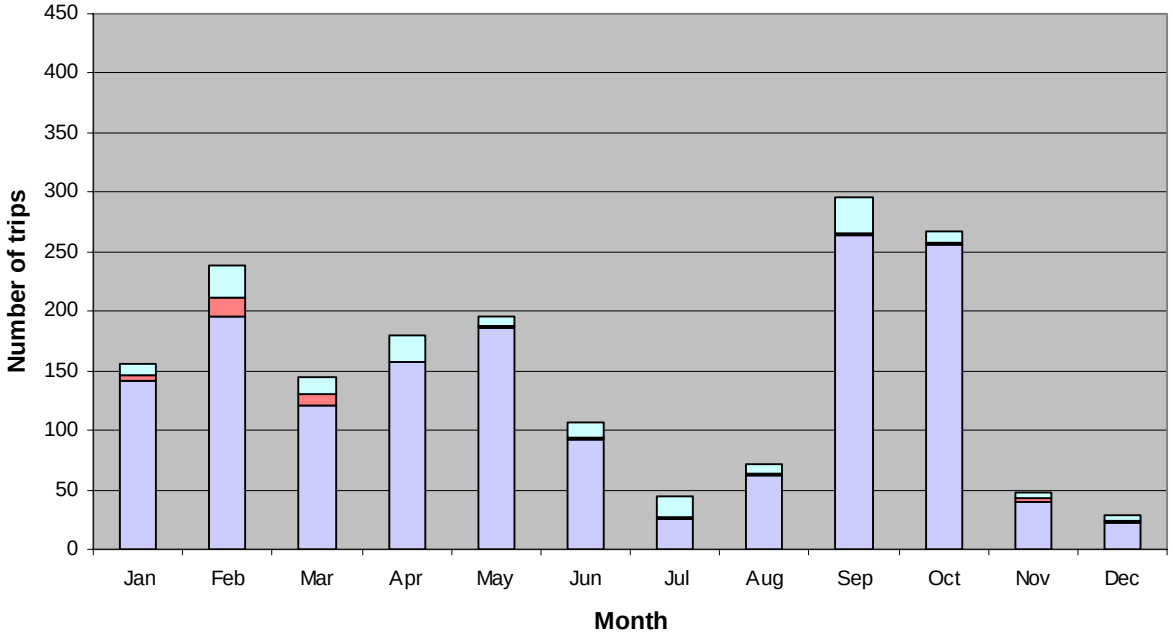

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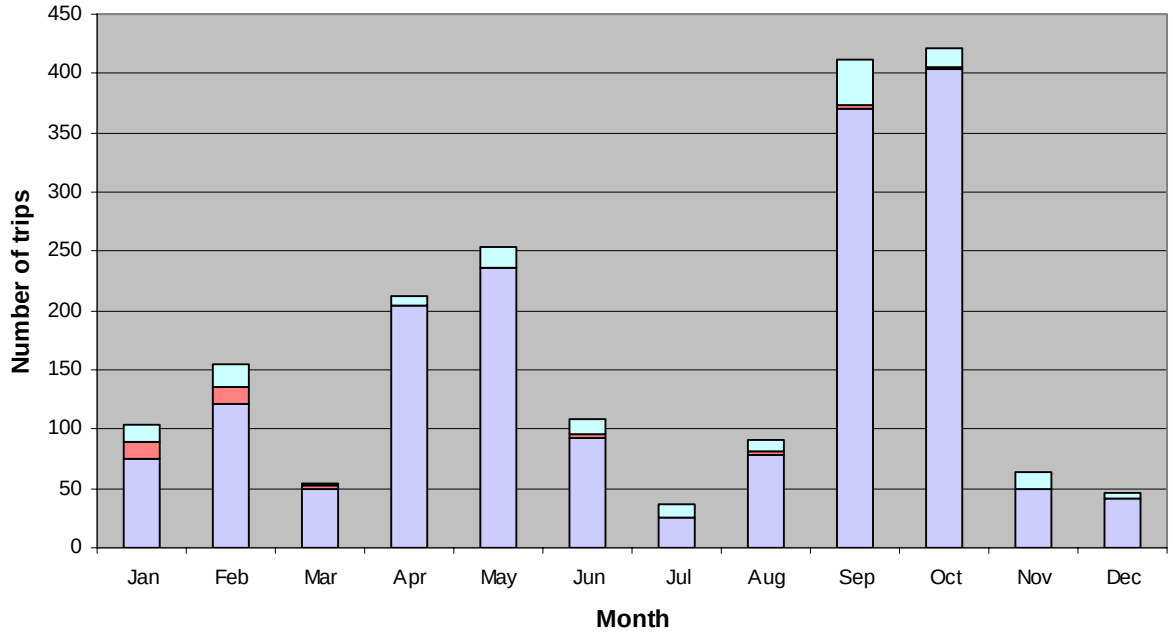

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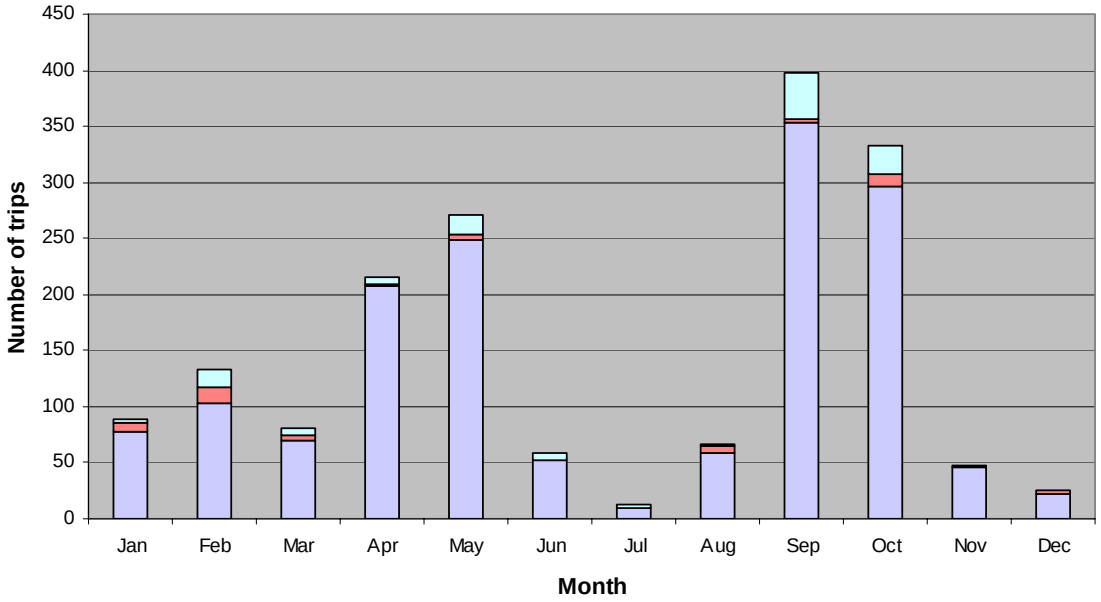

FINAL ENVIRONMENTAL IMPACT STATEMENT
Special Use Permits for Outfitter and Guide Operations
on the Lower Rogue and Lower Illinois Rivers

Appendix D

Summary of Responses to Comments Received on the November 2004 Draft Environmental Impact Statement (DEIS)

The DEIS was made available for public review and comment under provisions of the National Environmental Policy Act (40 CFR 1500-1508), and Notice, Comment, and Appeal Procedures for National Forest System Project and Activities, (36 CFR 215). The Forest Service accepted written, electronic and oral comments as provided in 36 CFR 215.6. Pursuant to 36 CFR 215.6(b), (1), this appendix documents the Responsible Official's considerations of all substantive comments submitted by interested parties.

Public Involvement

A 45-day comment period notifying interested parties to the availability of the DEIS for review and comment was announced through a press release on December 2004. Public meetings were scheduled on December 13th, 2004 in Medford, December 16th, 2004 in Gold Beach, and January 3rd, 2005 in Medford.

Two hundred and fifty paper copies were produced. Copies of the DEIS were distributed to federal and state agencies, local governments, elected officials, eight tribes, media representatives, libraries, organizations and businesses.

One hundred and four oral statements, comment letters and emails were received in response to the DEIS by the Gold Beach Ranger District. All comments received by the close of the Comment Period were reviewed and were considered as part of the comment analysis process. All comments were read and coded based on content and intent. The Responsible Official read all the comments.

Substantive comments were responded to in three ways: (1) a Response to Comments Document was created where reference, response and/or clarification to the DEIS comment was provided, (2) changes were made to the content of the DEIS documentation, to be documented in the FEIS, and in response to suggestions about the range of alternatives, (3) new alternatives were developed.

Summary of Comments

Substantive comments received generally focused on the transparency of analysis, and the detail and basis of assumptions of analysis. Some comments provided new information to be considered. Additional comments requested clarification of the analysis. Two additional alternatives were developed in the FEIS based the some of the comments.

Response to Comments

The Response to Comments is organized into resource areas following the same sequence as in DEIS and FEIS Chapters 3 and 4. The number in parentheses after the word "comment" refers to the assigned number of the letter, FAX, or email that the comment comes from. Comments without these numbers came from the public meetings.

Key acronyms:
Draft Environmental Impact Statement (DEIS)
Final Environmental Impact Statement (FEIS)

Water Quality

1. Comment: (#45) I do not believe that intensive jet boat use is compatible with the "Wild and Scenic" designation that includes sections of the Rogue River corridor. There is insufficient attention to the cumulative impacts of the discharge of pollutants into the water body from such activity, and their impact on at risk species. Moreover, there are real questions as to whether permitting such activity would violate the Clean Water Act.

Response: The DEIS described how the cumulative impacts of the discharge of pollutants into the Rogue River are negligible (also, see response to comment 3). The "insufficient attention" to cumulative impact to at risk species is addressed by Fisheries. The Forest Service knows of no wording in the Clean Water Act that would preclude the permitting described in all action alternatives.

Starting on Page 17 of the DEIS, there is a discussion of the roles of the US Army Corps of Engineers and Oregon Department of State Lands in administering section 404 of the Clean Water Act (CWA) relative to the channel maintenance activities. These two agencies are responsible for enforcing the requirements of this section of the CWA. If a permit were issued for this activity, meeting the terms of the permit would ensure compliance with the CWA.

2. Comment: (#86) Alternative 4 fails to identify or analyze the erosion impacts of not allowing a dock at Clay Hill Lodge. The DEIS fails to identify, let alone analyze, the erosion impacts of not allowing a dock at Clay Hill Lodge. (See DEIS, p. 161) ("Since none of the alternatives increase the number of boats permitted on the river, there should be no change in the current effects of boats on the beaches,"). The failure to identify either the benefit of allowing a dock or, conversely, the impact of not allowing a dock under Alternative 4 with regard to bank erosion is a legal insufficiency that must be corrected.

Response: Whether or not there were increases to erosional impacts would depend upon the configuration and material composition of the bank at this location. Because there is a sandy beach where the Clay Hill Lodge boat comes ashore, increased erosion impacts from not allowing a dock would be extremely minor, even if boats continued to moor at this location at the same rate as they would have with a dock. Any localized increase in erosion rates due to not allowing a boat dock would be negligible compared to natural background erosion rates and to increased erosion from some of the activities listed in the table on DEIS page 157. If there were increased erosion impacts without a dock, these impacts would be addressed by adding mitigation measures to the operator's permit. The benefit of allowing a dock at Clay Hill Lodge is described on page 140 of the DEIS. The adverse impact to Clay Hill Lodge of not allowing a dock is described on pages 147-148 of the DEIS. This will be clarified in the FEIS.

3. Comment: (#87) Page 119 of the DEIS acknowledges that the massive Biscuit salvage timber sale will result in cumulative impacts when combined with the proposed action and contends that the cumulative impacts will be disclosed and analyzed in the summary of cumulative effects found on page 156. Unfortunately this summary contains no actual analysis of the cumulative impacts to wildlife, recreation, or hydrology resulting from the listed projects. The DEIS clearly does not analyze the effect of other projects in combination with the proposed project to ensure that individually minor but collectively significant effects are not overlooked.

Response: Page 119 of the DEIS does not acknowledge that the Biscuit salvage timber sale will result in cumulative impacts when combined with the proposed action. It does say that the Illinois River Trail Reconstruction and the Biscuit Fire Salvage projects "… will not degrade fish habitat, therefore these projects will not affect fish or fish habitat in the Rogue or Illinois Rivers." The impacts on the watershed from all of the alternatives in the DEIS are minor and negligible compared to natural changes in the watershed and to impacts caused by many of the projects listed on page 157 of the DEIS.

Due to the inherent level of precision in cumulative effects analysis, a more detailed cumulative effects analysis could only assume that approximately zero additional impacts would result from all alternatives in the DEIS. Consequently, a more detailed cumulative watershed effects analysis was not justified based on the factors described above.

4. Comment: (#87) In-stream dredging runs afoul of the Clean Water Act. The dredging project as proposed in the DEIS fails all three parts of EPA's fill analysis.

Response: See response to comments 1 and 7. This comment presupposes that the appropriate Clean Water Act permits will not be obtained. In fact, all required permits will be obtained before the activities proceed. Section 7 of the Wild and Scenic Rivers Act requires compliance with the Clean Water Act.

5. Comment: (#87) The proposed dredging and jet boat wake clearly violates Aquatic Conservation Strategy standards 3, 5, and 8. The contention on page 166 of the DEIS that dredging activity somehow maintains or restores the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations, is unsupported and arbitrary.

Response: The FEIS will clarify the language of the Aquatic Conservation Strategy (ACS). The proper focus for determining ACS effects is the 5th field watershed scale. The language in the FEIS will reflect this.

6. Comment: (#92) The DEIS does not adequately address the past cumulative effects of logging in the watershed of the Rogue's Wild River Area or the past and potential future cumulative effects of the Biscuit Fire and the logging of thousands of acres of the roadless area and Late-Successional Reserve.

Response: The cumulative effects of the past and potential future effects of the Biscuit Fire and logging in the watershed were addressed in the Biscuit Fire EIS. The impacts on the watershed from all of the alternatives in this EIS are minor and negligible compared to natural changes in the watershed and to impacts caused by many of the projects listed on page 157 of the DEIS. Due to the inherent level of precision in cumulative effects analysis, a more detailed cumulative effects analysis that included activities in the DEIS could only assume that approximately zero additional impacts would result from all alternatives in the DEIS. Consequently, a more detailed cumulative watershed effects analysis beyond what has already been done for the Biscuit Fire EIS was not justified based on the factors descried above.

CHANNEL MAINTENANCE

7. Comment: (#41) The public is offered little specific information on where these activities have occurred in the past, and the impacts of these past dredging operations. The DEIS offers only an extremely cursory analysis of the dredging operations, not even offering detailed information regarding the extent, frequency, and possible impacts of dredging operations.

Response: The use of the term "dredging" in the DEIS is not an accurate reflection of the described activities. Dredging means to remove material from the bottom of a channel with any of various powerful machines (dredges) designed for this purpose. The actions described as "dredging" in the DEIS are in fact relatively minor re-positioning of channel material within the channel and do not make use of dredges.

The impacts caused by the re-positioning of material within the channel are, as described in the DEIS, minor. Consequently, a more detailed analysis as suggested by this comment was not justified. As discussed on page 91 of the DEIS, the "prop wash" method of re-positioning gravel displaces the channel material a short distance downstream and does not produce a plume of water more than a short distance downstream (approximately 100 feet).

An excavator is used to move gravels from the low flow channel to an existing gravel bar within the high water channel at Illahe Island. Turbid conditions from the excavation dissipates in less than one mile and lasts no longer than about half a day, a very minor impact that occurs only in some years, as discussed on page 91 of the DEIS. Neither type of activity removes any material from the active channel. Since materials are not removed from the active channel, they are subject to repositioning during the annual high flow events, just as they are in the undisturbed reaches, and in fact, there appears to be no difference between disturbed and undisturbed reaches in response to flow.

A table was added to the FEIS that provides the names of the sites where channel maintenance has occurred in the past and is expected to occur in the future. A figure was added that shows the location of these channel maintenance sites. The FEIS text was also modified to provide the amount of material that is moved by these channel maintenance operations.

8. Comment: (#92) The DEIS provides no enforceable or measurable standards about water depths or conditions which require dredging for safe navigation at 44 riffles at or below Agness. The DEIS needs to obtain site-specific data about how the determination is made to initiate "prop wash" dredging and excavations at Illahe Island. How does the Forest Service know that dredging is accomplishing safe boating conditions in a timely manner or is dredging being done excessively, without justification?

Response: The Army Corps of Engineers and the Oregon Department of State Lands, through the channel maintenance permits that they issue, provide the conditions for which channel maintenance activities are permitted. Operations must follow the terms and conditions set forth in those permits.

The Forest Service has not assumed responsibility for accomplishing channel maintenance in order to provide safe boating conditions. Consequently, the Forest Service has not assumed responsibility for determining that safe boating conditions are accomplished and that they are accomplished in a timely manner. Channel maintenance is performed by the tour boat industry in order to improve the economic viability of their operations. It is in their economic interest to provide safe boat operations, but not to spend money on channel maintenance that is unneeded. It is the Corps of Engineers and the Oregon Department of State Lands responsibility to only issue channel maintenance permits that comply with the Clean Water Act.

9. Comment: (#92) The DEIS does not address the issue of tour boat size and the need for dredging. Why couldn't tour boat operators use smaller boats later in the season and forgo some of the need to dredge?

Response: Tour boat size is regulated. Historically, the need for channel maintenance has been approved during years of low water flows. The Rogue RMP addresses the need and approves this activity. Smaller boats do not necessarily have a shallower draft than large boats. The large tour boats in current use are of a shallow draft design with a draft of about 4 to 6 inches when on plane. Smaller boats with a shallow draft design would only improve the draft by an inch or two. This is not enough of a margin to reduce or eliminate channel maintenance.

10. Comment: (#92) The DEIS provides no quantitative data about the area impacted by dredging or the volume of sediment removed. The DEIS (p. 118) can't assert that dredging is minor without providing quantitative data. Also, even if the impact is minor or insignificant, the cumulative impact of dredging at 32 sites may be significant.

Response: A table was added to the FEIS that provides the names of the sites where channel maintenance has occurred in the past and is expected to occur in the future. A figure was added that shows the location of these channel maintenance sites. The FEIS text was also modified to provide the amount of material that is moved by these channel maintenance operations.

As discussed on page 91 of the DEIS, turbid flow conditions caused by the prop wash method of channel maintenance clears up about 100 feet downstream of the activity. Because the distance between each site is greater than 100 feet, there would be no cumulative effects from this activity.

As discussed on page 91 of the DEIS, turbid flow conditions caused by channel maintenance activities at Illahe Island dissipate about one mile downstream. The nearest prop wash channel maintenance site is more than 6 miles downstream of Illahe Island. Consequently, there would be no cumulative effects from this activity.

11. Comment: (#92) The DEIS provides conflicting information about dredging intensity: DEIS (p. 121) states that channel maintenance (dredging) does not occur annually but DEIS (p. 91) states that prop wash dredging "generally occurs at 10-15 riffles a year, wherever needed and more than once during the year if necessary.

Response: This will be corrected and addressed in the FEIS.

12. Comment: (#92) The DEIS states that channel maintenance is an on-going activity and the decision to permit it is a federal and state action made by the Army Corps of Engineers and the State Department of Lands and that the Forest Service must complete a Section 7 determination. The DEIS must clarify why the channel maintenance is outside of the scope of the DEIS and the interpretation of the Section 7 of the WSR Act.

Response: Channel maintenance is outside of the scope of the EIS because the decision to allow it or not is the responsibility of the Army Corps of Engineers. This and the Section 7 determination process is explained in the DEIS (DEIS, p.17 &18). This will be clarified in the FEIS.

Fisheries

COHO

13. Comment: (#33) Maybe I missed something, but in all of the 208 page report I found little-to-nothing about the negative effects of motorboat wakes on young coho, which are known to depend on shoreline areas. Neither are other effects of the wakes considered. This omission is not remedied by the statement that wakes on or at the shore are "smaller" than they are next to the jet boats (p 161). Of course they are "smaller" there, but anyone who has stood on the shore or had a boat beached there knows that the wakes are substantial. The effects of wakes on coho are not covered under this subject on page 162. Do you have definitive studies about wakes and young coho?

Response: During the summer periods, when the jet boats are present, juvenile coho are not found in the project area. This portion of the lower Rogue River is not a rearing area. Rearing of juvenile coho occurs in smaller tributaries of the Rogue River. The lower Rogue River is primarily a migration corridor during smolting periods for coho and other salmonids. Some spawning by adult fall Chinook does occur in the lower Rogue River Corridor. Spring Chinook and steelhead juveniles are found in the project area. A study conducted by Satterthwaite (1994) made no visual observations of stranded fish from jet boat wakes in the Middle Rogue River above the project area. This will be clarified in the FEIS.

14. Comment: (#41) The likely to Adversely Affect determination for threatened coho salmon would appear to be inconsistent with the "maintain or improve" standard for Wild and Scenic River Outstandingly Remarkable Values.

Response: The Likely to Adversely Affect (LLA) determination was based on an analysis including the effects of fishing for coho salmon in the Rogue River. The effects of fishing on coho salmon are what influenced the determination of LAA. After discussions with NOAA Fisheries, it was determined that the effects of fishing are already covered under the 4(d) permit that the State of Oregon has for fishing. There is a new determination in the FEIS of a Not Likely to Adversely Affect, therefore the actions proposed in this analysis would maintain the standard for Wild and Scenic River Outstandingly Remarkable Values.

15. Comment: (#41) The programmatic National Oceanic and Atmospheric Administration – Fisheries (NOAA) take permit for the threatened coho salmon that is cited as covering this action may be entirely inappropriate for the jet boat issue. The DEIS deals with actions ranging from powerboat use and motorized tour boat use to excavation of gravels of the Rogue and Illinois Rivers to maintain a navigable channel for large vessels. The wide array of actions permitted under the preferred alternative represents an increase over current actual use, and the associated take of threatened coho salmon may seriously hinder the health and recovery of this species in the Rogue and Illinois Rivers. The lack of a complete consultation in the DEIS limits the ability of the public to judge the impacts of this action. It is difficult to believe that NOAA's programmatic take permit for fishing applies in this case, with such a wide variety of possible impacts.

Response: The DEIS evaluates commercial boat use on the Lower Rogue and Illinois River and the placement of docks within the river. The channel maintenance that occurs is not permitted through the EIS or the Forest Service. The permittees apply to the Oregon Department of State lands and the Army Corps of Engineers for the channel maintenance permits. The channel maintenance does occur in conjunction with the jet boat use and will be included in any consultation with National Oceanic and Atmospheric Administration – Fisheries as described in the FEIS.

16. Comment: (#65) Given that coho salmon constitute a threatened species, it is unclear why they are excluded as an indicator species for management.

Response: This comment is considered outside the scope of the analysis. Management Indicator Species is an element of the National forest Management Act and were designated in the Land and Resource Management Plan in 1989.

17. Comment: (#65) Given that the effect determination for coho salmon is Likely to Adversely Affect, it is unclear why the determination for other salmon species from the same actions is only MIIH.

Response: The DEIS included a Likely to Adversely Affect (LLA) determination which was based on an analysis including the effects of fishing for coho salmon in the Rogue River. The effects of fishing on coho salmon are what influenced the determination LAA. After discussions with National Oceanic and Atmospheric Administration – Fisheries and further analysis, it was determined that the effects of fishing are already covered under the 4(d) permit that the State of Oregon has for fishing. With this new information the effects determination for coho, as documented in the FEIS is Not Likely to Adversely Affect (NLLA).

The effects determination for sensitive species is still "*may impact individuals or habitat but not likely to cause a trend towards federal listing for a loss of viability*" (MIIH) for all sensitive species. There are different effects determinations for threatened or endangered species, verses sensitive species.

18. Comment: (#65) Given the Likely to Adversely Affect classification for coho salmon, I understand that a judgment from National Oceanic and Atmospheric Administration - Fisheries would be required before permits could be issued. Effect of alternatives can't be assessed in a meaningful way until the NOAA judgment and the rationale for that judgment can be provided.

Response: The results of consultation will be available prior to the Forest Service decision regarding special use permits (to be documented in a Record of Decision). Comments on the National Oceanic and Atmospheric Administration - Fisheries (NOAA) take permit should be addressed through NOAA.

19. Comment: (#89) Since the National Oceanic and Atmospheric Administration - Fisheries take permits for Coho salmon have not yet been issued, the public has had no opportunity to review or comment on it. The public should be given the opportunity to read and comment on it before the Record of Decision is issued.

Response: Comments on the National Oceanic and Atmospheric Administration - Fisheries (NOAA) take permit should be addressed through NOAA.

"SALMON"/STEELHEAD

20. Comment: (#65) The reported findings that cortisol levels did not differ throughout the day in juvenile salmonids are of concern to me because cortisol typically varies throughout the day in non-stressed individuals of species with which I am familiar. Perhaps this study reveals a chronically elevated measure of stress. My own research has suggested that unpredictable, recurring stressors (perhaps occasional jet boats in this case?) can yield chronic stress.

Response: The Chetco and Gold Beach Ranger Districts would be interested in the results of this research, if it is applicable to the analysis.

21. Comment: (#92) Although injury to fish from motor boats is unlikely (DEIS, p. 119), the DEIS fails to acknowledge that at least some salmon are killed and injured by jet boats. The DEIS needs to at least estimate the number of adult salmon killed and injured by jet boats. Assertions that thousands of boat trips do not injure or kill any salmon are false and misleading.

Response: There was no data found that showed direct mortality from jet boat interactions with adult salmon. Many salmon die each summer from *columnaris*, a disease that is exasperated by the warm water temperatures found in the lower Rogue River during the summer months.

22. Comment: (#92) The DEIS reports the income generated by guide boats (p. 109) but fails to report the number of salmon and steelhead killed by clients of guides.

Response: The USDA Forest Service does not monitor the numbers of salmon and steelhead taken in the sport fishery. This is covered by the 4(d) permit that the State of Oregon has for fishing from National Oceanic and Atmospheric Administration - Fisheries.

23. Comment: (#92) The DEIS fails to acknowledge that boat trips, especially those in the off season, would affect spawning fall Chinook salmon (DEIS, p. 53).

Response: Fall Chinook salmon primarily spawn in the lower Rogue River tributaries, such as Lobster, Quosatana, and Shasta Costa Creeks. During dry years or when rains come late in October or November, fall Chinook may spawn in the main stem. During this late season, jet boat use is considerably lower than during the summer. During seasons when flows are too low, the boats will not make any trips. When boats are running on the river and traveling through riffles, which are the primary spawning areas, the boats are using the deepest part of the channel, jet boats have been shown to affect redds in less than 14 inches of water, but the channels the boats use are deeper than this and there are not anticipated to be direct effects to eggs in the gravel.

24. Comment: (#92) The DEIS fails to acknowledge that guided trips to the Illinois River are likely to increase greatly because the Oregon Department of Fish and Wildlife has changed the fishing regulations to allow a kill fishery on fin clipped steelhead in the Illinois River.

Response: The number of guided trips on the lower Illinois River is as permitted, and the analysis included the number of permitted trips on the river.

GREEN STURGEON

25. Comment: (#92) The DEIS misrepresents Wilderness Conservation Society (WCS) data about green sturgeon. The fact that boats did not cause adult sturgeon to move doesn't mean there is no effect (DEIS, p. 120). Boat traffic is likely to be causing adverse impacts to eggs deposited in riffles (impacts to sturgeon from jet boats were not studied by WCS).

Response: There has been no research conducted on the effects of boat traffic on sturgeon eggs. However, there have been studies conducted on effects of jet boats on salmonid eggs. These studies showed an effect to eggs occurring in less than 10 inches of water and the commercial tour boats travel in water of much greater depths than that. Therefore there is not anticipated to be any effects to sturgeon eggs from the boat traffic.

26. Comment: (#92) Please include the Wilderness Conservation Society study about green sturgeon in an appendix.

Response: The study conducted by Wilderness Conservation Society has not been published; therefore it is not appropriate to consider it a scientific reference at this time.

OTHER

27. Comment: Additionally, the agency must properly document and disclose to the public the "best available science", methodology and data upon which it relies in presenting the technical conclusions in the DEIS. See, 40 CFR 1502.24; *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150 (9th Cir. 1998).

Response: Any methodology or science used will be adequately cited in the FEIS, and can be found in each section as well as the bibliography.

28. Comment: (#41) The DEIS does not include specific information about the assumptions made or the data used in this analysis.

Response: Any methodology or science used will be adequately cited in the FEIS, and can be found in each section as well as the bibliography.

29. Comment: (#41) The DEIS does not attempt to represent the public benefit by attempting to quantify the externalities caused by powerboat use in the form of diminished recreational experience for non-motorized users and in harm to fisheries (as the preferred alternative is Likely to Adversely Impact the threatened coho salmon, as well as may impact other species).

Response: The effect to fisheries has been analyzed in the FEIS.

30. Comment: (#41) The Siskiyou National Forest has failed to analyze the possible impacts of releasing, not only gravels, but also sediments, into the rivers. Particularly with regards to the fisheries, Management Indicator Species (MIS), and wildlife impacts in Chapter 4 of the DEIS, the Siskiyou National Forest has failed to present site-level information that describes the actions to be taken, and the anticipated impacts of these actions. Without knowing where or how intensely the dredging will occur, the public can't verify the assertion the "essential fish habitat will not be affected by minor modifications from dredging" (DEIS p. 121).

Response: There will be a more in-depth analysis in the FEIS.

31. Comment: (#41) The cumulative effects analysis presented in the DEIS is cursory, particularly regarding fisheries effects.

Response: There will be a more in-depth analysis in the FEIS.

32. Comment: (#87) The contention (DEIS) that essential fish habitat is unaffected by in-stream dredging is not supported by any documentation or analysis.

Response: There will be a more in-depth analysis in the FEIS.

33. Comment: (#87) Impacts to the Outstandingly Remarkable Values (ORVs) of fisheries is downplayed or ignored by the DEIS, while impacts to all other forms of recreation other than motorized boating are discounted by the agency.

Response: ORVs to fisheries is addressed in the FEIS.

34. Comment: (#87) The contention on page 131 of the DEIS that prop wash and excavator has no effect on essential fish habitat is not supported by any analysis or documentation. In-stream dredging can cause direct and indirect mortality of salmon, steelhead, native trout and other aquatic species.

Response: There will be a more in-depth analysis in the FEIS.

35. Comment: (#89) The DEIS fails to address or disclose effects on fish runs which may be covered by the Magnuson-Stevens Act.

Response: There will be a more in-depth analysis in the FEIS.

36. Comment: (#92) The DEIS (p. 118 & 121) falsely asserts that because dredging does not occur during spawning season, no habitat impact will occur.

Response: There will be a more in-depth analysis in the FEIS.

37. Comment: (#92) The cumulative effects analysis is inadequate (DEIS, p. 119). Although DEIS decisions are not covering private recreational motor boat or float use (DEIS, p. 17), cumulative impact analysis must consider all boat use (private and permitted). For example, the DEIS fails to discuss the impacts of jet skis. The DEIS fails to address cumulative impacts to invertebrate production due to disturbance from dredging and jet boat turbulence.

Response: There will be a more in-depth analysis in the FEIS.

38. Comment: (#92) The DEIS admits that boats increase stream temperatures in thermal refugia but provide no mitigating measures (DEIS, p. 120). A possible mitigation would be to curtail late afternoon trips when the river temperatures are peaking during July (DEIS, p. 46).

Response: The increase in water temperature in thermal refugia is insignificant on its effect on fish; therefore no mitigation measures are needed. This will be clarified in the FEIS.

Wildlife

WESTERN POND TURTLES

39. Comment: (#33) The report says that wakes "could negatively affect microhabitat for hatchling and juvenile" western pond turtles (p 163). But then the issue is not addressed; further, it is implied that there is no "affect". The implication here seems to be that microhabitat is too small to matter, but biologists know that "microhabitat "can make all the difference. In fact, most species entire existence depends on small and specialized areas of habitat.

Response: The direct, indirect and cumulative effects are addressed on DEIS pgs. 128-130 and concluded that the effects is May Impact Individuals and/or Habitat but not likely to cause a trend toward federal listing or a loss of viability (MIIH).

40. Comment: (#86) Alternative 4 fails to identify or analyze the impacts to western pond turtles as a consequence of not allowing a dock at Clay Hill Lodge. The DEIS acknowledges that western pond turtles are present in the water and on the beach near Clay Hill Lodge (DEIS, p. 66, 67). However, it contains absolutely no discussion of the impacts to western pond turtle under Alternative 4, and its conclusion that Alternative 4 will have fewer impacts to fish and wildlife than Alternative 2 is arbitrary and capricious to the extent that it has failed to consider these impacts.

Response: The effects of docks to wildlife will be discussed in the FEIS.

41. Comment: (#87) The western pond turtle analysis in the DEIS appears to be skewed so as to continue current human use patterns regardless of the impact to western pond turtles. Perhaps one reason for the lack of juvenile western pond turtles is that "Wakes resulting from motorized boat traffic could negatively affect microhabitat for hatchling and juvenile western pond turtles (Holland 2003, DEIS p. 129).

Response: The effects of all alternatives on the western pond turtle are included in the DEIS including the potential effects of wakes.

SPOTTED OWLS/BALD EAGLES

42. Comment: (#41) The effects on bald eagles and northern spotted owls may be more serious than suggested by the DEIS. We would look for more population-level data to corroborate the assertion that boat activity does not affect some of these and other sensitive vertebrates.

Response: Past monitoring within the project area determined that they are habituated to the noise.

43. Comment: (#87) Impacts to bald eagles and northern spotted owls are consistently downplayed or ignored in the DEIS. The Forest Service relies on the contention that some bald eagles may get desensitized to motor use (DEIS, p. 56) in concluding that there is a "low likelihood of actual disturbance or measurable effect on reproduction." Yet later in the DEIS (p. 124) it is disclosed that up to 30% of the time a perched eagle leaves as the boats approach and/or pass. Furthermore, as stated in the DEIS (p.123) "motorized boats are likely to take extra measures to look at an eagle closer and for a longer period of time." Yet the disproportionate likelihood of motorized users causing displacement is not fully disclosed or analyzed in the DEIS.

Response: The potential discrepancies identified by this comment will be clarified in the FEIS (Bald Eagles – Chapters 3 & 4).

44. Comment: (#87) Please disclose and discuss if the project is within USFW designated critical habitat for either the bald eagle or the northern spotted owl.

Response: Bald Eagle – The USFW has not designated critical habitat for bald eagles. Critical habitat for northern spotted owl is discussed at DEIS p. 126. This will be clarified in the FEIS.

OTHER

45. Comment: The Endangered Species Act was not given enough weight in the DEIS.

Response: Analysis in the DEIS is consistent with the endangered species act (DEIS p. 8 Preferred Alternative, p.35 Comparison of Alternatives, Chapter 3. Affected Environment, Wildlife pgs. 54-58, Chapter 4, Environmental Consequences, Effects to Wildlife, pgs.122-131.) The Responsible Official will consider the importance of ESA listed species in the Record of Decision.

46. Comment: Language needs to be clear on the difference between immeasurable effects and no effects.

Response: This will be clarified in the FEIS. A person would not be able meaningfully measure, detect or evaluate insignificant effects.

47. Comment: (#5) Environmental Impacts: The lower Rogue has undergone a reduction in wildlife numbers, particularly birds, in recent years. When I first started out in paddle craft, over 20 years ago, both the lower Rogue and the Klamath River had wildlife in similar numbers. Now the Rogue is wanting when it comes to wildlife, while the lower Klamath seems to have all the wildlife that it ever had. I believe this can be directly attributed to multiple jet boat trips every day. The Forest Service should compare the Wildlife diversity and numbers of the Klamath River to the lower Rogue.

Response: This comparison is beyond the scope of the project and outside of project area and watershed. The data for the lower Rogue does not show a decline in populations.

48. Comment: (#41) The analysis is extremely cursory and does not offer a scientific rationale that links specific actions to specific impacts, or lack of impacts. For instance, the DEIS states on p. 131 that Management Indicator Species and the western pond turtle may face "temporary displacement" from channel maintenance activities. Without a detailed description of these activities and how they affect specific MIS it is impossible for the public to judge the veracity of this statement. Without more detailed information regarding channel maintenance and its impacts, the DEIS is inadequate in giving direction to the Regional Forester for a Section 7 determination.

Response: A more detailed description of the proposed activities and how they affect wildlife will be included in the wildlife section of the FEIS. The analysis under the EIS is intended to give direction to the Regional Forester for a Section 7 determination as required by the Wild and Scenic Rivers Act.

49. Comment: (#41) The Siskiyou National Forest inadequately enumerates impact to management indicator species. No population-level data is offered to help the public verify the environmental impacts of the proposed action. The Siskiyou National Forest is required to provide quantitative population data to corroborate their claims about effects to sensitive species. The Forest is required to present the public with population data for management indicator species in a given project area. There is no suitable habitat proxy offered in the DEIS to replace this specific type of data.

Response: Existing population data will be disclosed in the FEIS. The effects to habitat will be expanded in the FEIS. With little or no impact to habitat, there would be no loss of viability expected within the river corridor for wildlife.

50. Comment: (#65) In a document that should be based on sound science, it is simply unacceptable to use "immeasurable" or "not measurable" to characterize effects. Such descriptions cannot be assessed objectively. These descriptions could mean, for example, that the Forest Service lacks the knowledge required to measure the effects.

Response: A person would not be able meaningfully measure, detect or evaluate insignificant effects. More definitive language for effects determination will be explained in the FEIS.

51. Comment: (#65) It is inappropriate to conclude that current use levels are having negligible effects because measures of those effects are stable under current use levels. Stable effects may reflect stable, adverse effects from use. Proper science requires an appropriate baseline to determine effects. For example, one approach could be to compare measures on the Rogue River to a comparable river with not jet boat use.

Response: The Forest Service is required to analyze the effects of all alternatives (including no action) to specific Forest Service wildlife goals. The effects of the no action alternative serve as a baseline for comparing action alternatives.

52. Comment: (#65) There is no suitable scientific justification for the use of river miles of intact riparian vegetation as a key indicator for impact on an extensive range of aspects of both the physical and biological environment. Furthermore, there are no criteria stated by which the intactness of riparian vegetation could be objectively evaluated.

Response: Key indicator(s) for potential effects from all alternatives to both the physical and biological environment will be revised in the FEIS and include measures for objective evaluation.

53. Comment: (#65) To permit meaningful evaluation of some of the information that is provide in the DEIS, may impact individuals or habitat, but will not likely contribute towards a trend of federal listing or, cause of loss of viability to the population or species (MIIH) classification requires clarification. For example, can a local population of a species that is otherwise abundant become federally listed?

Response: The MIIH classification will be clarified in the FEIS. Local populations are not generally federally listed by U.S. Fish and Wildlife Service.

54. Comment: (#87) Potential impacts to king snakes and foothill yellow frogs are not fully disclosed and analyzed. Population trends and potential impacts to these species are not adequately addressed by the DEIS.

Response: Potential impacts to king snakes and foothill yellow frogs will be expanded in the FEIS.

55. Comment: (#87) The DEIS fails to disclose or assess population data or trends for management indicator species pileated woodpecker and pine marten.

Response: Existing population data will be disclosed in the FEIS.

Botany

56. Comment: (#65) It is unclear how actions could impact botanical resources habitat but not impact individuals.

Response: There can be habitat that is suitable for plant species that is not occupied by that plant species.

57. Comment: (#65) It is unclear how a survey of unspecified areas in only three months in only one year could afford meaningful conclusions regarding botanical resources.

Response: There are two sensitive plants whose habitat has the potential to be impacted by jet boat wake. They are *Wolffia columbiana* and *Wolffia borealis*. *W. borealis* is known from fresh water at elevations below 3,000 feet. *W. columbiana* is known from quiet fresh water. It is unlikely these tiny water plants would be impacted more by jet boat wake than they would be by seasonal variations in water levels on the Rogue River. Neither *Wolffia* has been found on the Rogue River, or on the Siskiyou National Forest.

Other TES species that are known from the Rogue River corridor exist above the wake zone. Plants that live in the flood zone (which includes the wake zone) have to be able to withstand frequent disturbance due to seasonal fluctuations in the water level (see pages 73-74). The wake of jet boats is of shorter duration and does not extend into the riparian zone as far or with as much force as seasonal fluctuations in water levels. Seasonal water fluctuations have a much greater impact on vegetation along the Rogue River than does the wake from jet boats.

Port-Orford-Cedar

58. Comment: (#87) The DEIS (p. 78) acknowledges that "Ingress and egress of the Rogue and Illinois Rivers by fishing guides using Lobster Creek, Quosatana Creek, Foster Bar, Cougar Lane, and Oak Flat boat ramps could affect the spread of Port-Orford-cedar root disease, Phytopthera lateralis." Yet the DEIS (p. 135) concludes that " there will not be much infested soil or organic matter attached to the boats, trailer, or vehicles if there is some kind of surfacing at the boat ramps." That conclusion lacks analysis or documentation.

Response: The discussion in the DEIS summarizes the analysis and risk assessment that was completed for this project and is part of the project records (sometimes called the analysis file). Pertinent excerpts from that report leading to the stated conclusion include:

- Activities include ingress and egress of the Rogue River by fishing guides using Lobster Creek, Quosatana Creek, Foster Bar, Cougar Lane and Oak Flat boat ramps.
- Most of the project encompasses boats in the rivers with a minor part of the project being vehicles with boat trailers moving boats in and out of the rivers.
- For the purposes of this project these vehicles would not operate where soil or mud would adhere to tires.
- The boat ramps that may be used are constructed of concrete with access routes of asphalt surfaced, rock surfaced, or natural gravel bars.

This will be clarified in the FEIS.

59. Comment: (#87) Will the proposed project introduce appreciable additional risk of infection to these uninfected POC?

Response: Since the focus of the concern is moving infested soil or organic matter, there isn't going to be a much attached to the boats or trailers or vehicles, if there is some kind of surfacing at the boat landing. Appreciable additional risk does not mean "any risk." It means that a reasonable person would recognize risk, additional to existing uncontrollable risk, to believe mitigation is warranted and would make a cost-effective or important difference (see Risk Key Definitions and Examples for further discussion – *Record of Decision and Resource Management Plan Amendment for Management of Port-Orford-Cedar in Southwest Oregon, Coos Bay, Medford, and Roseburg Districts, May 2004, pg 34-35).*

It is believed both rivers already contain PL but are so diluted with the volume of water, that the possibility of disease spread is not measurable. The transport of soil would be the main cause for adverse effects but the probability of this is extremely low given the surfacing in and around the boat ramps and even if spores were to be transported in water or soil, they have to find a POC to infect which is also a low probability since there are no POC near the boat ramps. The risk of additional infection from this project is very low and not anticipated to add to the existing infection. Commercial boats having any effect to POC or for causing the disease to spread is not measurable. It is not likely vehicles or boat trailers would pick up soil or mud from the rivers, from areas near boat ramps, or from access roads. Therefore the transport PL to uninfected POC is not likely. There are no POC management practices required and there are no anticipated direct, indirect and cumulative effects from any alternative with this project on the spread of PL.

60. Comment: (#92) There is an omission in the cumulative effects section. The DEIS does not disclose that approximately 90 percent of the proposed 360 mmbf volume from the Biscuit Fire Project timber sales will be logged from the watershed of the 50 mile long stretch of the Illinois River just before it enters the Rogue River.

Response: The omission in the cumulative effects section will be corrected. The mitigations measures designed for the Biscuit Fire Recovery Project insure all standards and guidelines of the Siskiyou National Forest Land and Resource Management Plan as amended by the Northwest Forest Plan will be met, specifically along the stretch of the Illinois River.

Effects to Fire and Fuels

61. Comment: (65) The DEIS makes a strong point that the availability of jet boats could assist in fighting fire, but it is unclear that this is a necessary consequence of allowing jet boats on the Rogue River. Does the Forest Service have a formal agreement with the tour companies, or can the tour companies be compelled by law to make their boats available for assisting with firefighting needs?

Response: There are no agreements or laws currently in place; however it would be in their best interest to provide the needed services, for a fee at the prevailing rate. Should the river be shut down (or partially shut down) to commercial tour boat traffic due to a wildfire situation or other emergencies, the boats would be available for hire to move firefighters and supplies, just as would school buses and large trucks typically used to shuttle firefighters and equipment in most large wildfire situations.

Effects to Air Quality

62. Comment: (#65) There is no meaningful information on the effects of any alternative on air quality. Stating that jet boats do not generate the pollution of an outboard motor boat begs the questions of how much pollution is actually produce by the jet boats.

Response: The current permitted use of jet boats allows up to 6 commercial passenger boats (tour boats) per day and up to 2 trips per day of lodge service (Paradise Lodge). The actual use of jet boats (for the above) during the 2004 season averaged 1.95 trips per day for the tour boats, and .37 trips per day for the service to Paradise Lodge. There are no usage figures available documenting the use of jet boats that travel to and from the other lodges and the private cabins in the wild section of the river.

The commercial tour boat industry on the Rogue River (those which operate in the Wild Section) utilize engines of the most modern manufacture, and meet the most stringent of applicable air quality standards. The engines currently in use meet the California Air Resources Board (C.A.R.B.) rating of "3 Star- Ultra Low Emission". This information ahs been added to the FEIS Air Quality section of Chapter 4 and an Air Quality appendix has been created.

Cultural

63. Comment: (#65) The potential effects on cultural resources can't be evaluated when those resources are not specifically identified. The Forest Service has potentially overlooked some critical cultural resources.

Response: The disclosure of Heritage Resource sites are not specifically identified and are not included in the EIS because this would violate the various laws, acts and executive orders which direct the protection of cultural resources. A number of Heritage Resource surveys and site evaluations have been performed within the Rogue River corridor and all have met concurrence with the State Historic Preservation Office. The Heritage Resource assessment for the Rogue River DEIS is predominantly an internal document used to evaluate the eligibility of areas for inclusion in the National Register of Historic Places under the National Historic Preservation Act.

The National Historic Preservation Act of 1966 declares national policy of historic preservation: the protection, rehabilitation, restoration and reconstruction of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology or culture. An amendment authorizes the Secretary to withhold from public disclosure locational information on National Register listings if such disclosure would create a risk of damage or destruction to such sites or objects.

In addition, the Forest Service Policy for Cultural Resources, FSM 2361.03, states that a major goal of cultural resource management is to, "Ensure cultural properties and their records are protected from unauthorized uses."

The release of specific details regarding sites within the Rogue River corridor would reveal the past culture, religious customs and traditions of Native Americans which are protected by the American Indian Religious Freedom Act. The act requires the Federal agencies to respect the ceremonies, customs and traditions of Native American religions and enables the agencies to accommodate Native American religious needs through administrative procedures. In addition to violating the act, release of site specific information would impair the agency's ability to obtain information and collaboration from the Confederated Tribes of Siletz Indians. Violation of the trust would impair the agency's relationship with the confederation.

The 36 CFR 800 of the Code of Federal Regulations, the Protection of Historic and Cultural Properties, provides implementing regulations for Section 106 of the National Historic Preservation Act of 1966 and Executive Order 11593 (Protection and Enhancement of the Cultural Environment). It delineates Federal agency and State Historic Preservation Office responsibilities in locating, inventorying and evaluating cultural properties on Federal land. All known sites within the river corridor have been assessed to meet these standards and direction and comply with Section 106.

Identification and evaluation of heritage sites within the Rogue River corridor is an on going process. Survey and reconnaissance will continue along the river and it is inevitable that new sites will be discovered over time. When new sites are discovered, they will be evaluated to meet the same strict standards to comply with the Advisory Council on Historic Preservation procedures as described in 36 CFR 800.

Site specific information is available to the Responsible Official for analysis of effects on the environment.

Recreation

RANGE OF ALTERNATIVES/ADDITIONAL ALTERNATIVES

64. Comment: There needs to be an alternative that would reduce the number of existing motorized trips in the Wild Section of the Rogue River or at least an alternative that caps use at the existing level.

Comment: There needs to be an alternative that limits motorized use to the current level.

Comment: The range of alternatives is inadequate. The DEIS does not have any alternatives to address a reduction in actual commercial use.

Response: Two Alternatives have been added in the Final Environmental Impact Statement (FEIS). One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. This EIS process will not make any decisions about private boat use or other activities.

65. Comment: The No Action Alternative should be the status quo. That is, many permits have been issued many times over the years and No Action should be to continue these permits.

Response: The Purpose and Need for this project is to respond to a request and need to issue special use permits. The No Action alternative, as described in the DEIS, would not issue permits. This allows for comparison of the effects of action alternatives with a baseline of no action. The status quo is addressed by Alternative 2- the proposed action.

66. Comment: We would like to see an alternative developed that is based on user capacity instead of predicted business growth.

Response: Determining use capacity would involve studying all of the uses within the Wild and Scenic River corridor. Revisions to the Rogue RMP and Illinois RMP would be the correct process to determine user capacities. Determining user capacities for all uses is beyond the scope of this EIS process. The DEIS (p. 17) describes actions outside of the scope of the EIS and states that general overall recreation use would not be addressed.

67. Comment: (#4) The range of alternatives in the DEIS appears inadequate. Basically, you have put forth a No Change alternative that lets all commercial Special Use Permits expire without reauthorization and three action alternatives that are very similar. The current alternatives don't leave much choice except no authorizations at all and three similar alternatives that are close to the current situation. A statement was made by a Forest Service representative at a DEIS meeting that the court decision leading to this EIS effort somehow approved the range of alternatives in the DEIS. I didn't see that rationale or its basis expressed in the DEIS.

Response: In response to public comments, two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. The Forest Service representative was speaking about alternatives that were considered but eliminated, specifically about the re-establishment of 1968 use levels in the Wild Section. The explanation for this is on page 32 of the DEIS.

68. Comment: (#5) Purpose and Intent of the DEIS: At the conclusion of the last courtroom session I attended, relevant to our lawsuit directed at the agency, a federal attorney brazenly announced that the agency was going to conduct an Environmental Impact Statement simply to declare all of the existing permits as legal. The clear message in this statement was that the Forest Service was going to begin an expensive, extensive planning process, but the end result was already a foregone conclusion.

Response: The purpose and need of the project is stated on page 11 of the DEIS. The decisions to be made are described on page 14 of the DEIS and public involvement is described on page 26. Additional public involvement is described in the FEIS. Federal attorneys are not involved in decision making and this interpretation of the alleged statements may be incorrect or taken out of context.

69. Comment: (#5) In order to protect all the river's users, including those who use motors, I suggest that the Forest Service needs to look at a process, or at least other alternatives, which gradually reduce less appropriate uses of a Wild river.

Response: The special uses to be addressed in the FEIS are appropriate and comply with the Rogue RMP and Illinois RMP. Other uses are outside of the scope of this EIS and would be considered when the Rogue RMP and Illinois RMP are revised. Page 17 of the DEIS describes actions outside of the scope of the FEIS.

70. Comment: (#16) I take issue with any EIS that does not propose greater limits on the amount of motorboat use on the lower river from Blossom Bar downstream to at least Lobster Creek.

Response: In response to public comments, two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004.

71. Comment: (#22) I support development of an alternative that would increase the activity of motorized jet boats. Particularly in the Wild Section of the Rogue, I support renewing the permits.

Response: Alternative 2 – the Proposed Action, Alternative 3- no Sunday/Monday Use, and Alternative 4 – Modified Actual Use, would all allow varying levels of increased use over the current actual jet boat activity.

72. Comment: (#23, #25, #27 and other form letters) I support the development of an alternative that would drastically reduce or eliminate entirely the activity of motorized jet boats on these magnificent Wild rivers.

Response: In response to public comments, two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. The No Action alternative would eliminate jet boats that operate under the special use permits as described in the purpose and need. Completely eliminating all motorized boats from these rivers is an issue with the revisions to the 1972 Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan (Rogue RMP) and Illinois Wild and Scenic River Management Plan (Illinois RMP) are beyond the scope of this EIS process. This EIS process will not make any decisions about private boat use or other activities.

73. Comment: (#29) It is unclear from this DEIS why the Siskiyou National Forest chose not to develop an action alternative that would exclude jet boats from the Wild Rogue River which is the most controversial area where user conflicts are likely to occur. The Siskiyou National Forest should consider an alternative that limits jet boat use in those portions of each river where Congress intends to place more stringent environmental protections; namely, the Wild portions of the Rogue and Illinois Rivers.

Response: In response to public comments. two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. The Rogue RMP permits jet boats below Blossom Bar in the Wild Section. It would require a revision of the management plan to exclude jet boats from the Wild Section. The DEIS (Past Management Decisions on Motorized Boat Use, p.17) describes the history of motorized use management on the Rogue River. Motorized boats are prohibited on the Wild Section of the Illinois River.

74. Comment: (#33) I think the level of use should be limited to what it now is (rather than what the permits now allow). With great foresight, non-motorized use has been limited for many years through the permit program. It is ironic however, that motorized use is allowed to increase on a "wild" river when non-motorized use is not.

Response: In response to public comments, two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004.

75. Comment: (#40) We ask the Forest Service to add an alternative to this FEIS that would require a phase-out or severe reduction in the use of jet boats on the Lower Rogue and Illinois.

Response: Two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. This EIS process will not make any decisions about private boat use or other activities. Historical jet boat use to access private properties in the Wild Section is not part of this EIS.

76. Comment: (#41) The DEIS does a severe disservice to the public by not only failing to consider a reduction in powerboat usage on the Wild section, but also by failing to consider an alternative that holds usage to its current actual level.

Response: Two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. This EIS process will not make any decisions about private boat use or other activities.

77. Comment: (#65) No alternative is afforded that specifically sets use levels at current levels, or even at the highest levels in recent years.

Response: Two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. This EIS process will not make any decisions about private boat use or other activities.

78. Comment: (#65) Apart from the No Action alternative, there is no alternative that presents a realistic reduction in use.

Response: Two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. This EIS process will not make any decisions about private boat use or other activities.

79. Comment: (#65) Because the Wild Section is very special, another meaningful reduction to consider would be cessation of jet boat tours (and perhaps private excursions, etc.) on the Wild Section only.

Response: Two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. The FEIS analyzes a broad range of alternatives. The Responsible Official will consider the effects of each alternative and may combine different elements of the alternatives in the Record of Decision (ROD). Consideration will be given to the cessation of jet boat tours in the Wild Section in making that decision. The reasoning behind the final decision will be described in the ROD.

80. Comment: (#65) The rationale for excluding easements from all alternatives is not suitable. In point of fact, the EIS is to cover special use permits for docks at lodges that are covered by easements.

Response: Easements are outside the scope of this EIS process (DEIS, p.17). An alternative to analyze conservation easements was considered but eliminated from further study (DEIS, p. 33). The agency feels that the rationale given on page 33 is suitable and should be part of the revisions to the Rogue RMP and Illinois RMP. The proposed dock would be authorized by a special use permit and are for commercial purposes. This EIS is specific to commercial special use permits. The dock permits would be in compliance with the conservation easements at the described locations.

81. Comment: (#88) Please amend the DEIS to include alternatives for phasing out jet boats from the Wild and Scenic Section. At the very minimum, there should be closures on the days that jet boats can run on the Rogue River, as has been implemented on the Deschutes River in Oregon.

Response: The Rogue River Management plan permits jet boats below Blossom Bar in the Wild Section. Excluding jet boats from the Wild Section would require revisions to the Rogue RMP and Illinois RMP. Alternative 3 – No Sunday/Monday use, would exclude commercial motorized boats on Sundays and Mondays from the Wild section of the Rogue River. In response to public comments, two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004.

81. Comment: (#89) The DEIS contains a no-action alternative as required by law but all of the remaining three alternatives allow increases in actual jet boat use. In scoping comments, Riverhawks specifically requested that the DEIS include an alternative that limits powerboat use to historic levels. NEPA requires a reasonable range of legal alternatives in addition to the no-action alternative. Alternatives 2, 3, and 4 are all very similar once we apply the assumption that the District Ranger would exercise the option to grant all the case-by-case exceptions allowed.

Response: In response to public comments, two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004.

83. Comment: (#89) Issues that were presented during scoping were dismissed with no analysis. Riverhawks specifically asked for an alternative that held tour boat use at historic levels as required by the River Management Plan and Wild and Scenic Rivers Act. The DEIS offered little explanation why these laws would not apply.

Response: The DEIS explains why an alternative that would re-establish 1968 use levels in the Wild Section was considered but not analyzed (Alternatives Considered but Eliminated, p.32). In response to public comments, two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004.

DOCKS

84. Comment: (#4) The alternatives dealing with the authorization of docks in the Wild Section are stated as though the issue was mostly about safety. I think that it is also an issue of accessibility particularly for the elderly or disabled who can't scramble around the rocks anymore.

Response: Accessibility and safety are linked. Elderly or disabled people who have limited mobility may be more likely to fall and be injured. Wording has been added to the FEIS to address this point.

85. Comment: (#6) It is our understanding that the property has been continuously serviced with a dock for about 30 years or more, although admittedly the dock is sometimes stored and not left in the river out of consideration for and to help preserve the wild and scenic state of the river. We are quite concerned to learn that the DEIS mentions that the Wild River Lodge had a dock for only a few years around 1976, and that none of the alternatives set forth in the DEIS recognizes or provides for the dock at Wild River Lodge. We request that Alternatives 2, 3, and 4 of the DEIS be amended to provide for the issuance of special use permits for the use of the existing dock at Wild Rivers Lodge in the manner that it has been used over the years.

Response: The analysis within this EIS is for docks at commercial lodges open to the public and weather to permit them or not. Additional requests for private docks are not part of this analysis. Additional docks would be part of the revision to the Rogue RMP and Illinois RMP.

86. Comment: (#34) There are other instances in the statement where issues fall outside the scope of the title for this DEIS such as the issue of docks. Several of us have had docks in the past; both in the Recreation Section and the Wild Section and one other in the Wild section has expressed an interest to replace one that did exist there beyond those listed. If docks are to be addressed then those with that interest should be invited to make comment.

Response: This EIS is for docks at commercial lodges open to the public and weather to permit them or not. Additional requests for private docks will be part of the analysis within the revision to the Rogue RMP and Illinois RMP.

87. Comment: (#35) The permits issued to dock users in the Wild Section, fails to take into consideration the environmental easements purchased by the USFS thirty five years ago. The easements would disallow any anchoring of docks to the banks of the river. At the expense of the environmental easements the USFS purchased in the past, ergo, the need for docks remains, in my opinion, in violation of the easements.

Response: The docks that are being considered for permits would be in compliance with the conservation easements at each location.

88. Comment: (#86) Denial of Clay Hill Lodge's right to have a dock, as contemplated under Alternative 4, does not comply with federal law and violates the terms of the federal government's easement agreement with Clay Hill Lodge.

Response: Federal Law requires reasonable access to the property. The FEIS will provide the Responsible Official with information that is needed to determine what is required for reasonable access. Alternative 4 is not a decision but part of a range of alternatives to be considered that addresses and analyzes options for the Responsible Official to consider in a Record of Decision.

89. Comment: (#86) The discussion of Alternative 4 in the DEIS fails to analyze the safety, environmental, and economic impacts of not issuing a permit for a dock at Clay Hill Lodge.

Response: These impacts were analyzed in Chapter 4 – Environmental Consequences, of the DEIS (Water Quality, p. 117; Fisheries, p. 121; Botany, p.133; Recreation, p.147; Economics, p. 155).

90. Comment: (#86) Given the identified benefits and complete absence of negative impacts associated with allowing a dock at Clay Hill lodge, it is not apparent why the Forest Service moved from it's Proposal, which allowed a dock, to it's Preferred Alternative, which does not allow a dock. The DEIS is silent on this issue, and the lack of explanation suggests that the Forest Service's shift represents a compromise at the expense of Clay Hill Lodge rather than a substantive analysis of the benefits and (lack of) impacts associated with allowing a dock at Clay Hill Lodge.

Response: These impacts were analyzed in Chapter 4 – Environmental Consequences, of the DEIS (Water Quality, p. 117; Fisheries, p. 121; Botany, p.133; Recreation, p.147; Economics, p. 155). Alternatives are considered that address and analyze options for the Responsible Official to consider in a Record of Decision. An EIS is not a decision document. It is an analysis of the consequences of a range of reasonable alternatives.

91. Comment: (#86) The DEIS contains no analysis of the issue that issuance of dock permits at all commercial lodges would lead to more development in the Wild Section.

Response: This has been corrected in the FEIS. Conservation easements set and define standards and guidelines for approved facilities and improvements on private property within the Wild and Scenic River corridors. The issues and management direction of additional docks are addressed in the Rogue RMP and are not part of the Proposed Action.

92. Comment: (#86) The dock at Clay Hill Lodge was in existence at the time that the Rogue was deemed a Wild river and has been used at times during each of the past four decades (see DEIS, p. 90) (discussing existence of a dock in the late 60's, early70's, and from 1973-78, 1985-91). The DEIS is incorrect when it states that "there would be an additional dock at Clay Hill Lodge which has not been there for approximately 20 years". (DEIS, p. 145) 1991 is 13 years before the DEIS was drafted.

Response: This has been corrected in the FEIS.

93. Comment: (#86) The DEIS conclusion regarding Alternative 4 is incorrect and unsupported by and internally inconsistent with other statements in the DEIS. This conclusion states that: "Alternative 4 provides the best mix of economic benefits while minimizing effects to wildlife and fisheries, and further minimizes the potential effects of commercial boating within the Wild Section of the lower Rogue River with other river users" (DEIS, p.8). To the contrary, Alternative 4, to the extent that it does not allow issuance of a permit for a dock at Clay Hill Lodge, is inconsistent with federal laws, and holds the potential for greater negative effects on safety, wildlife, and economics than other alternatives. Furthermore, to the extent that the Forest Service has failed to take a hard look at these impacts, adoption of this alternative is inconsistent with NEPA.

Response: The Forest Service believes that Alternative 4 complies with all federal laws. Analysis of impacts, including safety, wildlife, and economics are described in Chapter 4. The safety analysis has been expanded in the FEIS.

94. Comment: (#86) Alternative 4 does not comply with all federal laws. Any proposal that does not include issuance of a special use permit for a dock at Clay Hill Lodge does not comply with Alaska National Interest Lands Conservation Act (ANILCA). The DEIS itself does not indicate that Alternative 4 complies with all federal laws. The DEIS states that the Proposal (Alternative 2) is also in accordance with other required federal statutes but remains silent on whether the Preferred Alternative or any other alternative complies with federal law.

Response: ANILCA requires that reasonable access be provided to private landowners. It doesn't specify what form that access should take. One of the decisions to be made in this EIS process is whether or not to permit a dock at Clay Hill Lodge. Alternative 4 is part of a range of alternatives considered for the analysis of environmental impacts. The analysis will give the Responsible Official the information needed to make a decision on reasonable access to Clay Hill Lodge. The rationale for that decision will be contained in the Record of Decision. The FEIS states that all alternatives would comply with federal law.

95. Comment: (#86) The DEIS understates the safety impacts of not allowing a dock at Clay Hill Lodge under Alternative 4. The DEIS in several instances emphasizes the important safety reasons for allowing replacement of the dock at Clay hill Lodge. In the discussion of alternative 4, however, these safety concerns are understated and minimized. The DEIS does acknowledge that Alternative 4 doesn't provide for safety of passengers, staff, and clients of Clay Hill Lodge but contains no analysis of this impact. This lack of analysis suggests that the Forest Service did not take a hard look at this issue. If the Forest Service did analyze this issue, the DEIS is insufficient because it fails to include any substantive discussion of safety impacts.

Response: The safety analysis and discussion for docks has been expanded in the FEIS.

96. Comment: (#86) As the DEIS states, with no dock, "the economic viability of the lodge businesses would be greatly impacted" (DEIS, p. 141). The DEIS thus acknowledges the impact to Clay Hill lodge of not having a dock. In its discussion of Alternative 4, however, the DEIS later attempts to minimize this impact by characterizing it as the absence of a benefit. (*See* DEIS, p. 148) ("This same benefit would not occur at Clay Hill Lodge although it is no different that the current condition"). Any discussion of Alternative 4 should characterize its economic impacts accurately and not sugar coat or gloss over them.

Response: This discussion has been clarified and expanded in the FEIS.

97. Comment: (#89) The Rogue RMP clearly states "New boat docks, moorings, or salmon boards will not be permitted." The alternatives that allow new docks to be built are clearly in violation of the Rogue RMP and should be withdrawn.

Response: The historical record shows that a dock at Clay Hill Lodge has been in place before the designation of the Rogue National Wild and Scenic River and subsequent river management plan (and is therefore not "new". The Forest Service has approved a dock at Clay Hill Lodge in the past.

DETERMINATION OF CARRYING CAPACITY

98. Comment: (#41) The Siskiyou National Forest should note that there is legal precedent for the need to address the actual capacity of these rivers. Without analyzing the amount of impact caused by different types of users, including motorized tour boats, and without establishing what level of impact the system can withstand without diminishing ORVs, the Siskiyou national Forest is failing to uphold its NEPA obligation to fully analyze the environmental impacts of its action.

Response: The purpose of this EIS is analyze whether or not to continue providing recreational activities on the lower Rogue and Illinois Rivers through existing outfitting and guiding opportunities. The need is to respond to existing outfitter and guide permit holders that want to continue their commercial operations.

Determining carrying capacity would involve studying all of the recreational uses within the Wild and Scenic River corridor along with non-recreational activities such as conservation easements, power lines, etc. Revisions to the Rogue RMP and Illinois RMP would be the correct process to determine carrying capacities. Determining carrying capacities for all uses is beyond the scope of this EIS. The DEIS (p. 17) describes actions outside of the scope of the EIS and states that general overall recreation use, i.e. carrying capacity, would not be addressed.

99. Comment: (#41) Without a determination of user capacity, it is difficult to judge in this DEIS alone whether jet boats, along with other uses, are negatively affecting the fisheries values of these rivers. Without analyzing effects in the light of a set user capacity or use level, the Siskiyou National Forest is failing to adequately describe the impacts its preferred alternative to fisheries resources.

Response: Within the context of cumulative effects, other river use is evaluated for overall effects to fisheries. Revisions to the Rogue RMP and Illinois RMP would be the correct process to determine carrying capacities. Determining carrying capacities for all uses is beyond the scope of this EIS. The DEIS (p. 17) describes actions outside of the scope of the EIS and states that general overall recreation use, i.e. carrying capacity, would not be addressed.

100. Comment: (#77) Why have there been no efforts to determine, based upon objective scientific studies, a realistic carrying capacity for motorboat use?

Response: Revisions to the Rogue RMP and Illinois RMP would be the correct process to determine carrying capacities. Determining carrying capacities for all uses is beyond the scope of this EIS. The DEIS (p. 17) describes actions outside of the scope of the EIS and states that general overall recreation use, i.e. carrying capacity, would not be addressed.

101. Comment: (#87) The Forest Service has not established a user capacity for the river so as to determine appropriate levels of commercial motorboat use as required by law (Please see Friends of Yosemite Valley v. Norton 348 F3d 789, 9th Cir. 2003).

Response: Revisions to the Rogue RMP and Illinois RMP would be the correct process to determine carrying capacities. Determining carrying capacities for all uses is beyond the scope of this EIS.

102. Comment: (#89) Before the Siskiyou National Forest can seriously propose raising motorboat use levels, it must determine what the carrying capacity of the Rogue River is for recreational use.

Response: Determining carrying capacity would involve studying all of the uses within the Wild and Scenic River corridors. Revisions to the Rogue RMP and Illinois RMP would be the correct process to determine carrying capacities. Determining carrying capacities for all uses is beyond the scope of this EIS. The DEIS (p. 17) describes actions outside of the scope of the EIS and states that general overall recreation use, i.e. carrying capacity, would not be addressed.

CONSISTENCY WITH RIVER MANAGEMENT PLAN/FOREST PLAN/WILD & SCENIC RIVERS ACT

103. Comment: Why isn't the Forest Service following the existing River Management Plan for the Rogue River and reducing use to 1968 levels?

Response: Management decisions affecting the 1968 use levels are explained in Alternatives Considered but Eliminated (DEIS, p. 32).

104. Comment: (#89) The River Management Plan states "In the Wild area, Boating regulations to achieve the Wild River objectives will be encouraged. The regulations should: (1) Favor non-motorized use. Motorboat use from Watson Creek to Blossom Bar will be held to the use level consistent with that of 1968, the year of the Wild and Scenic Rivers Act." It is clear that the DEIS does not favor non-motorized use, or does it hold use levels to that of 1968. Alternatives 2, 3, and 4 violate the River Management Plan and should be withdrawn.

Response: Motorized use is prohibited on 22.6 miles of the Wild Section of the Rogue River. Limited motorized use is permitted on the lower 9.8 miles. Non-motorized users only encounter motorized use during the last day of what is normally a 3-day trip. Non-motorized use is favored in the Wild Section. The reasons that motorboat use is not held to 1968 levels are explained in Alternatives Considered but Eliminated (DEIS, p. 32). The Rogue RMP allows historical motorboat use to continue in the Wild Section below Blossom Bar Rapids. Past management decisions have reduced and limited motorboat use in the Wild Section.

105. Comment: (#89) Forest-wide standards and guidelines state that "Commercial rafting and guide permits on the Illinois and Rogue Rivers shall be issued in accordance with requirements of the management plans of these rivers." Since Alternatives 2, 3, and 4 of the DEIS are in violation of the River Management Plan. They also violate the Forest-wide standard and guideline.

Response: These alternatives are in accordance with the Rogue RMP and Illinois RMP along with subsequent management decisions effecting use levels.

106. Comment: (#92) The proposal does not comply with the Wild and Scenic Rivers Act and is not based on legal River Management Plans.

Response: The proposal and its alternatives comply with the Wild and Scenic Rivers Act and are based on the Rogue RMP and Illinois RMP along with subsequent management decisions.

107. Comment: (#92) The DEIS does not disclose that the Siskiyou National Forest Plan states that the Rogue RMP was scheduled for review and possible revision 15 years ago – an important fact because the 1986 amendment of the Wild and Scenic Rivers Act requires agencies to review existing RMPs for conformity with the clarifications/requirements of the amended act.

Response: This is an issue with the legal interpretation of the 1986 amendment and is beyond the scope of this EIS process.

108. Comment: (#92) The purpose and need is flawed because the Forest Service has incorrectly assumed that motorized use generally and /or the level and type of motorized use currently occurring on the Wild & Scenic Rogue and Illinois Rivers is consistent with the Wild and Scenic Rivers Act or was grandfathered in by the Act or by the Endangered American Wilderness Act.

Response: The purpose and need specifies the underlying purpose and need to which the agency is responding in proposing alternatives for action. The proposed action and its alternatives comply with the Wild and Scenic Rivers Act and the Endangered American Wilderness Act. Specifically, the Rogue RMP and Illinois RMP allow for motorized use in certain sections of the rivers.

USER CONFLICTS

109. Comment: (#87) A study referenced in the DEIS (p. 92) indicates that a survey in 1974 showed that 80% of downriver users opposed the use of motorboats on the Wild Rogue (Pfister and Frenkel, 1974). A 1992 study (DEIS, p. 93) confirmed that floaters and anglers continue to oppose jet boat use in the Wild section of the river. Yet the Forest Service inexplicably relies on the low number of complaints it receives to push its commercial jet boat agenda in the Wild river sections (DEIS, P. 94).

Response: The discussion on page 94 of the DEIS simply describes the conflicts that arise between different types of users and the number of complaints that are received. The same study reflects a majority (99 percent) of respondents rated their river experience as "good, very good, or excellent."

110. Comment: (#89) The assumption that motorboat use does not deter non-motorized use is unfounded. The simple fact that the Forest has only surveyed non-motorized users who come to the Rogue River doesn't mean that people don't avoid the Rogue River because of the motorboat use. It just means that they don't show up to be surveyed.

Response: The user studies were specific to the Rogue and not rivers in general. The target questions where developed to address management issue, user expectations and experiences on the Rogue River.

111. Comment: (#33) Regarding the Wild section of the Rogue, the report states that most respondents to surveys are pleased with their experience. But recognition should be made that people who are not pleased with this place quit coming here. In this well –understood phenomenon, the place attracts the people who enjoy being there. Therefore, boaters who strongly dislike motorized use simply don't come to the Rogue anymore, so they are not there to fill out the surveys. This is especially true of the lower river.

Response: The DEIS only describes attitudes of rafters on the Rogue River (DEIS, p. 93). It is well known that a rafting experience on the Rogue River may and probably will involve encounters with motorboats on the lower portion of the Wild Section. People who wish to completely avoid motorboats choose to raft other rivers. The DEIS states that "It is unlikely that many floaters would quit floating the Rogue River because of the motorboats being on the river. Some floaters, who have expressed their concerns and dislike for motorboats continue to float the river multiple times a year during all seasons." (DEIS, p.143).

112. Comment: (#89) The assertion that there are few complaints about conflict between motorized users is based upon the several erroneous assumptions. One assumption is that conflicts will be reported. Another assumption is that reported conflicts will be recorded.

Response: A complaint, by definition, is expressed dissatisfaction. If conflicts are not reported or expressed then it is not a complaint. Reported complaints are recorded.

113. Comment: (#89) There is no mitigation offered to mitigate the effects on the non-motorized user of the possible 193% increase in tour boat use above Watson Creek that would be allowed by alternatives 2 and 4. There is no mitigation offered for the possible 77% increase allowed by alternative 3.

Response: Mitigations common to all action alternatives are described in Chapter 2 (DEIS, p. 37). The economic analysis finds that annually, a 5 percent increase of use could be expected over the next 5 year term of the permits, not 193% and 77% respectfully.

114. Comment: (#89) The assertion that increased motorized use would not cause increased conflict between motorized and non-motorized users (DEIS, p. 142) is unfounded.

Response: The analysis in the FEIS has been changed to reflect maximum permitted use instead of actual use to more accurately describe the impacts of Alternative 2 – the Proposed Action. In addition, in response to public comments, two alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the 2 lowest years of use from 1999-2004.

115. Comment: (#92) The key indicator for "user conflicts" also does not provide a way to determine if the quality of the public's uses and enjoyment of a Wild, Scenic, or Recreation River Area will be protected and enhanced.

Response: Two methods of monitoring user conflicts have been utilized. First, user conflicts have been determined by surveys which partly measure user satisfaction and experience, which many users (99%) rated their experience as "good, very good, or excellent." Second, complaints have been minimal (0-4 annually) about river related user conflicts.

116. Comment: (#98) Safety is an important issue that has been grossly minimized in this DEIS. I have witnessed many near accidents over the years.

Response: The safety analysis discussion has been expanded in the FEIS. No accidents between floaters and motorboats under special use permits have been reported for more than 30 years.

OTHER

117. Comment: Private floater use of the Rogue River has been limited so why not limit motorized use?

Response: Special use permits control the amount of commercial motorized use by limiting the number of permits issued, by limiting the number of daily trips and by limiting some trips by the time of year. Private motor boat use is only limited in the Wild Section. Revisions to the Rogue RMP and Illinois RMP would be the correct process to determine appropriate levels of all other river related activities.

118. Comment: Finding no effect is only meaningful as to what was measured. The DEIS reads more like an economics effects analysis than an environmental analysis.

Response: The environmental analysis(consequences) is contained in Chapter 4 of the DEIS. The economic analysis is only a portion of the consequences on resources described in Chapter 4. The issues that drive the analysis were determined by public scoping and are described in the DEIS (DEIS, P. 26). No additional issues or comments on specific indicators of measure have been received during the comment period for the DEIS.

119. Comment: I feel that the permittees overstate the amount of use of their permits. The DEIS is weak on monitoring and control of permitted use.

Response: Control of permitted use is outlined within the operating plans for each permit holder. River monitoring by Forest Service personnel is the primary method to check permittees' use levels. Use levels are summarized annually. The Forest Service has not observed any overstatements of use levels by permittees.

120. Comment: It is a major flaw that private motorized use that isn't required to have a special use permit is not evaluated in the DEIS.

Response: Private motorized use by permit exists only in the Wild Section. This EIS only analyzes commercial special use permits. Revisions to the Rogue RMP and Illinois RMP would be the correct process to analyze all other river related activities.

121. Comment: I feel that my property rights include a dock at Clay Hill Lodge and that a special use permit should not be required.

Response: Under Forest Service policy, special use permits are required for docks or any other facility located on the Rogue or Illinois Rivers.

122. Comment: There are too many jet boats in the Wild Section during the early fall fishing season (after September). Do not increase daily permitted use.

Response: Daily use levels will be discussed as part of the Record of Decision.

123. Comment: (#3) I would like to request the Forest Service to also incorporate the 2004 use levels in the average use if possible.

Response: 2004 use levels are being incorporated in the average use.

124. Comment: (#4) Nowhere in the DEIS do I see a clear statement of what will happen to existing outfitter-guide operations if their Special Use Permits expire before a decision can be made for authorization. I think that it is likely that appeals and subsequent litigation will stretch the time period until a decision can be implemented over many months or even years.

Response: The No Action alternative analyzes the effects of not issuing permits to existing operations (DEIS, p. 152). The Forest Service recognized the need to issue permits during the interim of when the Record of Decision could be implemented. This was done with a new Categorical Exclusion that allows for issuance of expiring permits that need to be reauthorized when there are no changes in the terms and conditions of the permits.

125. Comment: (#4) The DEIS makes a statement on page 94 that "there is no regulated float season on the Illinois river at this time". Actually, Forest Service permits are required to float through the Wild section of the Illinois River during the spring float season. Outside of the spring season the Illinois is almost always too low to float. These permits are not currently limited in number but a permit is still required and a restriction on the number of float permits available could be applied at some later date if use exceeds specified limits.

Response: This error will be corrected in the FEIS.

126. Comment: (#5) Weak and ineffective monitoring: There is nothing in this DEIS that would indicate any presence whatsoever of an effective and comprehensive monitoring program being conducted by the Forest Service. The technique proposed in the DEIS (going almost unmentioned) is known as random sampling – a method known for being ineffective and prone to error.

Response: Monitoring requirements have been expanded in the FEIS, and are included in Chapter 2. The Forest Service has increased river monitoring over the last three years utilizing payment made by the permittees through the Fee Demo authority. This has improved permittees compliance with the terms and conditions of their permitted activities.

127. Comment: (#5) When do all of these expansions of use come to an end? Why are there no limits proposed?

Response: In response to public comments, two alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the 2 lowest years of use from 1999-2004.

128. Comment: (#5) Jet boat docks: One applicant for a new dock may have had a previous owner of the property take actions years ago so as to render the current application for a dock illegal. Yet the DEIS mentions that another special use permit for another dock may be issued by the Forest Service. This inequity is found in Alternative 2 and should be researched further.

Response: The proposal to permit a dock at Clay Hill Lodge, as described in Alternative 2, would meet the requirements of the conservation easement at that location, and is legal.

129. Comment: (#70) Jet boats are just too loud and, I believe, unnecessarily disturb wildlife along the lower Rogue and Illinois Rivers. Yet recreation is important too. It does draw tourists essential for local employment. Alternative motor crafts should be considered instead such as fan boats as seen in the Everglades. There is less aquatic disturbance and sonar disruption of fish, and there would be less intrusion on non-motorized craft.

Response: Existing technology has yet to develop a boat that could travel to the same locations upriver and eliminate user conflicts. Fan boats are louder than the jet boats currently being used and would not be a feasible solution. Oregon Administrative Rules require engine noise levels to be less than 88 decibels. Tour boats that access the Wild Section have a noise level between 68.0 to 69.3 decibels.

130. Comment: (#33) The lower Rogue, below Foster Bar, is one of the premier rivers in the West for an overnight river trip on an undeveloped and scenic river without heavy whitewater. On the West Coast, only a handful of other rivers offer the opportunities available here. Awareness of this appears to be completely absent in the report (DEIS).

Response: A very high percentage of camping is by motorized boat use. Use is high on summer and fall weekends and holidays, sporadic through the rest of the year. Non-motorized boat use for camping is very low. This EIS only analyzes the commercial special use permits. Revisions to the Rogue RMP and Illinois RMP would be the correct process to analyze all other activities within the Rogue and Illinois Wild and Scenic Rivers.

131. Comment: (#35) If permits are to be issued at all, they must be done with a condition that they will be revoked prior to the present five year USFS intended permit conditions, and reissued with major entry limitation changes, once the revised management plan takes effect.

Response: Revisions to the Rogue RMP and Illinois RMP could affect the existing special use permits. Permits would be amended when decisions are made with a new river management plan to reflect any changes.

132. Comment: (#41) The Siskiyou National Forest has failed to demonstrate how the current use is impacting the environment, particularly regarding fisheries and other established Outstandingly Remarkable Values (ORVs) of the Illinois and Rogue Rivers.

Response: Effects of current use on the environment and ORVs were described in the analysis of Alternative 2- the Proposed Action, in Chapter 4 of the DEIS. The Outstandingly Remarkable Values for the Rogue, as identified by Congress (HR 1623 July 3, 1968 and HR 1917 September 24, 1968) and as described in the Rogue RMP (Federal Register Vol. 37, No 13, 13408-134116) include natural scenic, fisheries and recreation. Other river-related values that are important, but were not considered outstandingly remarkable at the time include wildlife and cultural resources. The ORVs for the Illinois River, as described in the Illinois RMP, are water quality, fisheries, scenery, botanical resources, and recreation (p. 2). This will be clarified in the FEIS.

133. Comment: (#41) The preferred alternative does not specifically address how proposed increases in actual use over the averages the past few years might increase the impact on the environment.

Response: Chapter 4 of the FEIS will analyze the effects that each alternative has on the environment by specifically addressing known impacts within specific resource areas.

134. Comment: (#41) The Siskiyou National Forest has failed to justify why a 25% increase over past actual use is necessary. The economic growth figure factor of 25% is unsupported in the DEIS. Why did the Siskiyou National Forest arrive at this particular figure? It seems extremely arbitrary, particularly considering the Siskiyou National Forest has failed to establish what level of commercial powerboat use the river can handle without degrading the ORVs of the river. The Siskiyou National Forest fails to adequately analyze how or if this increase may diminish natural and scenic values, fisheries health, and how it may exacerbate existing user conflicts by increasing actual jet boat usage on the Rogue and Illinois rivers, particularly in the Wild Section of the Rogue.

Response: Alternative 4 was developed as an alternative to reduce the level of permitted trips from the level in Alternative 2 - the Proposed Action. The 25% increase over actual use was used to help display the differences in impacts between Alternative 2 - the Proposed Action and an alternative with reduced permitted trips. The FEIS will provide the deciding officer with information to determine how best to permit commercial use while protecting or enhancing the ORVs.

In response to public comments, two Alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the two lowest years of use from 1999-2004. The analysis of impacts of these new alternatives will help contrast the impacts between actual use, reduced use, and the possibility of increases to maximum permitted use in the other alternatives.

There is a difference between actual use and permitted or authorized use. Actual use is projected to grow 2 to 3% a year over the next five year term of the permits for a term growth of 10 to 15%. Use numbers in Alternative 4 utilized and account for this projected increase. There is no indication in the economic and use analysis that shows growth rates to be greater than 10 to 15% over the five year term of the permits.

135. Comment: (#41) The DEIS does not attempt to represent the public benefit by attempting to quantify the externalities caused by powerboat use in the form of diminished recreational experience for non-motorized users and in harm to fisheries (as the preferred alternative is Likely to Adversely Impact the threatened coho salmon, as well as may impact other species).

Response: The Rogue RMP and Illinois RMP allow for appropriate levels of motorized boating. The purpose of this EIS is to determine the appropriate level of commercial boating through the analysis of a range of alternatives. The effects of diminished recreational experience to non-motorized users are analyzed.

136. Comment: (#41) The Siskiyou National Forest has failed to provide a credible plan by which use will be monitored and controlled in the future. The "honors system " may be suitable, but the Siskiyou National Forest has not demonstrated how it will reinforce this system with monitoring and what recourse is available to the public in the event that a permit holder does not abide by the terms of its agreement.

Response: Monitoring requirements have been expanded in the FEIS, and are included in Chapter 2. The Forest Service has increased river monitoring over the last three years utilizing payment made by the permittees through the Fee Demo authority. This has improved permittees compliance with the terms and conditions of their permitted activities.

137. Comment: (#41) The DEIS does not present the public with a thorough, well-reasoned analysis of channel maintenance activities and its possible impacts to the environment. The current DEIS is deeply inadequate for the purpose of developing a Section 7 determination on whether the current use will negatively impact the ORVs of the Rogue and Illinois Wild and Scenic Rivers. For instance, it has failed to analyze the visual impact caused by dredging and the resultant release of stream bottom sediment into the Rogue and Illinois rivers. The effects to the natural scenic ORV, as well as other ORVs of the Rogue and Illinois Rivers, are difficult to ascertain from this DEIS, which lacks site-specific information about how dredging has occurred, how it might occur in the future, and what the specific effects might be.

Response: The analysis of channel maintenance and it possible impacts to the environment are found in Chapter 4 of the DEIS (Effects on Water Resources, p.117; Effects to Fisheries, p. 121; Effects to Wildlife, p. 131; Effects to Botanical Resources, p. 133; Effects to Air Quality, p.138; Effects to Cultural Resources; p. 139; Effects to Recreation, p. 148; Effects to Wilderness, p. 151; Effects to Economics, p. 155).

Additional information on the intensity and context of channel maintenance is added in the FEIS to the Effects of Water Resources Section. The description of effects to Outstandingly Remarkable Values (ORV) has been expanded in the FEIS. The ORV of recreation is maintained and enhance by periodic channel maintenance.

138. Comment: (#41) Because the DEIS lacks detailed, reliable information regarding the impacts to other ORVs, this analysis is inadequate for developing a Section 7 determination. Dredging may have many other impacts rather than alleviating possible barriers to a subset of recreational users on the Rogue and Illinois Rivers, and this DEIS gives no detailed analysis of these possible effects.

Response: Environmental impacts are described in detail in Chapter 4 of the DEIS. The ORV's and the Section 7(a) Determination will be addressed in more detail in the FEIS.

139. Comment: (#41) The Siskiyou National Forest failed to analyze the cumulative impacts of all recreational and management activities in the DEIS. It is not adequate to simply list other activities without presenting a thorough rationale for how specific impacts may or may not occur.

Response: The Summary of Cumulative Effects (DEIS, pages 156 through 165) contains a thorough discussion of cumulative effects and the impacts upon specific resources.

140. Comment: (#55) The DEIS appears to give a preference to commercial interests and doesn't consider an option of preserving the natural habitat.

Response: The purpose of the proposal in the EIS is to continue providing recreational opportunities on the lower Rogue and Illinois Rivers through existing outfitting and guiding opportunities as outlined by Forest Service Policy. The proposed action and all alternatives are designed to meet Forest Plan standards and guidelines and protect or enhance ORVs. The option of preserving habitat is a land allocation decision made in the Forest Plan or revisions to the Rogue RMP and Illinois RMP and is outside of the scope of the FEIS.

141. Comment: (#65) The potential impact of some alternatives can't be evaluated because the level of use that could potentially result depends on the personality, motivation, etc., of an individual. These do not constitute objective policies; they are subjective policies that preclude appropriate assessment.

Response: Use levels, types of users and user trends have been stable over the last ten years. This information was utilized in the analysis of the alternatives.

142. Comment: (#65, #89) Some alternatives afford the potential for use to triple or otherwise increase over recent levels. There is no meaningful assessment of the effects of increased use.

Response: Increased use within some of the alternatives has been corrected and re-analyzed in the FEIS. There is a difference between actual use and permitted or authorized use. Actual use is projected to grow 2 to 3% a year over the next five year term of the permits for a term growth of 10 to 15%. Use numbers in Alternative 4 utilized and account for this projected increase. There is no indication in the economic and use analysis that shows growth rates to be greater than 10 to 15% over the five year term of the permits.

143. Comment: (#65) When there are many political and economic motivations to issue the special use permits, it is not acceptable that the document is full of assertions that are informed to an unknown extent by data. Phrases such as "it is unlikely", "may possibly" or "should not have" are abundant. For example, on page 133 the document simply asserts: "It is unlikely that jet boats cause wake with the power sufficient to dislodge or break purple loose strife stems or roots."

Response: Corrections have been made in the FEIS to clarify impacts where this phrasing occurred in the DEIS.

144. Comment: (#65) It is quite inappropriate to dismiss jet boat effects on Wilderness and other resources on the basis that private jet boats, for example, produce similar or even worse effects. These other uses are yet to be addressed and should not be presumed for the future.

Response: Other uses on the Rogue River are a reality that is appropriate to address. Impacts from private jet boats would remain if no commercial permits were issued. Impact analysis in the DEIS is based on the existing levels of these other uses. Revisions to the Rogue RMP and Illinois RMP would address the environmental impacts of all activities with the Rogue and Illinois Wild and Scenic Rivers.

145. Comment: (#65) The DEIS provides not rationale for affording the potential for increased use that could triple current levels. The DEIS contains statements such as the following on page 142: "However, since the number of people recreating has been relatively stable over the last five years (the only years measured?), the amount of recreational use is not expected to increase or decrease dramatically". Under alternatives 2, 3, and 4 the potential for dramatic increases in use would be permitted without a demonstration of need or evaluation of potential impact.

Response: In response to public comments, two alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the 2 lowest years of use from 1999-2004. The economic analysis shows a potential of 5% increase of use annually of the next five year term of the special use permits.

146. Comment: (#86) The DEIS states that "private property easements" are not within the scope of the FEIS (DEIS, p.17). To the extent that the Preferred Alternative (Alternative 4), as opposed to the Proposal (Alternative 2), contradicts the express terms of Clay Hill Lodge's easement, Clay Hill Lodge submits that discussion of the impacts of Alternative 4 on the government's legal obligation to comply with the terms of the easement is an appropriate and essential subject for discussion in the DEIS. To the extent that the Forest Service disagrees, Clay Hill Lodge respectfully requests an explanation for the disagreement, as there is no indication why the easement is not included in the DEIS as drafted.

Response: How the Forest Service administers the Clay Hill Lodge easement is beyond the scope of the EIS. It is the agency's position that all alternatives comply with the law and current Forest Service regulations. Revisions to the Rogue RMP and Illinois RMP would address all activities including easements.

147. Comment: (#87) The purpose and need statement for the project appears to be so narrowly crafted as to discount all recreational, ecological, and hydrological uses that are in conflict with commercial jet boat use in the Wild Section of the river.

Response: The purpose of this EIS is whether or not to continue providing recreational activities on the lower Rogue and Illinois Rivers through existing outfitting and guiding opportunities. The need is to respond to existing outfitter and guide permit holders that want to continue their commercial operations. The EIS analyzes the impacts of this proposal within a range of alternatives and the proposal's effects to other resources within the Rogue and Illinois Wild and Scenic Rivers. Impacts to recreational, ecological, and hydrological uses are described in Chapter 4- Environmental Consequences.

148. Comment: (#87) The large scale, and daily, commercial jet boat use of the Wild Section of the Rogue River does not protect the Outstandingly Remarkable Values of the Wild section as established throughout this document. Indeed fish will be impacted and all other recreational uses will be degraded.

Response: The discussion of the Outstandingly Remarkable Values has been expanded in the FEIS. Analysis to the effects to fish and all other recreation uses is addressed within the range of alternatives and analyzed in Chapter 4.

149. Comment: (#87) Impacts to the Outstandingly Remarkable Values of fisheries is downplayed or ignored by the DEIS, while impacts to all other forms of recreation other than motorized boating are discounted by the agency.

Response: Discussions of the Outstandingly Remarkable Values have been expanded in the FEIS.

150. Comment: (#87) The DEIS failed to avoid, minimize, and mitigate to the maximum extent possible. The tour boats are able to avoid impacts on the aquatic environment by not operating in low flows, for example. Additionally the DEIS neither proposed nor discussed any plans or attempts to minimize the impacts of the action. Indeed the proposed use of an in-stream excavator is the antithesis of attempting to minimize the impacts of the action.

Response: Mitigations are described in the DEIS (DEIS, p. 37). The No Action alternative and the addition of an alternative to the FEIS that would greatly reduce actual use are both options for reducing impacts. Effects of channel maintenance are discussed and analyzed. Within the Rogue RMP channel maintenance is identified as an appropriate method to allow continuance of the Outstandingly Remarkable Value of Recreation.

151. Comment: (#89) It is quite clear that the DEIS is making no effort to prevent use levels from reaching "the point where the quality of the recreation experience or the quality of the stream environment deteriorates." The Siskiyou National Forest seems to believe that powerboat use can increase significantly from current use levels without impacting the recreational experience or the stream environment. The Siskiyou National Forest has presented no evidence to support this arbitrary and capricious belief.

Response: The effects of increased jet boat use (Alternatives 2, 3, and 4) were described in DEIS Chapter 4. In response to public comments, two alternatives have been added in the FEIS. One would cap commercial use at a level that averages the 2 highest use years of use from 1999 to 2004. The other alternative would reduce commercial use to a level that is the average of the 2 lowest years of use from 1999-2004. The analysis of the range of alternatives will give the Responsible Official the information needed to make a decision on the level of permitted commercial use, including powerboat use. The rationale for that decision will be contained in the Record of Decision.

152. Comment: (#89) The provision in alternatives 3 and 4 that allows the District Ranger to authorize additional trips on a case-by-case basis is totally inconsistent with the intent of the Wild and Scenic Rivers Act (WSRA) and the River Management Plan (RMP). The intent of the WSRA and the RMP is clearly to place limits on growth of motorized use, any provision to allow a District Ranger the authority to modify the limits set in an EIS is inconsistent with the RMP and WSRA. Alternatives 3 and 4 should be withdrawn.

Response: In response to public comments, two additional alternatives were developed and analyzed. Clarifications have been made in the FEIS.

153. Comment: (#89) The purpose and need statement only recognizes an economic need for the commercial interests to be able to make more money. The purpose and need is not justified by sound rationale and evidence.

Response: The purpose of this EIS is to analyze whether or not to continue providing recreational activities on the lower Rogue and Illinois Rivers through existing outfitting and guiding opportunities. The need is to respond to existing outfitter and guide permit holders that want to continue their commercial operations. The EIS analyzes the impacts of this proposal within a range of alternatives and the proposal's effects to other resources within the Rogue and Illinois Wild and Scenic Rivers. Impacts to recreational, ecological, and hydrological uses are described in Chapter 4- Environmental Consequences.

154. Comment: (#89) The list of Federal Agencies, federal recognized tribes, state and local governments, and organizations representing a wide range of views regarding issuing special use permits for commercial motorized boat activity on the lower Rogue and Illinois Rivers is incomplete. This list fails to list any environmental organizations or river protection groups. The failure to list these groups effectively denies them the ability to collaborate on analysis and comments.

Response: The Schedule of Proposed Actions is made available by mailing to interested parties and electronically on the Internet. Interested parties responding to the scoping for the proposed action received notification of the availability of the draft and were mailed copies of the DEIS.

155. Comment: (#89) The DEIS fails to adequately assess the cumulative effects of motorized use on the river environment in alternatives 2, 3, and 4. These alternatives pose the possibility of significant increases in motorized use. The DEIS should analyze these along with the possibility that private and lodge boat use might increase to their maximum permitted levels.

Response: The Summary of Cumulative Effects (DEIS, pages 156 through 165) contains a thorough discussion of cumulative effects and the impacts upon specific resources. There is a difference between actual use and permitted or authorized use. Actual use is projected to grow 2 to 3% a year over the next five year term of the permits for a term growth of 10 to 15%. Use numbers in Alternative 4 utilized and account for this projected increase. There is no indication in the economic and use analysis that shows growth rates to be greater than 10 to 15% over the five year term of the permits.

156. Comment: (#92) The DEIS uses boat trips to assess impacts and regulate use but does not explain the methods used to obtain boat trip data or cite reports that contain these data.

Response: Data for boat trips comes from Forest Service use reports submitted by the commercial permittees and are monitored through permit administration.

157. Comment: (#92) The key indicator for the wildlife, fish, and water quality issue is insufficient to determine if the rivers' fish, water quality, or wildlife ORV's are protected and enhanced.

Response: Analysis to the effects on fish, water quality, and wildlife within Chapter 4 has been expanded.

158. Comment: (#98) One of my concerns about this DEIS is that private jet boats were not included. Why not?

Response: The purpose an of this project is to continue providing recreational activities on the lower Rogue and lower Illinois Rivers through existing outfitter and guide opportunities as outlined by Forest Service policy. There is a need to respond to existing guide permit holders who want to continue their commercial operations by issuing new special use permits that authorize occupancy on National Forest system lands. Requiring special use permits for private, non-commercial, motorboats does not meet this purpose and need and is beyond the scope of this proposal. Revisions to the Rogue RMP and Illinois RMP would be the correct process to analyze all activities within the Rogue and Illinois Wild and Scenic Rivers.

Wilderness

159. Comment: (#87) The Forest Service's refusal to limit commercial jet boat traffic to the non-wild sections of the Rogue River violates the 1978 Wilderness Act.

Response: This is not true as the Rogue Wild and Scenic River is not managed as wilderness. The Wild Rogue Wilderness was established by the passage of the Endangered American Wilderness Act of 1978 (Public Law 95-237). A portion of the Wild and Scenic Rogue River, which was designated under the Wild and Scenic Rivers Act in 1968, bisects the Wild Rogue Wilderness.

The Endangered American Wilderness Act contains specific language as how to manage the Wild and Scenic portion of the Rogue River. Its states, in part, that "…certain lands…shall be known as the Wild Rogue Wilderness: Provided, that the portion of the segment of the Rogue River designated as a component of the National Wild and Scenic Rivers System … which lies within the Wild Rogue Wilderness shall be managed as a wild river notwithstanding section 10(b) of that Act or any provision of the Wilderness Act to the contrary…"

Therefore, the river within the Wild Rogue Wilderness is managed separately under Wild and Scenic Rivers Act direction. This specific direction for the river was made in recognition of certain established uses along the river; while not consistent with wilderness direction, Congress did not wish to eliminate by passage of the Endangered American Wilderness Act.

Economics

160. Comment: How are indirect jobs and income determined?

Response: The indirect and induced jobs and income estimates are derived using the IMPLAN model which is a widely accepted and applied input-output modeling system (see DEIS page 111).

161. Comment: (#1) The agency must recognize and adequately address the socioeconomic needs of the locale, including proper maintenance of the outfitting industry in southwestern Oregon. The Rogue and Illinois are destination resources, and local communities derive substantial economic benefit through the existing permit system. The progressively drastic socioeconomic impacts of Alternatives 4, 3, and 1 are not fully analyzed or disclosed in the DEIS.

Response: The importance of the Rogue River outfitter and guide industry to Gold Beach, Agnes and Curry County was discussed in the DEIS pages 110 and 111. The results of the analysis of the effects of the alternatives was displayed and discussed in the DEIS pages 152-155.

162 Comment: (#2) The last five years has been tumultuous for our nation and for Oregon. In this timeframe we have experienced dramatic fluctuations in our fish stocks, the social response to the attacks of September 11, 2001, high gas prices, prolonged economic recession and war abroad. Combined with the immediate impacts of drought, we do not believe this five-year period is an accurate benchmark for average use of the Rogue and Illinois rivers. Thus, Alternative 2 is preferable to Alternative 4 because it does not set limits calculated on this short-term average. The reductions in Alternative 4, while modest compared to the last 5 years, could result in a net-loss of recreational use of the area as the economy normalizes.

Response: The last five year period was chosen because it includes the most detailed and consistent data by outfitter and guide type available. The average annual total use for the five-year period is two percent less than the average annual total use for the last nine years. The nine-year period includes the peaks of 1994 and 1995. Earlier years of use data were not considered because they were about 20 percent less than the last five years reflecting a different type of outfitter and guide industry on the Lower Rogue.

163 Comment: (#4) I am concerned about the lack of depth of the economic analysis. Nowhere do I see a statement declaring the devastating impact a significant reduction in the authorization of outfitter-guide permits on the Lower Rogue would have on the communities of Agness and Gold Beach.

Response: The DEIS discusses that the Lower Rogue outfitter and guide industry makes up about 20 percent of the tourism industries in Gold Beach, Agnes and Curry County (DEIS page 111). The effects of the alternatives were displayed and discussed in the DEIS pages 152-155.

164. Comment: (#41) How was the indirect economic benefits of motorized recreation users on the Rogue determined?

Response: The indirect economic effects of motorized outfitter and guides on the Rogue were derived by estimating the direct and induced jobs and income effects using the IMPLAN model which is a widely accepted and applied input-output modeling system (see DEIS page 111).

165. Comment: (#65) Assertions regarding economic impact can't be evaluated based upon the information provided. For example, the means of determining indirect costs is not provided nor is it apparent to me how this was determined; in fact, much of the economic information seems to be based upon estimates deriving from unspecified premises. Furthermore, the direct costs for no action are presumably based upon a complete cessation of jet boat tours. Such a premise is not clearly warranted. The premise can't be based upon the fact that on business seeking to provide tours only to Lobster Creek went out of business. This could have occurred for a number of reasons, including poor management and competition from other tour companies that could offer more. If only tours to Lobster Creek were available, perhaps such a tour could be quite successful, while protecting the wild portions of the Rogue River.

Response: The methods and assumptions used to estimate the economic costs and benefits of the alternatives were discussed in the DEIS page 103-111 and pages 152-155. The DEIS also states that additional information on the economic analysis is available in the project record.

The no-action alternative was not considered based on the cessation of any outfitter and guide businesses. The alternative was developed and analyzed to address the purpose and need, the issues, and their resolution within the decision space of the Responsible Official.

166. Comment: (#86) The DEIS conclusion regarding Alternative 4 is incorrect and unsupported by and internally inconsistent with other statements in the DEIS. This conclusion states that: "Alternative 4 provides the best mix of economic benefits while minimizing effects to wildlife and fisheries, and further minimizes the potential effects of commercial boating within the Wild Section of the lower Rogue River with other river users" (DEIS, p.8). To the contrary, Alternative 4, to the extent that it does not allow issuance of a permit for a dock at Clay Hill Lodge, is inconsistent with federal laws, and holds the potential for greater negative effects on safety, wildlife, and economics than other alternatives. Furthermore, to the extent that the Forest Service has failed to take a hard look at these impacts, adoption of this alternative is inconsistent with NEPA.

Response: This will be addressed in more detail in the FEIS.

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RESPONSE FROM OTHER GOVERNMENTS, ELECTED OFFICIALS AND AGENCIES

The full text of letter from governmental agencies and elected officials is reproduced in accordance with Forest Service policy. This does not imply that the many comments from individuals and groups were considered less seriously. The agency letters are reproduced to inform readers of the positions taken by their public servants.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

JAN 19 2005

January 10, 2005

Reply To
Attn Of: ETPA-088

Ref: 03-060-AFS

John Borton, District Ranger
Gold Beach Ranger District
Rogue River-Siskiyou National Forest
29279 Ellensburg
Gold Beach, OR 97444

Dear Mr. Borton:

The U.S. Environmental Protection Agency has received the Draft Environmental Impact Statement (EIS) for the proposed **Special Use Permits for Outfitters and Guide Operations on the Lower Rogue and Lower Illinois Rivers** (CEQ No. 040542) for review in accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act.

EPA Region 10 has conducted a limited review of the draft EIS and, based upon the that review, we do not foresee having any environmental objections to the proposed project. Therefore, we have assigned a rating of LO (Lack of Objections) to the draft EIS. This rating will be published in the *Federal Register*.

Should you have any questions, please contact Bill Ryan of my staff at (206) 553-8561.

Sincerely,

Christine B. Reichgott

Christine B. Reichgott, Manager
NEPA Review Unit

Printed on Recycled Paper

Oregon
Theodore R. Kulongoski, Governor

Oregon State Marine Board
435 Commercial St. NE, #400
P.O. Box 14145
Salem, OR 97309-5065
(503) 378-8587
Fax 378-4597

December 7, 2004

John Borton, District Ranger
Gold Beach Ranger District
29279 Ellensburg
Gold Beach, OR 97444

Dear Mr. Borton:

The Oregon State Marine Board appreciates the opportunity to comment on the draft EIS "Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers. We value our long history of involvement with recreational boating issues on the Rogue River and have carefully reviewed the document.

General Comments

We find the DEIS to be complete and well written, containing much useful information regarding boating on this outstanding natural resource. The DEIS seems to coalesce many of our contentions regarding motorboat use on waterbodies of the state. We find *Alternative 2 – The Proposed Action*, to be well supported within your document as a desired course of management. I will reiterate some of the key points below.

- The last five years have been tumultuous for our nation and for Oregon. In this timeframe we have experienced dramatic fluctuations in our fish stocks, the social response to the attacks of September 11, 2001, high gas prices, prolonged economic recession and war abroad. Combined with the immediate impacts of drought, we do not believe this five-year period is an accurate benchmark for average use of the Rogue and Illinois rivers. Thus, Alternative 2 is preferable to Alternative 4 because it does not set limits calculated on this short-term average. The reductions noted in Alternative 4, while modest compared to the last five years, could result in a net-loss of recreational use of the area as the economy normalizes.

- The DEIS states numerous times that motorboat use is not shown to be significantly detrimental to species of concern, including fish or other aquatic organisms, mammals, birds, reptiles or amphibians in the project area. Further, the strongest basis for any conflict within the document is based upon a small number of reports of conflict between manually powered watercraft users and motorboat operators, or an expressed dislike of development (docks) by manually powered craft users. Even with this expressed conflict, it is noted that people

operating manually powered watercraft in the Wild Section are highly satisfied with their experience in this section of the river and wouldn't alter their use of the resource if these elements remain. This alone would seem to support the intent of Alternative 2.

- The thorough evaluation of effects of motorboat wakes, fuel tank rupture risk, motorboat impacts on salmonids and other species, and other potential environmental impacts do not appear to necessitate reduction of permits for commercial trips into the Wild Section. Furthermore, permitting docks at existing lodges as stated in the Alternative 2 seems to reduce the risk of environmental damage by providing a stable platform for fuel transfers, and also reduces the risk of injury to visitors to these facilities.

- No where in this report do we see a demonstrated need for reductions of motorboat use as noted in Alternative 1 or 3, except to satisfy the extremely small number of complaints focused on the mere presence of motorboats. While safety is the utmost concern for the Marine Board, these complaints do not represent a significant safety issue and do not justify the economic consequences to the local community, and the loss of recreational opportunity to the public, that would occur within Alternative 1 or 3. If such conflict were determined to represent a safety risk, we believe existing law enforcement resources could be utilized to adequately address the concern.

Recommendation

No agency or organization can forecast, with complete accuracy, how economies, recreational uses and other use patterns of the Rogue River resource will change in the coming decades. We believe that maintaining the flexibility contained in Alternative 2 is the best option for serving local economies, anglers, rafters, motorboat operators, tourists and all others benefiting from the ample recreational opportunities of the Rogue River.

Thank you for this opportunity to comment. Please contact us if you need any additional information or assistance. We look forward to working with you in the future.

Sincerely

Paul Donheffner

Paul Donheffner, Director
Oregon State Marine Board

c.c. Bill McNair, Rogue Alliance

APPENDIX E: SAMPLE PERMITS

These sample permits are provided to display the terms and conditions that would be required if new permits were issued. New permits would have a 5 year term. The number of trips permitted, as described in each alternative in Chapter 2, may change in the new permits. The exact terms and conditions of the new permits, if issued, would depend upon the decision that will be made in the Record of Decision.

Authorization ID
Contact ID:
Expiration Date: 12/31/2005
Use Code: 153

FS-2700-4 (05/03)
OMB 0596-0082

U.S. DEPARTMENT OF AGRICULTURE
Forest Service
SPECIAL USE PERMIT
AUTHORITY:
LAND AND WATER CONSERVATION FUND ACT OF 1964, AS AMENDED
September 3, 1964

(hereinafter called the Holder) is hereby authorized to use or occupy National Forest System lands, to use subject to the conditions set out below, on the Rogue River - Siskiyou National Forest.

This permit covers 35 miles and issued for the purpose of:

Commercially guided fishing and recreational float services on the Rogue River between Lobster Creek and the holding pool at the bottom of Blossom Bar Rapids.

"A" USE: Motorized use that occurs between Watson Creek and the holding pool at the bottom of Blossom Bar Rapid. This use may occur year-round. The specific allocation for this permit for this type of use is **27 annual boat days**.

"A+" USE: "A" USE that occurs **only between November 16 and May 14 annually.** The specific allocation for this permit for this type of use is **37 annual boat days.**

"B" USE: Float use that begins at Foster Bar and ends at Agness. This Use is for non-mechanized recreational floating and may occur year-round. The specific allocation for this permit for this type of use is **36 annual boat days.**

"C" USE: Motorized use that begins at or below Foster Bar and occurs between Watson Creek and Lobster Creek. This use may occur year-round. The specific allocation for this permit for this type of use is **21 annual boat days.**

"D" USE: Float/motorized use that begins at or below Foster Bar and occurs between Watson creek and Quosatana Creek. Motors used must be 20 horsepower or less. This use may occur year-round. The specific allocation for this permit for this type of use is **48 annual boat days.**

The above described or defined area shall be referred to herein as the "permit area".

TERMS AND CONDITIONS

I. AUTHORITY AND GENERAL TERMS OF THE PERMIT

A. Authority. This permit is issued pursuant to the authorities enumerated at Title 36, Code of Federal Regulations, Section 251 Subpart B, as amended. This permit, and the activities or use authorized, shall be subject to the terms and conditions of the Secretary's regulations and any subsequent amendment to them.

B. Authorized Officer. The authorized officer is the Forest Supervisor or a delegated subordinate officer.

C. License. This permit is a license for the use of federally owned land and does not grant any permanent, possessory interest in real property, nor shall this permit constitute a contract for purposes of the Contract Disputes Act of 1978 (41 U.S.C. 611). Loss of the privileges granted by this permit by revocation, termination, or suspension is not compensable to the holder.

D. Amendment. This permit may be amended in whole or in part by the Forest Service when, at the discretion of the authorized officer, such action is deemed necessary or desirable to incorporate new terms, conditions, and stipulations as may be required by law, regulation, land management plans, or other management decisions.

E. Existing Rights. This permit is subject to all valid rights and claims of third parties. The United States is not liable to the holder for the exercise of any such right or claim.

F. Nonexclusive Use and Public Access. Unless expressly provided for in additional terms, use of the permit area is not exclusive. The Forest Service reserves the right to use or allow others to use any part of the permit area, including roads, for any purpose, provided, such use does not materially interfere with the holder's authorized use. A final determination of conflicting uses is reserved to the Forest Service.

G. Forest Service Right of Entry and Inspection. The Forest Service has the right of unrestricted access of the permitted area or facility to ensure compliance with laws, regulations, and ordinances and the terms and conditions of this permit.

H. Assignability. This permit is not assignable or transferable. If the holder through death, voluntary sale or transfer, enforcement of contract, foreclosure, or other valid legal proceeding ceases to be the owner of the improvements, this permit shall terminate.

I. Permit Limitations. Nothing in this permit allows or implies permission to build or maintain any structure or facility, or to conduct any activity unless specifically provided for in this permit. Any use not specifically identified in this permit must be approved by the authorized officer in the form of a new permit or permit amendment.

II. TENURE AND ISSUANCE OF A NEW PERMIT

A. Expiration at the End of the Authorized Period. This permit will expire at midnight on 12/31/2005. Expiration shall occur by operation of law and shall not require notice, any decision document, or any environmental analysis or other documentation.

B. Minimum Use or Occupancy of the Permit Area. Use or occupancy of the permit area shall be exercised at least 0 days each year, unless otherwise authorized in writing under additional terms of this permit.

C. Notification to Authorized Officer. If the holder desires issuance of a new permit after expiration, the holder shall notify the authorized officer in writing not less than six (6) months prior to the expiration date of this permit.

D. Conditions for Issuance of a New Permit. At the expiration or termination of an existing permit, a new permit may be issued to the holder of the previous permit or to a new holder subject to the following conditions:

1. The authorized use is compatible with the land use allocation in the Forest Land and Resource Management Plan.
2. The permit area is being used for the purposes previously authorized.
3. The permit area is being operated and maintained in accordance with the provisions of the permit.
4. The holder has shown previous good faith compliance with the terms and conditions of all prior or other existing permits, and has not engaged in any activity or transaction contrary to Federal contracts, permits laws, or regulations.

E. Discretion of Forest Service. Notwithstanding any provisions of any prior or other permit, the authorized officer may prescribe new terms, conditions, and stipulations when a new permit is issued. The decision whether to issue a new permit to a holder or successor in interest is at the absolute discretion of the Forest Service.

F. Construction. Any construction authorized by this permit may commence by na and shall be completed by na. If construction is not completed within the prescribed time, this permit may be revoked or suspended.

III. RESPONSIBILITIES OF THE HOLDER

A. Compliance with Laws, Regulations, and other Legal Requirements. The holder shall comply with all applicable Federal, State, and local laws, regulations, and standards, including but not limited to, the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq., the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S. C. 9601 et seq., and other relevant environmental laws, as well as public health and safety laws and other laws relating to the siting, construction, operation, and maintenance of any facility, improvement, or equipment on the property.

B. Plans. Plans for development, layout, construction, reconstruction, or alteration of improvements on the permit area, as well as revisions of such plans, must be prepared by a qualified individual acceptable to the authorized officer and shall be approved in writing prior to commencement of work. The holder may be required to furnish as-built plans, maps, or surveys, or other similar information, upon completion of construction.

C. Maintenance. The holder shall maintain the improvements and permit area to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the authorized officer and consistent with other provisions of this authorization. If requested, the holder shall comply with inspection requirements deemed appropriate by the authorized officer.

D. Hazard Analysis. The holder has a continuing responsibility to identify all hazardous conditions on the permit area which would affect the improvements, resources, or pose a risk of injury to individuals. Any non-emergency actions to abate such hazards shall be performed after consultation with the authorized officer. In emergency situations, the holder shall notify the authorized officer of its actions as soon as possible, but not more than 48 hours, after such actions have been taken.

E. Change of Address. The holder shall immediately notify the authorized officer of a change in address.

F. Change in Ownership. This permit is not assignable and terminates upon change of ownership of the improvements or control of the business entity. The holder shall immediately notify the authorized officer when a change in ownership or control of business entity is pending. Notification by the present holder and potential owner shall be executed using Form SF-299 Application for Transportation and Utility Systems and Facilities of Federal Lands, or Form FS-2700-3a, Holder Initiated Revocation of Existing Authorization, Request for a Special Use Permit. Upon receipt of the proper documentation, the authorized officer may issue a permit to the party who acquires ownership of, or a controlling interest in, the improvements or business entity.

IV. LIABILITY

For purposes of this section, "holder" includes the holder's heirs, assigns, agents, employees, and contractors.

A. The holder assumes all risk of loss to the authorized improvements.

B. The holder shall indemnify, defend, and hold the United States harmless for any violations incurred under any such laws and regulations or for judgments, claims, or demands assessed against the United States in connection with the holder's use or occupancy of the property. The holder's indemnification of the United States shall include any loss by personal injury, loss of life or damage to property in connection with the occupancy or use of the property during the term of this permit. Indemnification shall include, but is not limited to, the value of resources damaged or destroyed; the costs of restoration, cleanup, or other mitigation; fire suppression or other types of abatement costs; third party claims and judgments; and all administrative, interest, and other legal costs. This paragraph shall survive the termination or revocation of this authorization, regardless of cause.

C. The holder has an affirmative duty to protect from damage the land, property, and interests of the United States.

The holder shall maintain $500,000.00 worth of insurance coverage, naming the United States additionally insured on the policy(ies), to partially fund the indemnification obligations of the holder for any and all losses due to personal injury, loss of life, or property damage, including fire suppression and hazardous waste costs. The holder shall furnish proof of insurance (such as a surety bond, or certificate of insurance) to the authorized officer prior to execution of this permit and verify annually, and in writing, the insurance obligation to the authorized officer. The authorized officer may allow the holder to replace, repair, restore, or otherwise undertake necessary curative actions, to the satisfaction of the authorized officer, in order to mitigate damages in addition to or as an alternative to monetary indemnification.

D. In the event of any breach of the conditions of this authorization by the holder, the authorized officer may, on reasonable notice, cure the breach for the account at the expense of the holder. If the Forest Service at any time pays any sum of money or does any act which will require payment of money, or incurs any expense, including reasonable attorney's fees, in instituting, prosecuting, and/or defending any action or proceeding to enforce the United States rights hereunder, the sum or sums so paid by the United States, with all interests, costs and damages shall, at the election of the Forest Service, be deemed to be additional fees hereunder and shall be due from the holder to the Forest Service on the first day of the month following such election.

E. With respect to roads, the holder shall be proportionally liable for damages to all roads and trails of the United States open to public use caused by the holder's use to the same extent as provided above, except that liability shall not include reasonable and ordinary wear and tear.

F. The Forest Service has no duty to inspect the permit area or to warn of hazards and, if the Forest Service does inspect the permit area, it shall incur no additional duty nor liability for identified or non-identified hazards. This covenant may be enforced by the United States in a court of competent jurisdiction.

V. TERMINATION, REVOCATION, AND SUSPENSION

A. General. For purposes of this permit, "termination", "revocation", and "suspension" refer to the cessation of uses and privileges under the permit.

"Termination" refers to the cessation of the permit under its own terms without the necessity for any decision or action by the authorized officer. Termination occurs automatically when, by the terms of the permit, a fixed or agreed upon condition, event, or time occurs. For example, the permit terminates at expiration. Terminations are not appealable.

"Revocation" refers to an action by the authorized officer to end the permit because of noncompliance with any of the prescribed terms, or for reasons in the public interest. Revocations are appealable.

"Suspension" refers to a revocation which is temporary and the privileges may be restored upon the occurrence of prescribed actions or conditions. Suspensions are appealable.

B. Revocation or Suspension. The Forest Service may suspend or revoke this permit in whole or part for:

1. Noncompliance with Federal, State, or local laws and regulations.
2. Noncompliance with the terms and conditions of this permit.
3. Reasons in the public interest.
4. Abandonment or other failure of the holder to otherwise exercise the privileges granted.

C. Opportunity to Take Corrective Action. Prior to revocation or suspension for cause pursuant to Section V (B), the authorized officer shall give the holder written notice of the grounds for each action and a reasonable time, not to exceed 90 days, to complete the corrective action prescribed by the authorized officer.

D. Removal of Improvements. Prior to abandonment of the improvements or within a reasonable time following revocation or termination of this authorization, the holder shall prepare, for approval by the authorized officer, an abandonment plan for the permit area. The abandonment plan shall address removal of improvements and restoration of the permit area and prescribed time frames for these actions. If the holder fails to remove the improvements or restore the site within the prescribed time period, they become the property of the United States and may be sold, destroyed or otherwise disposed of without any liability to the United States. However, the holder shall remain liable for all cost associated with their removal, including costs of sale and impoundment, cleanup, and restoration of the site.

VI. FEES

A. Termination for Nonpayment. This permit shall automatically terminate without the necessity of prior notice when land use rental fees are 90 calendar days from the due date in arrears.

B. The holder shall pay an annual fee of Ninety Dollars $90.00 for the period from 01/01/2005 to 12/31/2005 and thereafter annually on March 1, Ninety Dollars $90.00: Provided, charges for this use shall be made or readjusted whenever necessary to place the charges on a basis commensurate with the fair market value of the authorized use.

C. Payment Due Date. The payment due date shall be the close of business on March 1 of each calendar year payment is due. Payments in the form of a check, draft, or money order are payable to USDA, Forest Service. Payments shall be credited on the date received by the designated Forest Service collection officer or deposit location. If the due date for the fee or fee calculation statement falls on a non-workday, the charges shall not apply until the close of business on the next workday.

D. Late Payment Interest, Administrative Costs and Penalties Pursuant to 31 U.S.C. 3717, et seq., interest shall be charged on any fee amount not paid within 30 days from the date the fee or fee calculation financial statement specified in this authorization becomes due. The rate of interest assessed shall be the higher of the rate of the current value of funds to the U.S. Treasury (i.e., Treasury tax and loan account rate), as prescribed and published by the Secretary of the Treasury in the Federal Register and the Treasury Fiscal Requirements Manual Bulletins annually or quarterly or at the Prompt Payment Act rate. Interest on the principal shall accrue from the date the fee or fee calculation financial statement is due.

In the event the account becomes delinquent, administrative costs to cover processing and handling of the delinquency will be assessed.

A penalty of 6 percent per annum shall be assessed on the total amount delinquent in excess of 90 days and shall accrue from the same date on which interest charges begin to accrue.

Payments will be credited on the date received by the designated collection officer or deposit location. If the due date for the fee or fee calculation statement falls on a non-workday, the charges shall not apply until the close of business on the next workday.

Disputed fees are due and payable by the due date. No appeal of fees will be considered by the Forest Service without full payment of the disputed amount. Adjustments, if necessary, will be made in accordance with settlement terms or the appeal decision.

If the fees become delinquent, the Forest Service will:

Liquidate any security or collateral provided by the authorization.

If no security or collateral is provided, the authorization will terminate and the holder will be responsible for delinquent fees as well as any other costs of restoring the site to it's original condition including hazardous waste cleanup.

Upon termination or revocation of the authorization, delinquent fees and other charges associated with the authorization will be subject to all rights and remedies afforded the United States pursuant to 31 U.S.C. 3711 *et seq*. Delinquencies may be subject to any or all of the following conditions:

Administrative offset of payments due the holder from the Forest Service.

Delinquencies in excess of 60 days shall be referred to United States Department of Treasury for appropriate collection action as provided by 31 U.S.C. 3711 (g), (1).

The Secretary of the Treasury may offset an amount due the debtor for any delinquency as provided by 31 U.S.C. 3720, *et seq*.)

VII. OTHER PROVISIONS

A. Members of Congress. No Member of or Delegate to Congress or Resident Commissioner shall benefit from this permit either directly or indirectly, except when the authorized use provides a general benefit to a corporation.

B. Appeals and Remedies. Any discretionary decisions or determinations by the authorized officer are subject to the appeal regulations at 36 CFR 251, Subpart C, or revisions thereto.

C. Superior Clauses. In the event of any conflict between any of the preceding printed clauses or any provision thereof and any of the following clauses or any provision thereof, the preceding printed clauses shall control.

D. Access to Records (A7). For the purpose of administering this authorization (including ascertaining that fees paid were correct and evaluating the propriety of the fee base), the holder agrees to make all of the accounting books and supporting records to the business activities, as well as those of sublessees operating within the authority of this authorization, available for analysis by qualified representatives of the Forest Service or other Federal agencies authorized to review the Forest Service activities. Review of accounting books and supporting records shall be made at dates convenient to the holder and reviewers. Financial information so obtained shall be treated as confidential as provided in regulations issued by the Secretary of Agriculture.

The holder shall retain the above records and keep them available for review for 5 years after the end of the year involved, unless disposition is otherwise approved by the authorized officer in writing.

E. Nondiscrimination (B-1

1. The holder and its employees shall not discriminate against any person on the basis of race, color, sex (in educational activities), national origin, age, or disability or by curtailing or refusing to furnish accommodations, facilities, services, or use privileges offered to the public generally. In addition, the holder and its employees shall comply with the provisions of Title VI of the Civil Rights Act of 1964 as amended, Section 504 of the Rehabilitation Act of 1973, as amended, Title IX of the Education Amendments of 1972, as amended, and the Age Discrimination Act of 1975, as amended.
2. The holder shall include and require compliance with the above nondiscrimination provisions in any third-party agreement made with respect to the operations authorized under this permit.

3. The Forest Service shall furnish signs setting forth this policy of nondiscrimination. These signs shall be conspicuously displayed at the public entrance to the premises and at other exterior or interior locations, as directed by the Forest Service.

4. The Forest Service shall have the right to enforce the foregoing nondiscrimination provisions by suit for specific performance or by any other available remedy under the laws of the United States or the State in which the violation occurs.

F. Insurance (B10). The holder shall have in force public liability insurance covering a combined single limit in the amount $500,000.00. The minimum amount and terms are subject to change at the sole discretion of the authorized officer at the five-year anniversary date of this authorization. The coverage shall extend to property damage, bodily injury, or death rising out of the holder's activities under the authorization including, but not limited to, occupancy or use of the land and the construction, maintenance, and operation of the structures, facilities, or equipment permitted by this authorization. Such insurance shall also name the United States as additionally insured. The holder shall send an authenticated copy of its insurance policy to the Forest Service immediately upon issuance of the policy. The policy shall also contain a specific provision or rider to the effect that the policy shall not be cancelled or its provisions changed or deleted before thirty (30) days written notice to the authorized officer at 29279 Ellensburg, Gold Beach, OR 97444 by the insurance company.

G. Operating Plan (C8). The holder shall provide an Operating Plan and revise the plan as needed. The plan shall be prepared in consultation with the authorized officer or designated representative and cover operation and maintenance of facilities, dates or season of operations, and other information required by the authorized officer to manage and evaluate the occupation and/or use of National Forest System lands. The provisions of the Operating Plan and the annual revisions shall become a part of this authorization and shall be submitted by the holder and approved by the authorized officer or their designated representative(s). This Operating Plan is hereby made a part of the authorization.

H. Regulating Services and Rates (X22). The Forest Service shall have the authority to check and regulate the adequacy and type of services provided the public and to require that such services conform to satisfactory standards. The holder may be required to furnish a schedule of prices for sales and services permitted by the authorization. Such prices and services may be regulated by the Forest Service: Provided, that the holder shall not be required to charge prices lower than those charged by comparable or competing enterprises.

I. Advertising (X30). The holder, in advertisements, signs, circulars, brochures, letterheads, and like materials, as well as orally, shall not misrepresent in any way, either the accommodations provided, the status of the authorization, or the area covered by it or the vicinity. The fact that the permitted area is located on the National Forest shall be made readily apparent in all of the holder's brochures and print advertising regarding use and management of the area and authorized facilities.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082.

This information is needed by the Forest Service to evaluate requests to use National Forest System lands and manage those lands to protect natural resources, administer the use, and ensure public health and safety. This information is required to obtain or retain a benefit. The authority for that requirement is provided by the Organic Act of 1897 and the Federal Land Policy and Management Act of 1976, which authorize the Secretary of Agriculture to promulgate rules and regulations for authorizing and managing National Forest System lands. These statutes, along with the Term Permit Act, National Forest Ski Area Permit Act, Granger-Thye Act, Mineral Leasing Act, Alaska Term Permit Act, Act of September 3, 1954, Wilderness Act, National Forest Roads and Trails Act, Act of November 16, 1973, Archaeological Resources Protection Act, and Alaska National Interest Lands Conservation Act, authorize the Secretary of Agriculture to issue authorizations for the use and occupancy of National Forest System lands. The Secretary of Agriculture's regulations at 36 CFR Part 251, Subpart B, establish procedures for issuing those authorizations.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service Public reporting burden for collection of information, if requested, is estimated to average 1 hour per response for annual financial information; average 1 hour per response to prepare or update operation and/or maintenance plan; average 1 hour per response for inspection reports; and an average of 1 hour for each request that may include such things as reports, logs, facility and user information, sublease information, and other similar miscellaneous information requests. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

This permit is accepted subject to the conditions set out above.

HOLDER NAME: U.S. DEPARTMENT OF AGRICULTURE
Forest Service

By: _____ By: _____

(Holder Signature) (Authorized Officer Signature)

By: _____ Title: JOHN BORTON, District Ranger

(Holder Signature) (Name and Title)

Date: _____ Date: _____

LMRP PERMIT OPERATING PLAN
FOR
COMMERCIAL OUTFITTER/GUIDE OPERATIONS
ON THE SISKIYOU NATIONAL FOREST
FOR PERIOD JANUARY 1, 2005 – DECEMBER 31, 2005

This plan will be reviewed annually and updated or revised, as needed. It is a part of the permit and describes stipulations pertinent to the conduct of operations authorized by the Special Use Permit attached hereto.

PERMITTEE **NAME OF BUSINESS**

BUSINESS ADDRESS **TELEPHONE**

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PERMITTEE REPRESENTATIVE

The following individual(s) are designated to represent the permittee in contacts with the Forest Service concerning permit administration.

NAME	ADDRESS	TELEPHONE	LIMITS OF AUTHORITY

OBJECTIVE

This document's purpose is to clarify requirements for operations conducted under authority of this permit and will provide direction for the full term of the permit. Modifications to this plan may be made as necessary to update it or address and resolve any special issues which may arise during the term of the permit.

INTRODUCTION

Special Use Permits are necessary for all commercial outfitter/guiding operations on the National Forest system, including roads and rivers that traverse National Forest lands.

LICENSES

The permittee is responsible for compliance with all state, local, and federal laws, rules, and regulations applicable to the permitted activities, including appropriate state outfitter/guide registration through the
Oregon State Marine Board.

INSURANCE

INSURANCE MUST REMAIN CURRENT OR THE PERMIT IS INVALID

The insurance requirement is satisfied by providing the Forest Officer a complete, authenticated copy of the Permittee's insurance policy in the first year of a multi-year permit and certificates of insurance with original signature of the Insurer in the remaining years of a multi-year permit. The name of the insured on the policy must be identical to the name or names given on the permittee application including names of individuals and/or corporations. When coverage is not in force, the permittee is in violation of the permit.

Some insurance policies are not in force if personal floatation devices (pfd's) are not provided and/or worn by passengers at all times during boating operations. Check your insurance policy and ensure that pfd's are available in the craft and/or worn if this is a policy requirement.

Any instance or occurrence that may subject the permittee or the U.S. Government to any personal liability claims must be reported to the insurance company and authorized Forest Service Representative at the same time.

FOREST SERVICE REPRESENTATIVE

The District Ranger is the Forest Officer responsible for the issuance and administration of permits on any area within the boundaries of the Gold Beach Ranger District.

RECORDS

Actual Use Report forms will be provided by the Ranger District and must be used by the permittee to record total use. Reports are due on or before January 15, annually.

These reports must be submitted by the due date, and compliance with this requirement will be reflected in your performance evaluation. If you prefer, you may submit these forms as often as you choose for your business needs.

FEES

Total fees are based on the minimum fee of $90.00 at permit issuance and actual use at the end of the annual operating period, December 31. At the end of the permit period, a comparison will be made between the minimum use and actual use. If more use has occurred than the originally paid minimum use fee of $90.00, the permittee will be billed for the additional use fees. Fees are due 30 days from billing date. Fees not paid on time are subject to late charges and may affect permit privileges.

FEE SCHEDULE

Option 1: Set charge per service day:

Client Charge Category	Charge per Service Day	Fee Per Service Day
A	1.00 - 8.00	.25
B	8.01 - 20.00	.40
C	20.01 - 35.00	.80
D	35.01 - 50.00	1.30
E	50.01 - 75.00	1.90
F	75.01 - 100.00	2.60
G	100.01 - 125.00	3.40
H	125.01 - 150.00	4.10
I	150.01 - 175.00	4.90
J	175.01 - 200.00	5.60
K	200.01 - 250.00	6.75
L	250.01 - 300.00	8.25
M	300.01 - 400.00	10.00
N	Over 400.00	3% of adjusted Service Day

Option 2: As an alternative to Option 1, fees can be calculated based on 3% of outfitted customer revenue

NOTE: A SERVICE DAY IS ANY DAY OR PORTION OF A DAY THAT SERVICES ARE PROVIDED ON NATIONAL FOREST LANDS.

Indicate fee calculation option desired:

(check one)

Option 1: Flat rate/service day ●

Option 2: 3% of revenue ●

Signature _____

PERIODIC PAYMENTS

Fees are due and payable in advance, i.e., at theannual billing deadline of March 1. If the total fee is more than $500, a schedule of periodic payments may be arranged as follows:

FEE	DUE DATES
$500.00 to $2500.00	50% on March 1 50% on July 30 (mid point of operation)
Greater than $2500.00	34% on March 1 33% on July 30 (of operating season) 33% on Sept 30 (of operating season)

PROFESSIONAL STANDARDS

A high quality professional outfitting and guide service is to be provided. The permittee is expected to set the example and standards for all users. Any permittee who casts a negative reflection on the permitted operation or the Forest Service will be held accountable through the performance evaluation process. Care must be taken to provide clients with a safe and enjoyable trip.

Prior to and during each trip, the following items should be stressed in regard to minimum impact camping, day use, and river use:

1. Litter.
2. Sanitation.
3. Protection of natural and cultural resources.
4. Fire regulations and closures.
5. Fish and Game regulations.

Powerboaters and floaters share the river resource, including the launch/take out sites. The river experiences of both will be enhanced if both parties treat each other with courtesy and respect.

Don't forget:

Slow down when passing camp areas and beached boats.
Allow the craft moving downstream the right-of-way.
Use caution at "blind" spots on the river.
Kayakers and swimmers are difficult to see.
Excessive speed is not safe.

TRIP AUTHORIZATION

This permit authorizes day use only. Overnight commercial camping, either on a watercraft on the river or on the river bar, is prohibited under the terms of this permit.

BOAT RAMP USE

Boat ramps are sensitive locations that are prone to conflicts between users. Clear boat ramps as soon as possible. Ramps are to be used for putting boats into or removing them from the river, not for staging areas before the trip or tie-down areas after the trip.

FOSTER BAR

Foster Bar Boat Ramp can be especially crowded and requires special emphasis on use etiquette. Always leave one lane of the ramp open. Do not leave vehicles unattended on the gravel bar. After launching your boat, move away from the boat ramp to load passengers and gear. Boats not in use for more than one day should be removed from river mooring to the parking lot. The staging of trips on the boat ramp, either launching or taking out, is prohibited, as is the serving of food or any other activity other than putting in or taking out boats.

FIREARMS

Firearms carried by the permittee or client will be the direct responsibility of the permittee. Use of firearms in violation of State or Federal laws or regulations may result in suspension or revocation of this permit.

SANITATION

Use private and public toilet facilities where provided. At all other locations, use carry-out portable toilets. Do not abandon or bury fecal materials on the shore. Waste water should be disposed of in a waste water hole 100 feet or more from water sources. Do not use soap, detergents, or other pollutants in the river, regardless of their claims to be biodegradable.

It is the permittee's responsibility to carry out all trash and garbage to an approved site. The permittee should inform passengers that litter includes cigarette butts, foil, matches, toothpicks, bread bag closures and other micro-trash items that people often do not consider to be important.

CRAFT IDENTIFICATION

Your MRP number must be placed above the waterline where it will be visible at all times. **It is the permit holder's responsibility to replace/repaint the numbers so they are legible and visible at all times**, and in the case of multiple permit numbers on the boat, covering all numbers except the "OR" number and operative MRP number.

SAFETY AND RESCUE

Before each trip departs, the permittee will brief the passengers on the hazards associated with the trip (both on and off the water) as well as the necessary safety measures to be taken during the trip (i.e., the proper use of life jackets, etc.). Retrieval of damaged, wrecked, or inoperative craft, equipment, etc. is the responsibility of the permittee.

ASSIGNMENT, SUBLEASE, OR CONTRACTING FOR SERVICES

The permittee may not assign or sublease any portion of the permit authorization or interest therein, directly or indirectly, voluntarily or involuntarily. Contracting for services may occur within closely defined circumstances in this section.

Only bona fide employees who are compensated by the permittee for providing a service may guide trips in the absence of the permittee under the authorization granted to the permittee. In Oregon, such guides must be registered with the Oregon State Marine Board or be registered under the permittee with the OSMB.

If necessary to supplement a permittee's operation, contracting of services or equipment must be approved by the Authorized Officer in writing at least two weeks in advance of the trip. Such contracting (1) shall be booked, sold, and money collected by the permittee or permittee's booking agent; neither booking, selling, nor money collecting may be undertaken by employees of the permittee, contractors, or employees of the contractors, (2) shall be with only another valid LMRP permittee of the Gold Beach Ranger District, and (3) shall not constitute more than half the employees, required equiment, or services for any one trip. The permit shall retain operational control of and legal responsibility for the permitted activity.

Furthermore, employees of the permittee, contractors, and employees of the contractors must be registered with the Authorized Officer of the Gold Beach Ranger District by the permittee prior to beginning work, providing name, full current address, current and working telephone number, photocopy of OSMB registration, colors and types of craft used on the river, and Certificate of Insurance for the prescribed minimum amounts required by the U.S.Forest Service. Discovery of unregistered personnel may result in violation notices and repurcussions to the status of the permit.

Limited and specific boat days on LMRP permits require close and timely tracking; the permittee must inform the Authorized Officer by providing use reports no later than weekly; reports are not necessary for weeks with no trips. In addition, all craft must clearly display the permittee's MRP number in characters at least 2-1/2 inches tall; all other numbers except the "OR" number must be covered.

Using a contractor to supplement needed guides or boats for a permittee's legally scheduled trip should be a decidedly-rare occurrence. This process is not intended to aid or promote illegal practices, and instances of contracting will be investigated thoroughly prior to approval by the Authorised Officer.

EXCLUSIONS

The Special Use Permit does not create an exclusive right of use to the regulated area by the permittee. The permittee shall not interfere with other valid uses of the federal lands by other users. The United States reserves the right to use any part of the regulated area for any purpose.

PERMIT NONCOMPLIANCE

A. MINOR VIOLATIONS

Minor violations of the provisions of the Special Use Permit or Operating Plan may result in administrative action in regard to the permit. This will normally be handled by mail, telephone, or in person to inform the permittee and to correct the infraction to the satisfaction of the Forest Officer. Infractions will also be documented in the permittee's folder. Minor violations may result in permit suspension. Repeated minor violations may lead to revocation, or termination.

B. MAJOR VIOLATIONS

Major violations of the provisions of the Special Use Permit or the Operating Plan may result in administrative action on the permit and/or criminal/civil action through Federal Court.

Major violations include, but are not limited to: convictions or diversions for assault or other violent crimes against both clients and non-clients, convictions or diversions for controlled substance felony violations, convictions or diversions for DUII operation of private or commercial vehicles or watercraft, convictions or diversions for private or commercial fish and game violations, convictions or diversions for violations of federal or state boating laws or any private or commercial at-fault boating accidents, and suspension or revocation of any state or federal outfitter/guide permits for cause.

Major violations may result in permit suspension, revocation, or termination.

PERFORMANCE EVALUATION

Each year the permittee will be evaluated by the Autherized Officer on overall performance in regard to permit and operating plan compliance, as well as public service. The primary objective of the Special Use Permit is to provide a service to the public, and comments from clients or other involved publics, both positive and negative, will be especially relevant. Comments, both positive and negative, will be examined by the Authorized Officer, and their validity will be reflected in theAuthorized Officer's assessment of performance. Permits with Marginal and Unacceptable ratings will be documented on paper, and copies will be issued to the permittees and the permittee's file.

BOAT DAYS: DEFINITION AND USAGE

A Boat Day is defined as one boat used for any part of one day. If the Holder fishes one type of use for any part of one day and another type of use for any part of the same day, it qualifies as one Boat Day for each use or 2 (or more) total Boat Days.

Permit Holder Signature	Authorized Officer Signature
Date	Date

2005 Operating Plan
For
Commercial Tour Boat Operations
On the
Gold Beach Ranger District
Rogue River, Lobster Creek to Blossom Bar Rapid

Permittee:

Address**:**

Phone Number:

Fax Number:

This plan will be reviewed annually and updated or revised as needed during the duration of the 1-year permit period, January 1, 2005, through December 31, 2005. It is part of the special use permit and describes mutually agreed upon stipulations pertinent to the conduct of operations authorized by the permit.

OBJECTIVE
This document's purpose is to clarify requirements for operations conducted under authority of this permit and will provide directions for the full term of the permit. Modifications to this plan may be made as necessary to update or address and resolve any special issues that may arise during the term of the permit.

INTRODUCTION
Outfitter/Guide permits are issued for all commercial operations on the National Forest system including rivers. Restrictions on the maximum daily and weekly trip numbers are part of the conditions described on page one of the special use permit.

LICENSES
The permittee is responsible for compliance with all state, local and federal laws, rules and regulations applicable to the permitted activities.

APPLICATION
Tour boat permittees holding tenure permits are asked to submit their applications for renewal at least one year prior to the permit termination date. Application forms and instructions will be sent to the outfitters well in advance of these dates.

INSURANCE
New permits will not be issued and operations authorized under an existing permit will not be allowed to continue until the Forest Service receives proper and current proof of insurance. This requirement may be satisfied by providing either an authenticated copy of the outfitter's insurance policy or a Certificate of Insurance on the approved format with original signature of the authorized insurance representative. The name of the insured on the policy must be identical to the name or names given on the outfitter's application including names of individuals and/or corporations. When coverage is not in force the permittee is in violation of the permit.

Some insurance policies are not in force if life preservers are not provided and worn by passengers at all times during boating operations. Check your insurance policy and ensure that jackets are worn if this is a policy requirement.

MANAGING AGENT

If a managing agent is hired, the permittee is required to furnish the Forest Service Representative with a notarized copy of the managing agent agreement. This document must clarify the specifics of the working relationships and limits of authority in permit matters such as correspondence, use reports, applications, etc.

PERMITTEE REPRESENTATIVE

The following individual/s is/are designated to represent the permittee in contacts with the Forest Service concerning permit administration.

NAME	ADDRESS	TELEPHONE	LIMITS OF AUTHORITY
1)			
2)			

FOREST SERVICE REPRESENTATIVE

The Gold Beach District Ranger is the Forest Service Authorized Officer responsible for issuance and administration of permits.

SERVICES AND RATES

Each year the permittee will furnish the Authorized Officer with a copy of a current brochure and price list. The permittee should advise the Authorized Officer in advance of any changes in price or services. The Outfitter/Guide pre-season service estimate will be completed annually by January 15, to provide the Forest Service with information on which to base fee assessments and to approve itineraries. It will be considered the basic statement of yearly services to be offered and established rates should coincide with brochures and price lists.

FEES

Two options are available for determining annual use fess. Both require the pre-season service estimate, payment in advance of use, and a year-end reconciliation. For 5-year permits, the option selected will be used for the duration of the permit period.

Fees for estimated use are due and payable in advance. The fee will be based on an estimate of the amount of total outfitter customer revenue expected during the full permit year based on the previous year's actual revenues. In support of each yearly estimate, the permittee will furnish copies of accounting records for the previous season or a signed certificate that reflects total customer revenue and actual service days provided during the previous season. This documentation must be submitted annually by **January 15**.

OPTION 1 – Fee Schedule

Under this option, the outfitter must estimate total revenues and total number of service days in each client charge category. These estimated revenues would be adjusted, using guidelines given below, for major pre and post trip transportation and lodging costs. The average revenue per service days is then calculated. Total fees due are then calculated using the following schedule. These fees may be adjusted to account for time spent on National Forest land or waters as shown in the guidelines given below.

Charge Category	Client Charge per Service Day	Fee per Service Day
A	$ 1.00 - 8.00	.25
B	8.01 - 20.00	.40
C	20.01 - 35.00	.80
D	35.01 - 50.00	1.30
E	50.01 - 75.00	1.90
F	75.01 - 100.00	2.60
G	100.01 - 125.00	3.40
H	125.01 - 150.00	4.10
I	150.01 - 175.00	4.90
J	175.01 - 200.00	5.60
K	200.01 - 250.00	6.75
L	250.01 - 300.00	8.25
M	300.01 - 400.00	10.00
N	OVER $ 400	3% of adjusted service day

OPTION 2 – 3% of Revenue

Under this option, the outfitter's fee will be calculated based upon three percent of outfitted customer revenue. The schedule in option 1 is not used. Adjustments are made using the same guidelines as in Option 1.

I elect option number: ☐ _____

Signature

OFF-FOREST USE DISCOUNTS:

Fees will be discounted to recognize off Forest use. The following rates apply:

Percent of Total Time On National Forest Lands And Waters	Fee Reduction
0 - 5%	80%
5 - 60%	40%
60 - 100%	None

The holder must provide documentation of the duration of trips, such as itineraries, to support a request for a fee reduction based on use off National Forest System lands. This shall include a separate itinerary for each type of trip, (64 mile, 80 mile, and 104 mile). Include travel time from the bay to Lobster Creek, Lobster Creek to Watson Creek, and Watson Creek to Blossom Bar, also include time spent for lunch layovers, etc.

When calculating fees, the discount will be applied to the Forest Service fee, not to the permittee's revenue.

PERIODIC PAYMENTS

Fees are due and payable in advance. If the total fee is more than $500, a schedule of periodic payments may be arranged as follows:

FEE	**DATE DUE**
Greater than $500 up to $2500	- 50% in advance of use - 50% on **June 30** (midpoint of operation)
Greater than $2500	- 34% **in advance** (April 30) - 33% on **July 30** (midpoint of operation) - 33% on **September 30** (end of operation, same FY)

CALCULATING FISCAL FEES AND RECONCILIATION

At the end of each season, a comparison will be made between the actual number of service days used and those initially estimated and paid. If more use has occurred, the permittee will be billed for the additional use; this will be due and payable within 30 days. If less use has occurred, the permittee will receive a credit toward the next season's fee assessment. The minimum fee for this use is $90.00, none of which will be refunded or applied against next season's fees.

If the permittee fails to utilize 70% or more of an assigned amount of use in any two years of a five-year permit period, the Authorized Forest Officer may reduce the holder's amount of use after taking into consideration any extenuating circumstances.
The requirement for submission of accounting records was covered earlier in this plan under "FEES". Periodic audits of these records will be made in accordance with clause number VII. D. of the permit.

REPORTING OF PASSENGERS AND BOAT TRIPS

The Authorized Forest Officer will either provide a form (Actual Use Report) or agree to a form developed by the permittee for tracking the actual number of passengers and boat trips for the operating season. The number of passengers will be reported monthly, by trip class (64, 80, 104 mile trip), and by fee class (if using option 1 of the fee schedule). The number of boat trips will be reported by trip class (64, 80, 104 mile trip) on a daily basis. Actual use reports for passengers and boat trips are due *January 15.*

NON-COMMERCIAL PASSENGERS

The permittee is authorized to carry non-commercial passengers at his discretion. The number of non-commercial passengers should appear on the Actual Use Report along with the number of commercial passengers. The purpose of these non-commercial trips does not need to be reported, however it should be recorded in a manner that this information could be made available upon request.

NON-USE
If all of a major part of the permit should go unused in any given year, the permittee and the Authorized Forest Officer will review the permittee's situation jointly and the future status of the permit will be determined. The review will consider any extenuating circumstances such as high or low water conditions, fire closures, sickness, etc. Continued non-use may result in permit revocation. A permit may not be held for speculative purposes with little or no public service being provided.

SALE
If a permittee decides to sell his/her commercial tour boat business, he/she and the prospective buyer will meet with the Authorized Forest Officer prior to concluding the sale or applying for a new permit. The past operation of the business and planned future use will be discussed. A permit may or may not be transferred. This will be at the discretion of the Authorized Forest Officer. Information on procedures, needed documentation and qualification requirements will be provided at that time. A written copy of transfer/sale procedures will be mailed to the permittee upon request.

PROFESSIONAL STANDARDS
A high quality professional scenic tour service is to be provided. The permittee and his/her employees are expected to set the example and standards for all users. Keep in mind employees are the reflection of the permittee's operation. Any employee who casts a negative reflection on the permitted operation or the Forest Service must be dealt with to the satisfaction of the Forest Service. Care will be taken to provide the passengers with a safe and enjoyable trip. In addition to guiding services, the permittee will also provide factual interpretive information about the area.

Power boaters and floaters share the river resource. The river experiences of both will be enhanced if both parties treat each other with courtesy and respect.

All craft moving downstream have the right-of-way. Avoid putting yourself or other parties in dangerous situations. The permit holder and boat operators are responsible for any damage caused by their wake.

The feeding of fish and wildlife, especially black bear, is prohibited.

A motorized round-trip is defined as one run upstream and one run downstream. Running the same rapid more than once upstream and once downstream is prohibited upstream of Foster Creek. The only exception to this rule will be if an emergency condition exists. Running rapids twice below Foster Creek should only occur when no other user groups are present.

If 360-degree spins are done, they should occur when no other user groups are present.

A haul back is defined as transporting persons back upstream after they have come downstream by floating or boating in the Wild Section of the Rogue River. Haul backs for float purposes and reasons other than emergencies are prohibited.

CRAFT IDENTIFICATION
All boats will be plainly marked with the name and/or representative symbol of the company that can be easily identified by someone standing on either riverbank.

BOAT NAME **PASSENGER CAPACITY** **TRIP LENTH**

Boat sizes must meet Forest Service limits for the sections of river used.

DAILY TIMES OF OPERATION

Times of tour boat operations between Agness and Blossom Bar will be agreed to in advance of operations and ***prior to March 15 of each year.*** Special charters may necessitate tour boat trips to be outside of specified times, and would be allowed.

SAFETY AND RESCUE

Tour boat operators should be briefed on the location of emergency landing strips and possible sites for helicopter rescue in case an emergency evacuation is needed. Incidents and accidents must be reported to the U.S. Coast Guard, Curry County Sheriff's Office, and U.S. Forest Service per current regulations. Retrieval of damaged, wrecked or inoperative tour boats, equipment, etc. is the responsibility of the permittee.

Each boat operated under the auspices of this special use permit must have the capability of safety and emergency communication with the Curry County Sheriff, the Gold Beach Ranger District and other motorized boats on the river.

HAZARDOUS WASTE MANAGEMENT

The permittee is required to manage hazardous materials and fuel and oil spills in accordance with Oregon Administrative Rules, Department of Environmental Quality, Chapter 340, Division 47 "Regulations Pertaining To Oil Spills Into Public Waters", and Oregon Administrative Rules, Chapter 340, Division 108 "Oil And Hazardous Material Spills and Releases".

SANITATION

Use toilet facilities at those sites where they are provided. Wastewater should be disposed of in the toilet hole or a waste water hole 100 feet or more from water sources. Don't use or dispose of soap, detergents, or other pollutants in the river.

It is the permittee's responsibility to carry out all trash and garbage to an approved site. Tour boat operators should inform their passengers that litter includes cigarette butts, gum wrappers, flip tops, and other items that many people often do not consider to be important.

FIREARMS

Firearms carried by the permittee, guests or employees will be the direct responsibility of the permittee. Misuse of firearms by the permittee, guests or employees, in violation of State or Federal laws or regulations may result in termination of this permit.

PERMIT NONCOMPLIANCE

A. MINOR VIOLATIONS

These will be handled by mail, telephone, or on the river to inform the permittee/boat operator and to correct the infraction to the satisfaction of the Authorized Forest Officer. Infractions will also be documented in the performance evaluation and permittee's file. Repetitious violations of this nature will result in adverse administrative action that may result in permit probation or suspension.

B. MAJOR VIOLATIONS

Infractions involving a direct violation of the provisions of the special use permit or the operating plan will result in administrative action on the permit and/or criminal /civil action through Federal Court. Major violations will most likely result in permit suspension or revocation.

PERFORMANCE EVALUATION

Each year at the end of the operating season, the permittee will be evaluated on overall performance in regards to permit and operating plan compliance as well as public service. The primary objective of the special use permit is to provide a quality service to the public. If complaints are received about a permittee's operation, the Forest Service will examine the operation to determine if the complaints are valid. If the complaints are found to be valid, this will be reflected in the Performance Evaluation. The Authorized Forest Officer will decide on the appropriate course of action. The Performance Evaluation is a part of this permit and operating plan and attached hereto as Exhibit I.

ACCEPTED: _____ _____

Permit Holder Date

_____ _____

JOHN BORTON Date
Gold Beach District Ranger
Siskiyou National Forest
Authorized Forest Officer

Fisheries Biological Evaluation
Special Use Permits for Outfitter and Guide Operations on the lower Rogue and Illinois River
Gold Beach Ranger District
APPENDIX F

Prepared by James Simino, Zone Fisheries Biologist
Date: March 18, 2005

I. INTRODUCTION

Land management activities require a Biological Evaluation to be completed (FSM 2672.4). The Biological Evaluation process (FSM 2672.43) is intended to conduct and document activities necessary to ensure proposed management actions will not likely jeopardize the continued existence, cause adverse modification of habitat or reduce taking of individuals for:

Klamath Mountain Province ESU Steelhead Trout (Oncorhynchus mykiss)
Status: **Not Warranted**
Regional Forester's Sensitive Species List

Southern Oregon and Northern California Coast ESU Coho Salmon (Oncorhynchus kisutch)
Status: **Threatened**
Regional Forester's Sensitive Species List

Southern Oregon and Northern California Coast ESU Chinook Salmon (Oncorhynchus tshawytscha)
Status: **Not Warranted**
Regional Forester's Sensitive Species List

Southern Oregon and California Coastal ESU Cutthroat Trout (Oncorhynchus clarki clarki)
Status: **Not Warranted**
Regional Forester's Sensitive Species List

II. DESCRIPTION OF PROJECT

The USDA Forest Service would reissue all 63 permits with the same term and conditions as the 2000-2004 permits.

Commercial Tour Boats
Two commercial tour boat companies would be offered three permits to operate jet boats on the Rogue River for scenic trips and to transport lodge guests. Three trip types would be permitted: Lobster Creek to either Snout Creek (Agness), Watson Creek (the beginning of the Wild Section on the lower Rogue), or to the pool below Blossom Bar Rapids (approximately 10 miles above Watson Creek in the Rogue Wild Section).

Fishing Guides
Fifty-nine permits would be offered to fishing guides for trips on the lower Rogue and lower Illinois Rivers. Special use permits for outfitter/guides who held valid floating fishing trip permits for the Rogue River at the end of the 2003-2004 season would be authorized.

The permits would allow guided floating fishing trips on the National Forest portion of the recreation and wild sections (MA-10) of the Wild and Scenic Rogue River from the confluence with Lobster Creek upstream to Blossom Bar. The permit would include the use of the river, river bars and roads necessary for access to the river. Only one guide would operate under each permit. Permits won't be issued until the entire permit process is completed. The fishing season usually runs from throughout the entire year and is regulated by the Oregon Department of Fish and Wildlife.

The existing special use permits expired on December 31, 2004. There is a need to allow some routine and historically permitted fishing guide activities to continue through the interim period until the ROD can be implemented. Livelihoods are at stake as is the seasonal economic stability of the town of Gold Beach, Oregon. Some fishing guides work the permitted sections of the lower Rogue and Illinois Rivers during the winter months. The jet boat tours do not begin operations until mid to late April.

Three fishing guide permits would include additional uses. One permit would include livery service, scenic trips, and boat training trips from Lobster Creek to the pool below Blossom Bar Rapids. Another would include livery trips and scenic trips from Foster Bar to Agness. The third permit would include raft trips from Foster Bar to Agness.

Commercial Lodge Boats
One permit would be issued to transport lodge guests from Foster Bar to Paradise Lodge.

Docks
Three special use permits would be issued for docks in the Rogue River Wild Section at the Paradise, Half Moon Bar, and Clay Hill Lodges.

III. DESCRIPTION OF PROJECT AREA

Fish Habitat

The dominant habitat feature in the watershed is the mainstem Rogue River, which provides 45 miles of primarily migration habitat for fish. This is a major river, with a low stream gradient, a wide active channel and powerful winter streamflows. It flows through a narrow canyon from river mile (RM) 27 down to RM 17. Active floodplain development is minimal. Perched terraces are remnants of an older baseline. Downstream of RM 17, the river valley opens up, the gradient decreases further and extensive gravel bars form. Downstream of RM 5 tidal waters influence the flow. Large islands form and the river flows through multiple channels. These are important rearing and smolting habitat for salmon and trout.

The region receives a high amount of precipitation between October and June and very little the remainder of the year. This results in a flow regime of extremes to which fish respond. During peak flows in late autumn, winter and spring the entire channel is submerged, with only the largest estuarine islands remaining. Further upstream only the inactive terraces are above water. To escape the force of the flow, fish hold on the margins of the channel, in submerged tributary mouths and in eddies behind boulders.

Spawning is restricted to the tributaries, where streamflows are lower and do not wash away fish eggs incubating in gravel streambeds. During drought years when rain events occur later in than average years, spawning may occur in the mainstem Rogue. Access to tributaries during dry years is blocked as the tributaries flow subsurface through all the alluvial deposits at tributary confluences.

By late summer the wetted channel is, in many places, reduced to only a fraction of the total channel width, revealing wide gravel bars as well as islands in the estuary. Exposed to the sun, mixed water temperatures rocket into the low 70s during late summer (see Temperature section), and fish hold in cooler water found at the bottom of deep pools and at the tributary mouths. During low flow conditions, the wetted channel is separated from the influences of forest riparian vegetation by bare rocks. Seasonal emergent rushes, willows and herbs line the channel margins. By mid-summer, mats of filamentous green algae have developed in shallow water and provide nutrients and structure for photosynthetic, invertebrate and amphibian organisms.

Large wood is primarily absent from the mainstem channel. Powerful storm flow and a wide channel result in large wood being flushed downstream, out of the watershed. Structural habitat diversity is provided by boulders and bedrock outcrops. Deep pools and turbidity provide instream cover. In the lower 5 miles of the river, where islands disperse the force of the river, pockets of large wood accumulate at river bends. These are important rearing structures for juvenile and smolting salmonids.

Illinois River

The Illinois River is a large tributary of the Rogue River, which enters the Rogue River at Agness, OR. The Illinois River is a large river, with a low stream gradient, a confined active channel and powerful winter stream flows. It flows through a narrow bedrock canyon. Active floodplain development is minimal and restricted to the confluences with the larger tributaries. Perched terraces also occur near the tributaries and are remnants of an older baseline. The lower Illinois River flows through a steep canyon dominated by bedrock features. The river flows through the canyon that begins some 40 miles upstream near Eight Dollar Mountain. Long confined reaches transport sediment through during high flows, with some deposition along the outside of curves in the channel (USDA 2000). The majority of habitat throughout this section of the river identified in a fish survey from Collier Bar to Lawson Creek described the channel morphology (Reid, 2002) “varied between short boulder strewn rapids to long (some approximately 0.5 miles) bedrock canyons or gravel bottom pools. Large boulders were common in many of the pools, while in places…pool depths were estimated at 100 feet or more.”

From the mouth of Nancy Creek downstream to the mouth of the Illinois River, the river valley widens. Within the channel, large depositional bars change size and shape with peak flow events, and the river meanders through these bars. Above the channel are alluvial terraces, including Oak Flat on the east bank. Most of these terraces were meadows prior to Euro American settlement, and are now used for pasture or other agricultural and residential use (USDA 2000).

The region receives a high amount of precipitation between October and June and very little the remainder of the year. This results in a flow regime of extremes to which fish respond. During peak flows in late autumn, winter, and spring the entire channel is submerged. Only the inactive terraces are above water. To escape the force of the flow, fish hold on the margins of the channel, in submerged tributary mouths and in eddies behind boulders. Spawning is restricted to the tributaries, where stream flows are lower and do not wash away fish eggs incubating in gravel streambeds.

By late summer, the river is reduced to only a fraction of the total channel width in many places, revealing wide gravel and cobble bars. Water temperatures rise into the 70s during late summer. Fish hold in cooler water found at the bottom of deep pools and at the tributary mouths to avoid the warmer temperatures. During low flow conditions, the river is separated from the influences of forest riparian vegetation by bare rocks. Seasonal emergent rushes, willows, and herbs line the channel margins. By mid-summer, mats of filamentous green algae have developed in shallow water and provide nutrients and structure for photosynthetic, invertebrate and amphibian organisms.

Large wood is absent from the main channel. Powerful storm flow and a confined channel result in large wood being flushed downstream, out of the watershed. Structural habitat diversity is provided by boulders and bedrock outcrops. Deep pools and turbidity provide instream cover.

During the summer, water temperatures in the Illinois exceed state standards. The salmonids that utilize the Illinois during these times are migrating upstream (adults) or downstream (smolts). The lower part of the Illinois River is a migration corridor for salmonid species.

Fisheries

Coho Salmon

Coho in the Rogue River are part of the Southern Oregon/Northern California ESU, which was listed as Threatened in 1997 under the federal Endangered Species Act by NMFS. The distribution of coho extends from the Elk River, Oregon, south to the Mattole River, California. The historic abundance of these coho ranged from 150,000 to 400,000 spawning fish. Today, the population is down to about 10,000 naturally produced adults. The Rogue River is one of the major remaining coho producing rivers in this ESU (NMFS, 1997). In the Rogue River, coho predominantly spawn and rear in the upper Rogue and the Illinois rivers. The upper Rogue population is mostly hatchery fish, most wild coho production is in the Illinois River tributaries. Below Agness, coho spawn in low numbers in the South Fork Lobster and in Silver Creek. Coho have also been seen in a tributary to Quosatana Creek. When coho populations were higher than present, a larger number of strays likely used the marginal habitat in lower Rogue River tributaries.

Adult coho enter the Rogue River in August with spawning occurring in December through February. Eggs incubate in gravel streambeds until early February when the fry emerge. Juvenile fish stay in their natal streams for more than one year, congregating in the medium-sized streams (Lobster Creek and Quosatana Creek). Coho migrate out of the Rogue through June of their second year. Rogue River coho spend two years in the ocean before returning to spawn (Rivers 1991). Because juvenile coho spend a full year in mid-sized streams they depend on high-quality habitat features throughout that year.

High-quality habitat is made up of cool water (<65ºF), off-channel habitats to get out of high flows, large quantities of instream cover, and the presence of large woody material (LWM). High summer water temperatures (>65º F), little instream cover or slackwater areas to escape high flows in winter, and a general low-density of instream wood are habitat features of the mid-sized streams that do not promote coho production. These conditions are typical of mid-sized streams in the Coast Range of southern Oregon, where coho production is low. These conditions do not affect other salmonids to the degree that coho are affected.

Fall Chinook

Rogue River fall Chinook are part of the Southern Oregon and Northern California Coastal Evolutionarily Significant Unit (ESU). The range of this ESU is from Cape Blanco, Oregon, south to Klamath River, California. This ESU was proposed for listing as Threatened under the federal Endangered Species Act, but was determined by the National Marine Fisheries Service (NMFS) now NOAA Fisheries, not to warrant listing in September 1999. Fall Chinook salmon in the upper Rogue River were identified by NMFS, March 9, 1998, as the only relatively healthy population in the entire ESU.

During the late 1980s, the combination of drought, stream habitat degradation, low ocean survival, and high ocean exploitation rates in the Klamath Management Zone resulted in a severe decline in Chinook populations in all of the Oregon coastal basins south of Elk River. River angling for Chinook in several southcoast basins, including the lower Rogue River, was closed during this time. Populations began to improve in 1991, with a sharp curtailment in ocean harvest coupled with the end of drought conditions by 1993 (ODFW 1997).

Adult fall Chinook enter the Rogue River in August and disperse throughout the watershed to spawn as streamflow allows. Most fish spawn in tributaries to the Rogue, as the high winter flows in the winter tend to move much of the cobble substrate where the fish spawn, washing away redds. In unusually dry years fish will spawn in the mainstem as was seen in 2003. Spawning is usually completed by the end of December, after which all adult Chinook die. Fry emerge from the gravel in March and start migrating downstream almost immediately. Downstream migration peaks between the end of May and the middle of July but continues through the summer (ODFW 1997). During mild winters, some juveniles can stay in the river. In the spring of 1998, 123 one year-old Chinook were caught in the Lobster Creek juvenile migrant trap (ODFW, 1998). Chinook migrate out of tributary streams by mid-summer and do not overwinter there, avoiding both high summer water temperatures and high winter flows. After migrating out of freshwater, these Chinook will spend two or three years in the ocean before returning to spawn.

Spring Chinook

Rogue River fall Chinook are part of the Southern Oregon and Northern California Coastal Evolutionarily Significant Unit (ESU). The range of this ESU is from Cape Blanco, Oregon, south to Klamath River, California. This ESU was proposed for listing as Threatened under the federal Endangered Species Act, but was determined by NMFS, now NOAA Fisheries, not to warrant listing in September 1999.

During the late 1980s, the combination of drought, stream habitat degradation, low ocean survival, and high ocean exploitation rates in the Klamath Management Zone resulted in a severe decline in Chinook populations in all of the Oregon coastal basins south of Elk River. River angling for Chinook in several southcoast basins, including the lower Rogue River, was closed during this time. Populations began to improve in 1991, with a sharp curtailment in ocean harvest coupled with the end of drought conditions by 1993 (ODFW 1997).

Adult spring Chinook enter the river in mid-February. Adults remain in the lower Rogue until mid-July, on their migration to upstream spawning reaches. Spring Chinook spawn in the Upper Rogue River in September through mid-November. From July through September adult fish are located upstream of the analysis area. Juvenile spring Chinook salmon begin hatching mid-February through mid-September. The juveniles can be found in the analysis area from April through September with limited presence in January, February, March, October and November. These fish rear within the Lower Rogue during this time. As water temperatures approach 70º F juveniles will hold over near tributary confluences where cooler water enters the main river. These thermal refugia are important to juveniles and adults both throughout the warm summer months.

Winter Steelhead

Winter steelhead in the Rogue River are part of the Klamath Mountains Province (KMP) ESU. This ESU was proposed as Threatened under the Endangered Species Act in 1996. However, in 1998 the ESU was determined to not warrant such a listing, based on recovery efforts in the states of Oregon and California. The ESU extends from the Elk River in Oregon south to, and including, the Klamath River in California. The NMFS estimates the current abundance of this ESU to be 85,000 with an historic abundance of greater than 275,000 (NMFS, July 1996). The ODFW estimates that the population of winter steelhead in the Rogue River between 1970 and 1987 averaged 44,000 adult spawners annually. The estimate for 1990-1996 is 55,000 adults, which indicates a positive trend in the population (RVCOG, 1997).

Winter steelhead spawn in lower Rogue River tributaries. Steelhead have a more variable life history than coho or Chinook. They can spend one to several years rearing in freshwater and can survive reproduction to return to the ocean. In streams their sleek body proportions allow them to ascend steeper gradients and use smaller streams for spawning and rearing. They also roam more within a basin to locate suitable spawning habitat. Winter steelhead enter the Rogue River to spawn in November and spawning continues into April. Fry emerge from May to early July. Most steelhead will spend almost 2 full years rearing in tributaries before smolting and migrating to the ocean in the spring. After typically 2 years of ocean rearing they will return to spawn. A small percentage of the population will return to freshwater after only one year. These so-called “half-pounders” are sexually immature and will return to the ocean again before making a spawning run.

Summer Steelhead

The Rogue River produces the largest run of summer steelhead in Oregon, outside of the Columbia River system. The only other Oregon coastal streams that produce summer steelhead are the Hood, Siletz and North Umpqua Rivers. The Rogue River is unusual in that it supports three forms of *Oncorhynchus mykiss* sympatrically: resident rainbow trout, winter, and summer steelhead.

Adult summer steelhead enter the Rogue River from the ocean between May and October. An early run, 10 percent of the population, enters in May, June or July. The late run, 90 percent of the population, enters in August, September or October. Adults hold in pools, completing sexual maturation, until they spawn in the winter (December through March). Fry emerge from gravel nests between April and June. Juveniles rear in tributary streams for two to four years before migrating to the ocean. Summer and winter steelhead have some overlap in time and space for egg laying and rearing activities. They are distinguished from each other mainly by the timing of their adult runs and the degree of gonad maturity upon entering freshwater.

Unlike winter steelhead summer steelhead do not spawn or rear in the segment of the Rogue River below Agness, nor its tributaries. They are a middle and upper Rogue River fish, with important spawning and rearing grounds in tributaries including the Applegate River.

Adult summer steelhead migrate upstream through the Rogue River between May and October. Pre-smolt juveniles migrate downstream from their natal streams to the estuary between April and June.

Rogue River summer steelhead also exhibit an interesting, non-spawning migration known as the "half-pounder" run. Half-pounders are small, sexually immature steelhead 11 to 16 inches long. They return to freshwater with the late-running adults in August and September, after only three to four months in the ocean. Instead of migrating upstream to spawning tributaries, half-pounders stay in the lower and middle Rogue River mainstem over the winter, then return to the ocean in the spring. Half-pounder steelhead are found in the Rogue River below Agness during the autumn and winter.

While 95 percent of summer steelhead exhibit the half-pounder migration pattern, it is not exclusive to them. Approximately 30 percent of the winter steelhead population in the Rogue River will also make a half-pounder run. The reason for the half-pounder run is not well understood. One theory is that these fish follow spawning spring Chinook into the rivers to take advantage of the large food resource provided by Chinook eggs. Another is that the half-pounders are escaping adverse ocean conditions. Other than the Rogue River, half-pounders are found only in the Klamath and Eel Rivers of Northern California.

Summer steelhead use many of the same streams winter steelhead use for spawning and rearing but also spawn in smaller streams, often spawning in streams that dry up during the summer.

Because summer steelhead are in freshwater as adults during the time of lowest flow and highest temperature, they require pockets of cool water. In the section of the Rogue River below Agness, summer steelhead will hold up in deep pools or at the mouths of tributaries that have cool water. Before the Lost Creek Dam was completed in the early 1970s, the summer water temperature of the mainstem Rogue River was two to three degrees warmer than the Illinois River, which enters immediately downstream of Agness. Summer steelhead would stay in the lower Illinois River until the Rogue River cooled in the fall, and then continue up the Rogue River. Now Lost Creek Dam reserves and releases cool water into the Rogue River, and summer water temperatures are usually cooler in the Rogue than the Illinois. As a result, summer steelhead no longer hold up in the Illinois River.

Summer steelhead that spawn in the Rogue River system, especially in the middle Rogue, are the weakest population of the Klamath Mountains Province steelhead ESU. Census information collected at Huntley Park shows a 25 percent decrease in population size since the mid-1980s. Both summer and winter steelhead are propagated at Cole Rivers Hatchery and released into the Rogue River. Wild fish are not incorporated into the brood stock and little interaction between wild and hatchery stock is thought to occur on the spawning grounds.

Anadromous Cutthroat Trout

Both resident and anadromous cutthroat trout occur in the lower Rogue River. Multiple age-classes of cutthroat are consistently present in coastal Oregon streams, and forces driving their complex life histories are poorly understood (ODFW, April 1997). Anadromous cutthroat usually rear in freshwater for two, three or four years before smolting. Yearling cutthroat appear to be displaced from prime habitat by other salmonid yearlings, probably because they emerge later and are, therefore, smaller. They commonly return to freshwater to overwinter without spawning. Females begin spawning at age 4 and can survive to spawn up to four or five times. Fish spawn in late winter and early spring (Trotter, 1997).

Resident Trout

Both rainbow and cutthroat trout occur in resident forms in the lower Rogue River. They occupy the uppermost reaches of most tributaries and commingle with the anadromous forms throughout the basin.

IV. DISCUSSION OF EFFECTS OF PROJECT

The proposed project determination is May Affect, Not Likely to Adversely Affect (NLAA) Southern Oregon/Northern California (SONC) coho, and Essential Fish Habitat (EFH) May be Adversely Affected (MAA) for the following reasons:

- Individuals may be harassed as motorboats pass directly over or within 5 meters, causing a startle or avoidance response. This effect is likely to be short in duration.
- Motorboat activity occurs during months when juvenile and adult coho are using the lower Rogue River as a migration corridor.
- Juvenile coho migrate at night and rest in the stream margins during the day, and interactions with jetboats would be minimal.
- Essential Fish Habitat will be affected, though the timing of channel maintenance does not coincide with when coho use this portion of the river.

The Sustainable Fisheries Act of 1996 (P.L. 104-267), amended the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act) to require federal agencies to consult with National Oceanic and Atmospheric Administration Fisheries (NOAA) on activities that may adversely affect "Essential Fish Habitat". The Act defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" and includes all freshwater streams accessible to anadromous fish, marine waters, and intertidal habitats. Critical Habitat is identical to coho habitat protected under the Endangered Species Act. For the project area, this would be the lower Rogue River and the lower Illinois River.

Table 1 summarizes effects on Threatened, Sensitive, and Salmonid Indicator Fish Species.

Table 1: Effects on Threatened, Sensitive, and Salmonid Indicator Fish Species

Species	Status	Salmonid Indicator Species	Present within Project Area	Effect Determination
Coho Salmon	Threatened	No	Yes	NLAA
Fall Chinook Salmon	Sensitive (USFS)	Yes	Yes	MIIH
Spring Chinook	Sensitive (USFS)	Yes	Yes	MIIH
Winter Steelhead Trout	Sensitive (USFS)	Yes	Yes	MIIH
Summer Steelhead	Sensitive (USFS)	Yes	Yes	MIIH
Coastal Cutthroat Trout	Sensitive (USFS)	Yes -*Resident forms only*	Yes	MIIH
Essential Fish Habitat				MAA

LAA = Likely to Adversely Affect
MIIH = May Impact Individuals and/or Habitat but not likely to cause a trend toward federal listing or a loss of viability
MAA= May Adversely Affect

Alternative 1

For a detailed description of the No Action Alternative refer to Chapter 2 of the Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers Final Environmental Impact Statement.

Direct Effects

There would be no measurable direct negative impacts on fisheries in the Rogue and Illinois Rivers in the project area. The reduction in motorboat activity would reduce the motorboat traffic that fish are exposed to and would reduce the startle responses to motorboat traffic. However, the drift boat, raft, kayak, and private motorboat traffic would likely remain the same. The majority of coho juvenile migration occurs during night and early morning, between the hours of 2100-0400 hours in river systems in british Columbia (Macdonald 1960, Meehan and Siniff 1962, Mace 1983, Groot and Margolis 1991). Coho juveniles in the Rogue River likely utilize a similar diel migration pattern. Satterthwaite (1995) studied the effects of boat traffic on juvenile salmonids and showed that steelhead and Chinook juveniles responded more to drift boats or rafts passing overhead than to any other boat type on the Rogue River. Startle responses from float traffic would continue. Both motor boat and float traffic likely cause startle responses in individual coho, Chinook, steelhead, and cutthroat trout. Motorboat and float traffic may also cause startle responses in green sturgeon.

Channel Maintenance

Channel maintenance may likely occur in portions of the lower Rogue downstream of the project area. The channel maintenance alters existing riffle habitat by converting it from shallow riffle habitat to deeper habitat type more like a run. The effects to fish habitat are likely only during low flow times. When the shallow riffle habitat is deeper this could change the macro-invertebrate community within the portion of the channel where maintenance occurs, though a shift in macroinvertebrate communities is not anticipated.

Riffle habitat is where many macroinvertebrates (aquatic insects) reside. These insects drift into areas with slower velocity water, where fish are residing and are preyed upon by the fish. The amount of riffle habitat being converted to deeper run habitat is very small and likely has no detrimental effect throughout the entire lower Rogue River. The thalweg deepening may make it easier for larger fish, such as green sturgeon, to pass through these riffles during lower flow periods in the summer months.

Willows will also be removed at two different locations during seasons when river flows do not remove the willows naturally. The location of willow removal will not create any measurable effect on water temperatures or shade and will have no effect on fish.

Indirect Effects

Boat traffic may become more concentrated in the Rogue River from the estuary to the mouth of Lobster Creek. This section of the river is important to juvenile salmonids. The estuary is where the salmon smolts finish the process of being able to process salt water after living in freshwater, an important stage in their development. Juvenile salmonids reside in the estuary from March through November, depending on the species and the run. Heavier boat use would have a negative effect on juvenile salmonids. The increase in boat encounters would increase the likelihood of a fish being startled in the area of river below the analysis area.

Dock removal would have minimal effects on fish.

Cumulative Effects

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. There are several projects planned within the Rogue River drainage upstream of Grave Creek on Bureau of Land Management and National Forest lands. In the Illinois River basin there are a few projects planned for the future. Two major projects are the Illinois River Trail Reconstruction and Biscuit Fire Salvage. These projects are required to meet the Northwest Forest Plan Aquatic Conservation Strategy. To meet this strategy projects cannot degrade fish habitat, therefore these projects will not affect fish or fish habitat in the Rogue or Illinois rivers.

Motor boat activity would continue throughout the lower Rogue, and boat traffic is likely to increase over time as more people use the Rogue River for recreation and fishing. The increased traffic in the river will increase the probability of boat traffic creating startle or behavioral responses in fish.

Refer to Summary of Cumulative Effects, Chapter 4, FEIS.

Alternative 2

For a detailed description of Alternative 2 refer to Chapter 2 of the Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers Final Environmental Impact Statement.

Direct Effects

The permitted boat use would cause startle or avoidance responses in fish as boats passed within 5 meters of fish in the lower Rogue and Lower Illinois Rivers (Sattherthwaite 1995). The majority of coho juvenile migration occurs during night and early morning, between the hours of 2100-0400 hours in river systems in british Columbia (Macdonald 1960, Meehan and Siniff 1962, Mace 1983, Groot and Margolis 1991). Coho juveniles in the Rogue River likely utilize a similar diel migration pattern. Boat-fish collisions are unlikely because of this startle response.

The lodge docks would not affect fish or fish habitat, as they are not disturbing spawning or rearing habitat in the river. The total number of permitted fishing guide trips for the project area is 394 year round trips in the Wild Section, 57 trips allowed during the winter in the Wild Section, 17, 293 trips allowed in the section from Lobster Creek to Watson Creek, and 4380 permitted in the Illinois River.

Table 2. Permitted tour boat use throughout the analysis area by month for Alternative 2.

Month	Maximum Trips per Day	Maximum Trips per Month
January	4	32
February	4	32
March	4	32
April	4	32
May	16	496
June (1-15)	16	*
June (15-30)	28	660
July	28	868
August	28	868
September	16	480
October	16	496
November	4	32
December	4	32
Total Yearly Permitted		4,244#
Total Lodge Boat Trips Permitted		365

*Number of total trips was combined with the second half of June

Total number of trips per year may not equal total numbers per month due to changes in the season due to Labor Day.

Channel Maintenance

Channel maintenance would occur at 45 different sites throughout the lower Rogue River. The effects to fish habitat are similar to those mentioned in Alternative 1. There are 44 prop wash locations where maintenance can occur. However the maximum number of sites modified in a single year is 15. The average amount of habitat modified in these 15 locations is 26,250 square feet of habitat throughout the lower Rogue River and deepen the channel up to 1.5 feet maximum.

The Illahee Island site modifies anywhere from 583 square feet to 873 square feet. The amount of riffle habitat in the lower Rogue (from Watson Creek to the mouth) is unknown, but if you assume that 50% of available habitat within the lower Rogue is riffle habitat, that would be 17,952,000 square feet of riffle habitat (35 miles from mouth to confluence with Watson Creek multiplied by 5280 feet per mile and multiplied by 125 feet average width of the river all divided by 2 for 50% of available habitat). The overall percentage of riffle habitat modified in the lower Rogue River for channel maintenance is 0.23%. The effects of the maintenance occurring at the different locations is still likely to be minimal, as the overall amount of riffle habitat being altered throughout the lower Rogue River is expected to be small. The thalweg deepening may make it easier for larger fish, such as green sturgeon, to pass through these riffles during lower flow periods in the summer months.

Willows will also be removed at two different locations during seasons when river flows do not remove the willows naturally. The location of willow removal will not create any measurable effect on water temperatures or shade and will have no effect on fish.

Indirect Effects

Startle responses may push fish out of thermal refugia or out of feeding and rearing areas. The fish must expend extra energy to move out of the area as they are startled. The amount of energy expended is minimal. As fish move, they may become more visible to predators. Startle responses will likely occur in predatory fish as well. In addition, private motorboat activity from the mouth of the Rogue to Lobster Creek continues, but the overall use would be less concentrated than in the No Action Alternative.

Motorboats and oar boats (rafts, kayaks, and drift boats) cause either a startle response (motorboats) or an avoidance response. Both responses can cause an increase in cortisol in fish. (Cortisol indicates stress in fish). A study of jet boat effects on juvenile salmonids in the Rogue River (Satterthwaite 1995) concluded that cortisol did not differ significantly throughout the day in river sections with motorboat traffic compared to days when motorboats didn't travel that section.

The months of heaviest motorboat traffic are July through September. During these months, most of the fish using the lower Rogue River are juvenile Chinook, juvenile steelhead, adult fall Chinook, adult coho, and summer steelhead. The effects of boat traffic on adults and juveniles during this time period are expected to be mainly startle responses. Fish will move quickly to avoid the boats as they pass over. These effects are only anticipated if boats pass within 5 meters of a fish. Anything beyond 5 meters does not cause a response, probably due to acclimation of fish to motorboat traffic. Another part of this study looked at predation of juvenile salmonids by northern pikeminnow. An increase in juvenile salmonid predation was not found in conjunction with commercial tour boat traffic.

When juvenile and adult fish are moving through the Rogue River canyon section (Grave Creek to Agness), the fish use tributary confluences as resting areas. These areas typically have infusions of colder water from the tributaries. Reid (2002) found that jet boat wakes increased the average temperatures in these refugia by 0.24ºF, with little effect on salmonids. Jet boat traffic (tour boat and jet sled) did not elicit a startle response in juvenile Chinook holding in these thermal refugia. The physiological effects of jet boat activity on migrating salmonids in the lower Rogue River found in the thermal refugia was determined to be minor. A bioenergetics model was used to calculate the effect of the increase in temperature on fish physiology. The minor increase in temperature over time would not affect the ability of a fish to survive where boat activity and warm water temperatures were present.

A preliminary 2003 study found that jet boat traffic had no effect on green sturgeon in the Rogue River. Adult green sturgeon were monitored using radio telemetry over a 24 hour period. No movements were recorded during times when motorboats passed over tagged individuals (Wildlife Conservation Society unpublished data).

Cumulative Effects

Same as Alternative 1.

Alternative 3

For a detailed description of Alternative 3 refer to Chapter 2 of the Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers Final Environmental Impact Statement.

Table 3. Permitted tour boat use throughout the analysis area by month for Alternative 3.

Month	Maximum Trips per Day	Maximum Trips per Month
January	4	32
February	4	32
March	4	32
April	4	32
May	16	496
June (1-15)	16	*
June (15-30)	28	660
July	28	868
August	28	868
September	16	480
October	16	496
November	4	32
December	4	32
Total Yearly Permitted		3516#
Total Lodge Boat Trips Permitted		261

*Number of total trips was combined with the second half of June

Total number of trips per year may not equal total numbers per month due to changes in the season due to Labor Day.

Direct and Indirect Effects

Same as Alternative 2. Reductions in use would not reduce the impacts of motorboat activity overall as boat activity would still occur throughout the lower Rogue River. The average number of trips per day and per month would not change. However, once the number of trips per year was met, no more trips are allowed. The total number of permitted fishing guide trips for the project area is 307 year round trips in the Wild Section, 57 trips allowed during the winter in the Wild Section, 17, 293 trips allowed in the section from Lobster Creek to Watson Creek, and 4380 permitted in the Illinois River. This reduction in tour boats traffic in the Wild Section would reduce the probability of startle or behavioral responses occurring in the analysis area.

Cumulative Effects

Same as Alternative 1.

Alternative 4

For a detailed description of Alternative 4 refer to Chapter 2 of the Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers Final Environmental Impact Statement.

Table 3. Permitted tour boat use throughout the analysis area by month for Alternative 4.

Month	Maximum Trips per Day	Maximum Trips per Month
January	4	32
February	4	32
March	4	32
April	4	32
May	16	496
June (1-15)	16	*
June (15-30)	28	660
July	28	868
August	28	868
September	16	480
October	16	496
November	4	32
December	4	32
Total Yearly Permitted		3363#
Total Lodge Boat Trips Permitted		246

*Number of total trips was combined with the second half of June

Total number of trips per year may not equal total numbers per month due to changes in the season due to Labor Day.

Direct and Indirect Effects

Same as Alternative 2. Reductions in use would not reduce the impacts of motorboat activity overall as boat activity would still occur throughout the lower Rogue River. This alternative would reduce the total number of trips by the tour boats to 3,363 trips per year though number of trips allowed per month would not change unless the yearly quota was met. The total number of permitted fishing guide trips for the project area are 220 year round trips in the Wild Section, 34 trips allowed during the winter in the Wild Section, 17, 293 trips allowed in the section from Lobster Creek to Watson Creek, and 4380 permitted in the Illinois River. This reduction in tou boats traffic in the Wild Section would reduce the probability of startle or behavioral responses occurring in the analysis area.

Cumulative Effects

Same as Alternative 1.

Alternative 5

For a detailed description of Alternative 5 refer to Chapter 2 of the Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers Final Environmental Impact Statement.

Table 4. Permitted tour boat use throughout the analysis area by month for Alternative 5.

Month	Maximum Trips per Day	Maximum Trips per Month
January	4	32
February	4	32
March	4	32
April	4	32
May	16	496
June (1-15)	16	*
June (15-30)	28	660
July	28	868
August	28	868
September	16	480
October	16	496
November	4	32
December	4	32
Total Yearly Permitted		1999#
Total Lodge Boat Trips Permitted		246

*Number of total trips was combined with the second half of June

Total number of trips per year may not equal total numbers per month due to changes in the season due to Labor Day.

Direct and Indirect Effects

Same as Alternative 2. Reductions in use would not reduce the impacts of motorboat activity overall as boat activity would still occur throughout the lower Rogue River. This alternative would reduce the total number of trips by the tour boats to 1999 trips per year though number of trips allowed per month would not change unless the yearly quota was met. The total numbers of permitted fishing guide trips for the project area are 165 year round trips in the Wild Section, 23 trips allowed during the winter in the Wild Section, 1326 trips allowed in the section from Lobster Creek to Watson Creek, and 38 permitted in the Illinois River. This reduction in tour boat and fishing guide boat traffic throughout the analysis area would greatly reduce the probability of startle or behavioral responses occurring in the analysis area.

Cumulative Effects

Same as Alternative 1.

Alternative 6

For a detailed description of Alternative 6 refer to Chapter 2 of the Special Use Permits for Outfitter and Guide Operations on the Lower Rogue and Lower Illinois Rivers Final Environmental Impact Statement.

Table 5. Permitted tour boat use throughout the analysis area by month for Alternative 5.

Month	Maximum Trips per Day	Maximum Trips per Month
January	4	32
February	4	32
March	4	32
April	4	32
May	16	496
June (1-15)	16	*
June (15-30)	28	660
July	28	868
August	28	868
September	16	480
October	16	496
November	4	32
December	4	32
Total Yearly Permitted		1201#
Total Lodge Boat Trips Permitted		130

*Number of total trips was combined with the second half of June

Total number of trips per year may not equal total numbers per month due to changes in the season due to Labor Day.

Direct and Indirect Effects

Same as Alternative 2. Reductions in use would not reduce the impacts of motorboat activity overall as boat activity would still occur throughout the lower Rogue River. This alternative would reduce the total number of trips by the tour boats to 1,201 trips per year though number of trips allowed per month would not change unless the yearly quota was met. The total number of permitted fishing guide trips for the project area are 394 year round trips in the Wild Section, 57 trips allowed during the winter in the Wild Section, 17, 293 trips allowed in the section from Lobster Creek to Watson Creek, and 4380 permitted in the Illinois River. This reduction in tour boats traffic in the Wild Section would reduce the probability of startle or behavioral responses occurring in the project area.

Cumulative Effects

Same as Alternative 1.

V. DETERMINATION OF EFFECTS

ESA and MSA listed species, Critical Habitat, and Essential Fish Habitat: The proposal meets the project design criteria for the programmatic activity category of Miscellaneous Special Use Permits and Leases. The effects for this activity category have been previously assessed and found to *not likely adversely affect SO/NC coho salmon or their critical habitat or Essential Fish Habitat for SO/NC coho salmon and SO/NCC Chinook salmon.* Essential fish habitat will be modified. The timing of modification does not affect migration or rearing habitat. The macroinvertebrate communities will likely be unaffected. The effects for this activity category have been previously assessed and determined to *may adversely affect* Essential Fish Habitat (EFH).

Sensitive species: The project *May Impact Individuals or Habitat, But Will Not Likely Contribute to a Trend Towards Federal Listing or Cause a Loss of Viability to the Population or Species (MIIH)*. The likelihood of a sensitive species being harmed from this action is possible but highly unlikely. Fish may be startled by the boats but it is unlikely to cause any harm to an individual.

Conservation Recommendations for Essential Fish Habitat (EHF): The mitigation measures, together with the Northwest Forest Plan Standards and Guidelines would adequately minimize the type, frequency, duration, timing, and intensity of potential adverse effects to EFH. Adequate conservation measures were incorporated into the proposal to protect EFH. Therefore, no further conservation measures are recommended.

Name of Biologist **/s/ *James Simino*** Date **February 4, 2005**

DICHOTOMOUS KEY FOR MAKING SECTION 7 DETERMINATION OF EFFECTS

Name and location of action: Rogue River Fishing Guides Special Use Permits
Section 7 Watershed: Rogue River
5th Field HUC: Rogue River
Species Considered: ESA: Coho
MSA: Coho, Chinook

1. Are there any proposed/listed anadromous salmonids and/or proposed/designated critical habitat in the watershed or downstream from the watershed?
   NO.....No effect
   YES.....**May affect, go to 2**[1]

2. Will the Alternative 2(s) have any effect whatsoever[1] on the species and/or critical habitat?
   NO..... No Effect
   YES ..... **Go to 3**

3. Does the Alternative 2(s) have the potential to hinder attainment of relevant properly functioning indicators (from checklist)?
   NO..... **Go to 4**
   YES ..... Likely to adversely affect[2]

4. Does the Alternative 2(s) have the potential to result in "take"[3] of proposed/listed anadromous salmonids or destruction/ adverse modification of proposed/designated critical habitat?
   A. There is a negligible (extremely low) probability of take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat. .....**Not likely to adversely affect**
   B. There is more than a negligible probability of take of proposed/listed anadromous salmonids or destruction/adverse modification of proposed/designated critical habitat ....Likely to adversely affect

[1]"Any effect whatsoever" includes small effects, effects that are unlikely to occur, and beneficial effects, i.e. a "no effect" determination is only appropriate if the Alternative 2 will literally have no effect whatsoever on the species and/or critical habitat, not a small effect, an effect that is unlikely to occur, or a beneficial effect.

[2]Document expected incidental take on reverse side of this key.

[3]"Take" - The ESA (Section 3) defines take as "to harass, harm, pursue, hunt, shoot, wound, trap, capture, collect or attempt to engage in any such conduct". The USFWS further defines "harm" as "significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering", and "harass" as "actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering".

APPENDIX G

Rogue and Illinois Rivers Special Use Permit
Wildlife Biological Evaluation

Written by: Michael Miller, Biological Science Technician
Rolando Mendez-Treneman, Zone Biologist
Reviewed by: David Clayton, Forest Wildlife Biologist /s/ David Clayton

Introduction

It is Forest Service policy, as directed by section 7 of the Endangered Species Act 1973 (as amended), to protect the habitat of listed threatened, endangered, proposed and sensitive species from adverse modification or destruction, as well as to protect individual organisms from harm or harassment as appropriate (FSM 2670.3). This Biological Evaluation is prepared for the Rogue and Illinois Rivers Special Use Permits project, which is authorized, funded, and conducted on the Rogue River-Siskiyou National Forest, Gold Beach Ranger District. The purpose of this evaluation is to determine and document the potential effects that the proposed activity will have on any Endangered, Threatened, Proposed, or Sensitive wildlife species (FSM 2672.4, including R-6 Supplement 41). A second objective of this evaluation is to ensure these species receive full consideration in the decision-making process, to maintain species viability and meet defined recovery goals.

The Biological Evaluation process (FSM 2672.43) provides a description of office analysis/field work done, and mitigation activities necessary to ensure proposed management actions will not likely jeopardize the continued viability of:

A. Species listed or proposed to be listed as endangered (E) or threatened (T) by the USDI Fish and Wildlife Service.
B. Species listed as sensitive (S) by the Regional Forester, USDA Forest Service Region 6 (USDA 2004)

The Biological Evaluation process consists of five steps:

1. Pre-field review of existing information (includes aerial photo and habitat map interpretation, as well as WILDOBS, FAUNA and other species sighting/survey record searches).
2. Field reconnaissance of the project area.
3. Determination of whether local populations of endangered, threatened, proposed, or sensitive species will be affected by the project.
4. Analysis of the significance of project effects on local and total populations of listed species.
5. If step 4 cannot be completed due to lack of information, a biological investigation is conducted to complete the analysis of significance.

Each Proposed, Endangered, Threatened, and Sensitive species, potentially occurring on the Gold Beach Ranger District, is evaluated based on the steps outlined above. If a proposed activity is likely to "affect" species listed as Endangered, Threatened, or Proposed under the Endangered Species Act, consultation or conferencing with the Fish and Wildlife Service (FWS) is required.

The Forest Service has completed consultation for this project under the programmatic consultation for "Formal and informal consultation on activities that may affect listed species in the Rogue River Basin for fiscal year 2004 through fiscal year (FY) 2008 (log # 1-14-03-F-511) (FWS 2003). Applicable project design criteria (PDC) identified in BO# 1-14-03-F-511 were used.

PROPOSED ACTIVITIES

The actions proposed are re-issuance of special use permits that allow alternative levels of commercial use by people with powerboats on the Rogue River between the mouth of Lobster Creek and Blossom Bar and the Illinois River between its mouth and the mouth of Nancy Creek. Permits are also proposed to allow the replacement of two existing docks (Paradise and Half Moon Lodge) and the replacement of a dock that was once present at Clay Hill Lodge. Willow cutting is proposed at 5 locations to improve boater safety. Rogue River channel maintenance (authorized by the U.S. Army Corps of Engineers and Oregon Dept. of State Lands) is required at approximately 16 riffles to allow tour boats and other power boats to navigate the river from its mouth to Watson Creek. Issuance of these special use permits affect the amount of powerboat use, number of docks, amount of channel maintenance and associated human uses on or adjacent to these rivers. The area of potential impacts on the Rogue River is from its mouth, where tour boat trips begin, up to the pool below Blossom Bar Rapids which is at river mile 48.4.

SUMMARY AND RECOMMENDATIONS

Habitat impacts from powerboats are apparently limited to the water and the shoreline. Habitat impacts from associated human uses are generally limited to the riparian area (within about 300' of the water). Therefore, analysis of potential effects focuses on this vicinity and defines this as the project area. Noise disturbance to individuals could extend beyond 300'.

Cumulative effects analysis considered potential direct and indirect effects from activities listed in the FEIS Table 24. Direct and indirect effects from powerboat use and associated human uses, in combination with other potential effects to riparian habitat from other activities, such as rafting, camping, and private powerboats, would not change the effects determination for riparian habitats or species of concern (threatened, endangered, sensitive, buffer species, management indictor or neo-tropical migrant focal species in any alternative.

The list of PETS species occurring on the Gold Beach Ranger District was reviewed in regards to potential effects on any of these species by project activities. Table 1 displays the process and which of the steps were necessary to complete the impact evaluation for each wildlife species considered. For those species where a potential conflict is identified, species-specific discussions are included in the Discussion section of this document.

Table 1: The Biological Evaluation process for animal species that may occur on the Gold Beach Ranger District is summarized for the Rogue and Illinois Rivers Special Use Permit Project Area. If no habitat is present, then species will not be described in detail in the Discussion

Risk Assessment					
Rogue & Illinois Rivers Analysis Area			**Determination of Effects**		
	Pre-Field Review	**Field Reconnaissance**	**Conflict Determination**	**Analysis of Significance**	
Wildlife Species	**Existing Sighting /Habitat?**	**Species/Habitat (Documented or Suspected) Present?**	**Potential Conflict?**	**Without Mitigation**	**With FWS PDC/ Mitigation**
Federally Endangered, Threatened Or Proposed Species					
Bald Eagle	Habitat	Species D	Yes	NLAA	NLAA
Marbled Murrelet	Habitat	Species D	Yes	NLAA	NLAA
Marbled Murrelet Critical Habitat	Habitat (20 ac.)	Habitat	No	NE	NE
Northern Spotted Owl	Habitat	Species D	Yes	NLAA	NLAA
Northern Spotted Owl Critical Habitat	Habitat (320 ac.)	Habitat	No	NE	NE
Brown Pelican	Habitat	Species D	No	NE	NE
Steller Sea-lion	Habitat	Species D	No	NE	NE
Forest Service Region 6 Sensitive Species					
Peregrine Falcon	Habitat	Species D	Yes	MIIH	MIIH
Pacific Shrew	Habitat	Habitat	Yes	MIIH	MIH
Pacific Pallid Bat	Habitat	Habitat	Yes	MIIH	MIIH
Pacific Fringe-tailed Bat	Habitat	Habitat	Yes	MIIH	MIIH
Wolverine	Habitat	Habitat	Yes	MIIH	MIIH
Fisher	Habitat	Habitat	Yes	MIIH	MIIH
Northwestern Pond Turtle	No	Species D	Yes	MIIH	MIIH
Common Kingsnake	Habitat	Species D	Yes	MIIH	MIIH
Black Salamander	Outside Known Range	No	No	NI	NI
California Slender Salamander	Outside Known Range	No	No	NI	NI
Del Norte Salamander	Sighting	Species D	Yes	MIIH	MIIH
Siskiyou Mountain Salamander	Outside Known Range	No	No	NI	NI
Southern Torrent Salamander	Sighting	Species D	Yes	MIIH	MIIH
Foothill Yellow-legged Frog	Habitat	Species D	Yes	MIIH	MIIH
Threatened and Endangered Species : **NE** = No Effect, **BE** = Beneficial Effect, **NLAA** = May Affect, Not Likely to Adversely Affect, **LAA** = May Affect, Likely to Adversely Affect, **CHU** = Critical Habitat Unit					
Sensitive Species: **NI** = No Impact, **BI** = Beneficial Impact, **MIIH** = May Impact Individuals or Habitat, but will not likely contribute to a trend towards Federal listing or cause a loss of viability to the population or species, **WIFV** = Will Impact Individuals or Habitat with a consequence that the action may contribute to a trend towards Federal listing or cause a loss of viability to the population or species					

Proposed, Endangered, or Threatened Species

Bald Eagle (*Haliaeetus leucocephalus*)
Status: Federal – Threatened
References: Anthony (1989), Anthony, et al. (1982), Dillingham (1997), Garrett et al. (1993), Johnsgard (1990), Stahlmaster (1987), Isaacs, F.B., and R.G. Anthony (2004), USDI Fish and Wildlife Services (1986, 1999a), USDA Forest Service and USDI Bureau of Land Management (2003), USDI Fish and Wildlife Service (2003).

Bald eagles were listed as Endangered in Oregon and elsewhere by the U.S. Fish and Wildlife Service (USFWS) in 1967, down listed to Threatened status in 1995, and proposed for delisting in 1999.

Oregon and Washington are key locations for wintering bald eagles and support approximately 25 percent of wintering bald eagles in the contiguous United States. Wintering sites are typically near concentrated food sources, such as anadromous fish runs, high waterfowl concentrations, or mammalian carrion. Winter roost sites offer protection from inclement weather and are characterized by more favorable microclimate.

Most bald eagles nest within 0.6 to 1.2 miles of aquatic foraging areas, typically a lake, reservoir, large river, or coastal estuary. Bald eagles require an abundant food supply of mostly fish, waterfowl, small mammals, and carrion, but the specific diet may vary by season and location.

Suitable bald eagle winter roosting, foraging, and nesting habitat exists in the project area and eagles are sighted regularly. The project area has year-round use by bald eagles and there are two known nest locations (Libby Creek and Watson Creek) adjacent to the project area. Bald eagle breeding season can start as early as January 1 and may extend until August 31 each year. Reproduction success at these two sites is similar to what is occurring in the rest of the State (Isaacs, F.B., and R.G. Anthony, 2004).

The current Biological Assessment (USDA Forest Service and USDI Bureau of Land Management, 2003) states, “Bald eagles are fairly tolerant of human activity, but high level noise or disturbance can dissuade them from important breeding areas or winter roost sites, particularly during early nesting season. Individual pairs have widely variable responses to disturbance. Some eagles choose to nest in areas of high recreational use or urban development and consistently and successfully reproduce, while other pairs are more sensitive to disturbance and would be adversely impacted by the same type of activity”. Bald Eagles on the Rogue River are occasionally (< 5-10% of the time) flushed by powerboats or rafts (personnel communications with Tom Hawkins, Forest Service raft and powerboat operator). However, most of the time they are very tolerant of human activities. For example, on 2 February 2005 Tom Hawkins observed a fishing guide fishing a stretch of water over and over (float through and then power upstream and then float through again) directly below a perched bald eagle. The bald eagle stayed perched as the guide continued fishing and as he passed by in the Forest Service powerboat Dillingham (unpublished, 1997) reported that bald eagles in the Rogue River corridor showed desensitization to motorboat noise.

Direct Effects

The most likely avenues for impact on this species relate to displacement resulting from noise and presence disturbance from people, power boats, rafts and vehicles. . These disturbances have not been associated with nesting failures in the project area.

Indirect Effects

Prey reduction would occur as a result of sport fishing associated with the proposed action, along with private non-guided fishing. The reduced prey availability would necessitate that an eagle expend additional energy to locate replacement food. The abundance in quantity and variety of fish is considered very high and not significantly altered by the proposed action. Vehicles for pulling and/or carrying motorized boats create additional noise and presence contributing to the potential for noise disturbance as well as desensitizing potential. Actual disturbance is likely to be infrequent. Additional traffic resulting from the proposed activity is not expected to result in measurable effects.

Cumulative Effects

Disturbance from private residences, businesses, roads, powerboats, rafts, and people have been occurring in the project area for decades and is expected to continue at some level with or without the proposed action. Bald eagles are a key attraction in the Rogue and people are likely to take extra measures to look at an eagle closer and for a longer period of time than other wildlife. . Development of the harvested private land adjacent to the Libby Creek bald eagle nest site began in 2004 and is expected to continue. The Libby Creek bald eagles fledged two young in 2004.

For the Lower Rogue and Lower Illinois Rivers Special Use Permits (all alternatives), the project is consistent with Project Design Criteria (USDA, 2003):

- No known bald eagle nest trees, perch trees, or roost trees will be cut, or modified to preclude function.
- No suitable habitat is being removed within 0.25 miles of nest or roost sites.
- No potential eagle perches within 0.5 mile of nests or roosts are being cut.

Work or other activities above ambient noise levels that cause disturbance, including helicopter use, logging, and construction would not take place within 0.25 mile (approximately 400 m) of active nests/roosts (not line of site) or within 0.5 mile (approximately 800 m) line-of-site from nests/roosts during periods of eagle use.

No blasting is proposed. As noted in the Forest's biological assessment, bald eagles are among the most tolerant of the raptor species to disturbance, even in heavily used recreational areas, as evidenced by successful reproduction, site tenacity, and increasing number of sites during the last 20 years.

The BE for "Outfitter Guides and Tour Boats on the Rogue River" (USDA Forest Service 1999) discloses no aversion to jet boat activity, including fish catching while jet boats were present. Observations of eagle response to boat activity are that the eagles usually are tolerant, ignoring human presence, and remain perched. Disturbance to nest sites from activities occurring on the Rogue River has not been documented. The structure and function of nesting, roosting, and wintering habitat are not impacted by the alternatives. There is the possibility of boat activity noise or proximity to result in the temporary displacement of a perched bald eagle. The proposed action warrants a may affect, not likely to adversely affect determination on the bald eagle. The action alternatives differ in their potential for impacts primarily as a function of commercial boat use level; the greater the boat activity (e.g., Alternative 2), the greater the potential for impacts. The no action alternative is considered a *may affect, not likely to adversely affect* determination for marbled murrelets because non-commercial private motor boating, rafting, hiking and camping will still occur. The remaining alternatives have a reduced potential for impacts compared to Alternative 2. Negative effects are highly unlikely and immeasurable.

Marbled Murrelet (*Brachyramphus marmoratus*)
Status: Federal – Threatened

References: Csuti, et al. (1997), Dillingham (1997), Dillingham et al. (1995), Hamer (1995a, 1995b, 1998), Long (1997), Long and Ralph (1998), Marshall (1998), Paton (1990), USDA Forest Service and USDI-Burea of Land Management (1994), USDI Fish and Wildlife Service (1992b, 1997), USDA Forest Service and USDI Bureau of Land Management (2003), USDI Fish and Wildlife Service (2003).

Due to nesting habitat loss and poor reproductive success, USFWS listed the marbled murrelet as threatened in 1992.

The marbled murrelet is a small seabird found from Alaska to California. It spends most of its life at sea, but nests in almost exclusively in mature or old-growth conifer trees with large moss-covered branches. Other nesting area characteristics include multi-layered canopies, low elevation, and close proximity to water. The breeding season (egg laying, incubation, and fledging) for marbled murrelets in Oregon begins in late April and extends to the end of September.

In the Pacific Northwest, murrelets have been found up to 53 miles inland. No murrelets were detected more than 32 miles from the ocean on the Siskiyou National Forest, although surveys had been conducted up to 47 miles inland. Sixteen, of the 857 murrelet detections on the Forest, occurred in the Project area below Agness. No murrelets have been detected above Agness. Suitable nesting habitat occurs in the project area above Lobster Creek.

There is the possibility of displacement resulting from noise and presence disturbance of people, power boats, rafts and vehicles. The adverse effects of disturbance may lead to nest abandonment by adults, reduced nest attentiveness (leading to increased vulnerability of predation), aborted feeding visits, premature fledging, and avoidance of otherwise suitable habitat (Hamer, 1998). However, many bird species, including murrelets, can habituate to relatively high disturbance levels. In their summary of all information concerning murrelet disturbance, Long and Ralph reported that "[Marbled] murrelets appeared generally undisturbed by passing vehicles, or sharp or prolonged loud noise" and "overall, it appears that marbled murrelets are not easily disrupted from nesting attempts by human disturbance except when confronted at or very near the nest itself".

The large conifer trees used as nesting habitat for this species in the project area is located above the high waterline between Lobster Creek and Agness.

Indirect Effects

Vehicles for pulling and/or carrying motorized and non-motorized boats create additional noise and presence contributing to the potential for noise disturbance as well as desensitizing potential. Actual disturbance is likely to be infrequent. Additional traffic resulting from the proposed activity is not expected to result in measurable effects as these are a relatively small fraction of the total vehicle activity in the project area.

Cumulative Effects

Disturbance from private residences, businesses, roads, powerboats, rafts, and people have been occurring in the project area for decades and is expected to continue at some level with or without the proposed action. .

The likelihood of impacts resulting from noise level similar to ambient conditions is considered low and negative effects are highly unlikely and immeasurable.

The cumulative effects of all projects in the Rogue River and Illinois basins are expected to be minimal for the Murrelet. These projects are consistent with Project Design Criteria (USDI Fish and Wildlife Service, 2003), therefore these projects will not affect murrelets in the lower Rogue or lower Illinois River corridor.

Critical Habitat

Marbled murrelet critical habitat was designated in 1996 and corresponded primarily to areas designated as Late-Successional Reserve in the Northwest Forest Plan (USDA, 1994, USDI, 1996). About 20 acres of this project is within critical habitat. One channel maintenance site (Coffee Pot) occurs in marbled murrelet critical habitat. Late-successional habitat occurs above the high waterline and will not be affected. The proposed activities do not modify critical habitat constituent elements or impair its function. The proposed action is considered no effect, on marbled murrelet critical habitat.

The Lower Rogue and Lower Illinois Rivers Special Use Permits FEIS (all alternatives) the project is consistent with Project Design Criteria (PDC):

- No removal or degradation of suitable habitat is proposed precluding the requirement for surveys to protocol.
- Litter prevention and control methods are incorporated into the permits.
- No heavy smoke production is associated with the proposal.
- No blasting is involved.

The PDC regarding noise levels above non-motorized activity baseline levels merits further discussion which follows. The project area is open to non-commercial boat (motorized and non-motorized) activity which occurs on a year-round basis. As such, the river is a "road" normally open to public traffic. This river "road" has its own normal, baseline noise levels, which is considered to approximate that noise level resulting from public, small motorboat activity which generates noise levels similar to the non-tour boats. As such, noise levels resulting from the proposed action are not considered significantly different from ambient conditions in the project area. Field sampling of boat activity during 2001 showed that the duration of noise levels being above ambient conditions have a range of 1.8 - 4.3 minutes with an average of 3.0 (sd=1.0, n=10).

Northern Spotted Owl (*Strix occidentalis caurina*)
Status: Federal –Threatened
References: Anthony, et al (2004), Courtney, et al (2004), Dillingham (1997), Forsman (1982), Thomas, et al. (1990), USDI Fish and Wildlife Service (1990), USDA Forest Service and USDI Bureau of Land Management (2003), USDI Fish and Wildlife Service (2003).

The northern spotted owl was listed as Threatened by USFWS in June 1990. The project area contains breeding and foraging habitat for northern spotted owls. Northern spotted owls use old-growth forests almost exclusively and rarely use clearcuts or young forest plantations. If young stands are used, they typically contain remnant large trees. Where timber harvest has occurred, spotted owls are usually found in remaining old-growth and mature forest patches. Habitat features associated with spotted owl use include multi-layered canopies, relatively high canopy closure, large diameter trees, and many snags and logs. These stand features are related to requirements for feeding, nesting, and roosting. Spotted owls most commonly nest in tree cavities or on platforms created by debris or mistletoe infections between March 1 and June 30.

A report that summarized the demography of the spotted owls throughout its range was released in September of 2004 (Anthony et al. 2004). The report showed a decline of approximately 4.1 percent across the range of the owl and showed significant declines of populations in some areas, in particular Washington State and northern Oregon. Only four study areas within the range of the spotted owl did not show evidence of spotted owl declines. In southern Oregon, three study areas did not show declines and appeared to have relatively stable or increasing populations.

Also in 2004, the FWS conducted a status review of the spotted owl across its range which summarized the biology, ecology, habitat associations and trends, as well as current and potential threats to the species (Courtney et al. 2004. They found that habitat loss, the primary reason for listing of the spotted owl, had declined significantly across the range. However, there was some concern as to the potential lag effects to spotted owl populations from past timber harvest. The greatest amount of habitat loss due to timber harvest had occurred in the Oregon Klamath and Cascade provinces. The three major operational threats they identified were timber harvest, catastrophic wildfire, and barred owls. Potential threats included effects associated with West Nile Virus, and Sudden Oak Death.

Barred owls have increased in SW Oregon but not to the extent of other areas within the range of the spotted owl. In the south Cascades demographic study area, there has been an increase of barred owls and they occupy up to 20 percent of historic or known spotted owl sites within that study area. However, there are far less barred owls known for SW Oregon than other areas in the northern portion of the range and the spotted owl survival is stable in that study area as well as in the Klamath demographic study area (Anthony et al. 2004).

There have been recent large fires in SW Oregon, in particular the Biscuit and the Timbered Rock fires, which have significantly reduced NRF within the province. However, analysis conducted on the effects of the Biscuit Fire using recent work by Zabel et al. (2003) showed that of the 49 owl pairs affected by the fire, it was likely that only seven were no longer extant. In addition, of the 15 spotted owl pairs affected by the Timbered Rock Fire, 11 of those pairs continue to occupy their historic activity centers even thought they were subject to varying degrees of fire severity. There is uncertainty as to how spotted owls respond to fire in SW Oregon and research is currently being conducted in an attempt to answer that question.

The two other new threats of Sudden Oak Death and West Nile Virus are thought to be potentially severe, however it is unknown when and to what extent these threats may become risks for the spotted owl.

Timber harvest on Forest Service lands within the Project area is not allowed. Barred owls are present in the Project area. Sudden Oak Death has not been reported in the Project area. West Nile Virus has been reported in Oregon.

Suitable owl habitat does occur in the project area. Eleven spotted owl territories overlap into the project area. Of these, the closest known activity center to the Rogue River is 700ft. Dillingham (1997) reported that northern spotted owls in the Rogue River corridor show desensitization to motorboat noise.

The Lower Rogue and Lower Illinois Rivers Special Use Permits FEIS (all alternatives) the project is consistent with Project Design Criteria (PDC) (Table 2):

- No removal or degradation of suitable habitat is proposed precluding the requirement for surveys to protocol.
- Work activities (such as tree felling, yarding, road construction, hauling on roads not generally used by the public, blasting) that produce loud noises above ambient levels, will not occur within specific distances (see table below) of any nest site or activity center of known pairs and resident singles between March 1 and June 30.
- No heavy smoke production is associated with the proposal.
- No blasting is involved.

Table 2. Prescribed distances for spotted owl seasonal restrictions from the current Biological Opinion (FWS log #1-15-03-F-511).

Type of Activity – for Spotted Owl	Zone of Restricted Operation
Blast of more that 2 pounds of explosives	1 mile
Blast of 2 pounds or less of explosives	120 yards
Impact pile driver, jackhammer, or rock drill	60 yards
Helicopter or single-engine airplane	120 yards
Chainsaws (hazard trees, timber harvest, etc.)	65 yards
Heavy Equipment	35 yards

The PDC regarding noise levels above non-motorized activity baseline levels is discussed in the Bald Eagle section.

Direct Effects

The late-successional habitat used by this species for nesting, roosting and foraging occurs above the high waterline between Lobster Creek, and Brushy Bar. There is the unlikely possibility of displacement resulting from noise and presence of people, power boats, rafts and vehicles.

Indirect Effects

Vehicles for pulling and/or carrying motorized boats create additional noise and presence contributing to the potential for disturbance as well as to desensitizing potential. Additional traffic resulting from the proposed activity is not expected to result in measurable effects as these are a relatively small fraction of the total vehicle activity in the project area.

Cumulative Effects

Disturbance from private residences, businesses, roads, powerboats, rafts, and people have been occurring in the project area for decades and is expected to continue at some level with or without the proposed action.

The Lower Rogue and Lower Illinois Rivers Special Use Permits would result in no more than a negligible probability of affecting the northern spotted owl. The alternatives differ in their potential for impacts primarily as a function of use level; the greater the boat activity (e.g., Alternative 2), the greater the potential for impacts. Negative effects are highly unlikely and immeasurable.

Critical Habitat

Northern spotted owl critical habitat was designated in 1992 (USDI, 1992a).. Approximately 320 acres of designated critical habitat occurs in the project area from Waters Creek to Billings Creek. One channel maintenance site (Illahe Island/Allen's Alley) occurs in northern spotted owl critical habitat (OR-67). Two willow cutting sites (Foster and Watson Creek Rapids) occur in northern spotted owl critical habitat. Late-successional habitat occurs above the high waterline and will not be affected. The proposed activities do not modify critical habitat constituent elements or impair its function. The proposed action is considered no effect, on northern spotted owl critical habitat.

Brown Pelican (*Pelecanus occidentalis)*
Status: Federal – Endangered
References: Marshal et al. (2003), USDI Fish and Wildlife Services (2005)

The Brown pelican was first listed in 1970. It is currently designated as endangered within its entire range, except U.S. Atlantic coast, FL, and AL. This species occurs in California, Oregon, Washington, Louisiana, Mississippi, Texas, Puerto Rico, Virgin Islands, Central and South America. The subspecies that occurs in Oregon is the California Brown Pelican (*P. o. californium*). The entire California Brown Pelican population was estimated to be 50,000-51,000 breeding pairs in 2002. The Brown pelican is a coastal marine species that rarely occurs inland or far offshore.

Non breeding adult and subadult birds usually begin to arrive in Oregon during April. Postbreeding adults arrive during May and June: juveniles during July and August. Peak numbers occur in August and September. The return migration southward usually begins in November.

Brown pelicans feed near shore in the ocean as well as the mouth of the Rogue River. They feed mainly on fish, with the northern anchovy being the primary species consumed. They roost on sandy shores and off shore rocks.

Direct, Indirect and Cumulative Effects

Both tour boat companies launch their trips from the estuary. Brown pelicans are transitory to the project area, there are no significant roosts within the project area and they do not breed within the project area. Because of the ongoing activities in the estuary, tour boat impacts are discountable and produce no additional effects to the brown pelican. The effects determination for this species is No Effect.

Steller (Northern) Sea-Lion (*Eumetopias jubatus)*
Status: Federal – Threatened
References: USDI Fish and Wildlife Services (2005), Verts and Carraway (1998)

The Steller sea-lion was listed in 1990 as threatened in California, Oregon, Washington, and Alaska, except the population segment that occurs west of 1440 W. Longitude was listed as endangered. The species occurs around the North Pacific Ocean rim from Japan, through the Aleutian Islands and Bering Sea, and south along the west coast of North America to Channel Islands, California. They eat a variety of fishes and invertebrates

Pyramid Rock, located on the Rogue River Reef, is one of the primary rookeries used by Steller sea-lions along the Oregon coast. Steller sea-lion presence in the Rogue River estuary (below RM 5) is the highest in June or July where they prey on lamprey, salmonids and other fish.

Direct, Indirect and Cumulative Effects

Both tour boat companies launch their trips from the estuary. Steller sea-lions are transitory to the project area, there are no haul-outs within the project area and they do not breed within the project area. Because of the ongoing activities in the estuary, tour boat impacts are discountable and produce no additional effects to the brown pelican. The effects determination for this species is No Effect.

Forest Service Region 6 Sensitive Species

American Peregrine Falcon (*Falco peregrinus anatum*)
Status: USDA Forest Service – Sensitive
References: Johnsgard (1990), USDI Fish and Wildlife Service (1999a)

The American peregrine falcon was identified as an endangered species in the 1970s and then delisted in 1999. Peregrine falcons are typically associated with cliffs, which serve as nesting and perching sites. Nest site criteria include ledges, potholes, and small caves that are near water, inaccessible to mammalian predators, and offer protection from rain and snow, and heat and cold. Peregrine falcons feed almost exclusively on birds.

Peregrines forage within the project area. Two nest sites occur adjacent to the project area with the closest one being 3,000 ft from the Rogue River.

Direct Effects

The two known nest sites are located outside the project area. There is the unlikely possibility of displacement of foraging peregrines or its prey species resulting from noise and presence of people, power boats, rafts and vehicles. Monitoring of peregrine falcon in the Rogue River corridor indicates de-sensitization to river boat noise, hence the low likelihood of actual disturbance or measurable effect on reproduction (Pagel, 1988; Dillingham, 1997). Direct observations of bird behavior during jet boat races showed no apparent disruption to peregrine falcon behavior.

Indirect Effects

Vehicles for pulling and/or carrying motorized boats create additional noise and presence contributing to the potential for noise disturbance as well as to desensitizing potential. Greater boat activity (e.g., Alternative 2) could result in greater potential for impacts. The no action alternative is considered a MIIH because non-commercial private motor boating, rafting, hiking and camping will still occur.. The remaining alternatives have a reduced potential for impacts compared to Alternative 2. Negative effects are highly unlikely and immeasurable.

Cumulative Effects

Disturbance from private residences, businesses, roads, powerboats, rafts, and people have been occurring in the project area for decades and is expected to continue at some level with or without the proposed action.

California Wolverine (*Gulo gulo)*
Status: USDA Forest Service – Sensitive
References: Csuti et al. (1997), Hornocker (1981), Maser (1998), Ruggiero et al (1994), Yocum (1973).

Wolverines are rare in Oregon and typically found in the Cascade Mountains. They are solitary animals with large home ranges, sometimes several hundred square miles. Yocum concluded from sighting records that the wolverine was becoming established in the western Siskiyou Mountains of Del Norte County, California. Wolverines typically avoid areas used regularly by humans. Wolverines are commonly associated with open forests at high elevation and in alpine areas, though it may be that the high elevation areas simply had the lowest level of human activity. Wolverines are opportunistic omnivores in summer and scavengers in winter; they prey on a variety of smaller animals, but large mammal carrion is an import food source all year. There are no recorded sightings of wolverine for the Gold Beach Ranger District. Numerous roads exist within the project area and human disturbance is common. The adjacent wilderness provides suitable habitat. The high level of human activity in much of the project area indicates poor habitat quality and a low likelihood of wolverine activity.

Direct Effects

Though the proposed action does not include habitat alteration, the action alternatives occur at a time of year when this species could be present in the project area. This species is very unlikely to be present. The species avoids human contact and is seemingly sensitive to human activity (i.e., noise). Numerous roads exist within the project area and human activity is common. Noise generated by motorized boats may decrease habitat suitability or quality with the result of a decreased likelihood of habitat use.

The Lower Rogue and Lower Illinois Rivers Special Use Permits (all alternatives) is considered "May Impact Individuals and/or Habitat but not likely to cause a trend to federal listing or a loss of viability" for the California wolverine. The alternatives differ in their potential for impacts primarily as a function of use level; the greater the boat activity (e.g., Alternative 2), the greater the potential for impacts

Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area. This additional traffic also results in increased collision potential, but this is also not likely to be large enough to have a measurable effect.

Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Pacific Fisher (*Martes pennanti*)
Status: USDA Forest Service – Sensitive
References: Csuti, et al. (1997), Maser (1998), Maser, et al. (1981), Ruggiero, et al. (1994).

Pacific fishers are rare in Oregon and typically only found in the southwest and northeast quarters of the state. The preferred habitat is coniferous forests; although deciduous forests may be used in portions of the range. Fishers may use clearcuts, but more commonly they avoid areas with no overhead cover. Natal and maternal dens are typically large cavities in living or dead trees. During winter, temporary dens may be found in snow, brush piles, and under logs or roots. Resting areas are predominantly in closed canopy stands in large trees, snags, or logs. Suitable habitat for fishers exists in the project area, but no fishers have been observed.

Direct Effects

Though the proposed action does not include habitat alteration, the action alternatives occur at a time of year when this species could be present in the project area. This species are unlikely to be present. Noise generated by motorized boats may decrease habitat suitability or quality with the result of a decreased likelihood of habitat use.

Motorized traffic, terrestrial support and/or aquatic, already occurs and is projected to continue to occur with or without the proposed activities

The Lower Rogue and Lower Illinois Rivers Special Use Permits (all alternatives) is considered "May Impact Individuals and/or Habitat but not likely to cause a trend to federal listing or a loss of viability" for the Pacific fisher. The alternatives differ in their potential for impacts primarily as a function of use level; the greater the boat activity (e.g., Alternative 2), the greater the potential for impacts.

Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area. This additional traffic also results in increased collision potential, but this is also not likely to be large enough to have a measurable effect.

Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Pacific Fringe-tailed Bat (*Myotis thysanodes*)
Status: USDA Forest Service – Sensitive

References: Csuti, et al. (1997), Maser (1998), Maser, et al. (1981)

The Pacific fringe-tailed bat is rare in Oregon, but is most common to southwest Oregon. Little is known about its habitat, but it is known to use caves, mines, rock crevices, and buildings for day and night roosts. Preferred habitat seems to be forested and riparian areas. The fringe-tailed bat is sensitive to human disturbance. There are no recorded Pacific fringe-tailed bat sightings in the WILDOBS database within the project area, however there are bridges, rock outcrops, snags, and or buildings present and suitable for roosting.

Direct Effects

The proposed activities do not modify bat habitat and is sufficiently removed from known roost, nursery, and/or hibernation sites so as not to pose an impact. The twilight period of bat activity overlaps with some of boating activity, creating an unlikely collision potential.

The Lower Rogue and Lower Illinois Rivers Special Use Permits (all alternatives) is considered "May Impact Individuals and/or Habitat but not likely to cause a trend to federal listing or a loss of viability" for the Pacific fringe-tailed bat. The alternatives differ in their potential for impacts primarily as a function of use level; the greater the boat activity (e.g., Alternative 2), the greater the potential for impacts.

Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area. This additional traffic also results in increased collision potential, but this is also not likely to be large enough to have a measurable effect.

Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating. The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on this species in the lower Rogue or lower Illinois River corridor.

Pacific Pallid Bat (*Antrozous pallidus pacificus*)
Status: USDA Forest Service – Sensitive
References: Csuti, et al. (1997), Maser (1998).

In Oregon, the pallid bat is found east of the Cascade Mountains and in the Siskiyou Mountain region of southwest Oregon. The pallid bat is most often found in arid regions where desert vegetation predominates but can also be found in open ponderosa pine and oak forests. Daytime roosts include caves, undersides of bridges, and cracks in rocks, hollow trees, snags, buildings, and mines. Nighttime roosts include open shelters easily accessible by flight such as open buildings, porches, undersides of bridges, and mines. The Pacific Pallid Bat is intolerant of disturbance and readily abandons roosts.

The Northwest Forest Plan does require protection of caves, mines, abandoned wooded bridges, and buildings that are used as roost sites for bats. Bat monitoring conducted at Quosatana Campground, Agness Guard Station, and Coon Rock Bridge during the summers of 2002 and 2003 yielded no detections of these species. This same monitoring found a moderate abundance of activity and the identification of a California bat (*Myotis californicus*) nursery colony in one of the utility service buildings at Quosatana Campground. The nursery colony is located about 150 yards from the Rogue River.

Direct Effects

The proposed activities do not modify bat habitat and is sufficiently removed from known roost, nursery, and/or hibernation sites so as not to pose an impact. The twilight period of bat activity overlaps with some of boating activity, creating an unlikely collision potential.

The Lower Rogue and Lower Illinois Rivers Special Use Permits (all alternatives) is considered "May Impact Individuals and/or Habitat but not likely to cause a trend to federal listing or a loss of viability" for the Pacific pallid bat. The alternatives differ in their potential for impacts primarily as a function of use level; the greater the boat activity (e.g., Alternative 2), the greater the potential for impacts.

Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in measurable disturbance, as these are a relatively small fraction of total vehicle activity in the project area. This additional traffic also results in increased collision potential, but this is also not likely to be large enough to have a measurable effect.

Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating. The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on this species in the lower Rogue or lower Illinois River corridor.

Pacific Shrew (*Sorex pacificus.*)
Status: USDA Forest Service - Sensitive

Pacific shrews are typically found in wet areas along small forest streams interspersed with down wood and marshy patches or around down wood in moist forests away from streams and wetlands (Maser 1998). Pacific shrews are not typically associated with conifer forests, but prefer alder/salmonberry riparian areas and skunk cabbage marshes (Csuti et al. 1997). Though no Pacific shrew sighting records were located for the project area, field reconnaissance indicates suitable habitat within project area riparian areas.

Direct Effects

Though the proposed action does not include habitat alteration, the proposed action occurs at a time of year when this species could be present in the project area. There exists the unlikely possibility that during boat loading and/or unloading activity at other than a ramp or dock, e.g. person leaves boat to play and land a fish, that an individual shrew could be stepped on or directly impacted by the boat.

Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in increased road kill potential, but this is not likely to be large enough to have a measurable effect.

Cumulative Effects

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on this species in the lower Rogue or lower Illinois River corridor.

Del Norte Salamander (*Plethodon elongatus*)
Status: USDA Forest Service - Sensitive

Habitat for Del Norte salamanders includes coniferous and deciduous forests with rocks and logs (Cockran and Thomas 1996). This species is most closely associated with rocks or talus slopes within forests (Csuti et al. 1997) and may also be found in partially-decayed logs or under forest litter in coastal areas (Cockran and Thomas 1996). Del Norte salamanders are common, abundant, and widely distributed across the Forest with 611 sightings. There are 2 sightings in the project area.

Direct Effects

Del Norte salamander habitat occurs above the high water line. Downed wood used as firewood could impact habitat quality. However, that effect is unlikely to have any measurable impacts to the species

Indirect Effects

Additional traffic generated by vehicles pulling and/or carrying commercial boats is not expected to result in increased road kill potential, but this is not likely to be large enough to have a measurable effect.

Cumulative Effects

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on this species in the lower Rogue or lower Illinois River corridor.

Siskiyou Mountains Salamander (*P. stormi*)
Status: USDA Forest Service - Sensitive

The Siskiyou Mountains salamander is primarily a California species and is only found in the Siskiyou Mountains of southern Oregon and northern California (Cockran and Thomas 1996). This species is associated with habitat similar to that of the Del Norte salamander. Gold Beach Ranger District is outside the known Siskiyou Mountains salamander distribution. No Siskiyou Mountains salamanders have been found during surveys on the Gold Beach Ranger District.

Direct, Indirect and Cumulative Effects

The proposal is considered No Impact on Siskiyou Mountains salamander because the project is outside the known range of this species.

Black Salamander (*Aneides flavipunctatus*)
Status: USDA Forest Service - Sensitive

The black salamander is also a primarily California species and is only found in the Siskiyou Mountains of southern Oregon near the California border (Cockran and Thomas 1996). The project area is outside the known black salamander distribution. Potential habitat for the black salamander occurs in the project area but no black salamanders have been found during surveys on the Gold Beach Ranger District.

Direct, Indirect and Cumulative Effects

The proposal is considered No Impact on black salamander because the project is outside the known range of this species

S**outhern Torrent Salamander** (*Rhyacotriton variegates*)
Status: USDA Forest Service - Sensitive

Torrent salamanders are sensitive to desiccation and changes in water temperature., so they are rarely found far from cold water (Cockran and Thomas 1996). Typical torrent salamander habitat includes cold and clear springs, seeps, headwater streams, and waterfall splash zones (Cockran and Thomas 1996). Metamorphosed individuals and adults may be found in moist forests near flowing water foraging for food. Larvae and adults are commonly found in gravel or under cobbles in clear flowing or seeping water (Cockran and Thomas 1996). Eggs are laid singly, loosely, and unattached during the spring in rock crevices where cold water will flow around them. Southern torrent salamander habitat exists within the project area; southern torrent salamanders are commonly seen along streams in the Gold Beach Ranger District. Three records of southern torrent salamander activity adjacent to the project area were located.

Direct Effects

Southern torrent salamander utilized cool headwater streams and springs. They are unlikely inhabitants below the high water line in the Rogue or Illinois Rivers. People walking in this habitat could injure an individual, however this is extremely unlikely.

Indirect Effects

No impacts are anticipated as this species is highly aquatic and restricted to very small and cool headwater stream and seeps. This type of habitat is not expected to be affected by the proposed action and it is unlikely that these animals would ever be found outside of this habitat

Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Foothill Yellow-legged Frog (*Rana boylii*)
Status: USDA Forest Service - Sensitive

The foothill yellow-legged frog lives in or near streams with rocky or gravel substrates (Cockran and Thomas 1996). Streams with sandy or muddy bottoms are occasionally used, as well as moist, rocky outcrops (Nussbaum et al. 1983). Adults commonly live among sedge clumps at the edges of deep pools, cobbles on the bottom of pools, or in bedrock at the main stream channel edge (Cockran and Thomas, 1996). Eggs are deposited during late spring or early summer in clusters attached to rocks on the bottom or edges of streams and tadpoles live in pools for three to four months before metamorphosing into adults (Cockran and Thomas 1996).

Foothill yellow-legged frog has been detected at 40 locations (Chetco, Elk, Illinois, Pistol, Rogue and Winchuck watersheds) within the Siskiyou National Forest. Two sighting occur in the project area.

Direct Effects

Powerboat wave action may dislodge eggs, egg masses, and/or tadpole/juvenile amphibians and deposit them on shore where they become subject to desiccation or predation. There exists the unlikely possibility that during boat loading and/or unloading activity at other than a ramp or dock (e.g., person leaves boat to play and land a fish), that an individual animal could be stepped on or directly impacted by the boat. The Forest Service will conduct surveys for yellow-legged frog oviposition sites in 2005 on the Lower Rogue River and if sites are found, will monitor those sites to determine if powerboats have adverse impacts to egg masses and tadpoles.

Indirect Effects

No indirect impacts are anticipated as this species is highly aquatic and they are unlikely to be impacted by increased road use or vehicle travel.

Cumulative Effects

There are no known foothill yellow-legged frog sightings where channel maintenance may occur. There is unsurveyed suitable habitat at these locations. Foothill yellow-legged frog eggs and tadpoles could be destroyed. Juvenile and adult frogs could be temporarily displaced

Potential effects from private residences, businesses, roads, powerboats, rafts, channel maintenance, boater safety willow cutting, docks, and people have been occurring in the project area for decades and are expected to continue at some level with or without the proposed action.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Common Kingsnake (*Lampropeltis getula*)
Status: USDA Forest Service - Sensitive

In Oregon, the common kingsnake is thought to be most closely associated with moist river valleys with thick riparian vegetation (Storm et al. 1995). The common kingsnake is widely distributed throughout the southern United States but is only known in Curry, Douglas, Jackson, and Josephine Counties in Oregon. Two of the 15 records of common kingsnake on the Forest are within the project area.

Direct Effects

No habitat modification is proposed in areas likely to be used by the common kingsnake. There exists the unlikely possibility that during boat loading and/or unloading activity at other than a ramp or dock, e.g. person leaves boat to play and land a fish, that an individual animal could be stepped on or directly impacted by the boat.

Indirect Effects

Down wood removed for firewood could reduce the amount of available cover for the common kingsnake. Vehicles for pulling and/or carrying boats could collide with common kingsnake as it moves across a road, however these activities are unlikely to have a measurable effect to the species.

Cumulative Effects

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating. Impacts on individual common kingsnake are expected to be very small in scale and immeasurable.

The cumulative effects of projects in the Rogue River and Illinois basins are expected to be minimal. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Northwestern Pond Turtle (*Clemmys marmorata m.*)
Status: USDA Forest Service - Sensitive
Habitat

The (north) western pond turtle (WPT) inhabits marshes, ponds, lakes, reservoirs, sloughs, and slow moving portions of creeks and rivers (Storm et al. 1995). Pond turtles seem to prefer areas that have refugia such as undercut banks, submerged vegetation, rocks, logs, or mud (Storm et al. 1995). Areas with basking sites for thermoregulation, such as rocks, logs, or emergent vegetation are also preferred. Partially submerged logs, vegetation mats, mud banks, rocks, and tree branches offer areas for sunning (Stebbins 1985).

Figure 1: One type of western pond turtle habitat, the willow-pedestal sedge shoreline.

The project area offers suitable year-round habitat for the species and WPTs are common in the project area. Two habitats, both most prominent along the Rogue River north bank, seem to have the vast majority of turtle riverine activity. The first can be characterized as a willow (*Salix* sp.) - pedestal sedge (*Carex* sp.) shoreline where summer river flow is relatively constant, resulting in a close proximity of foraging, basking, and resting habitat, and security cover.

Willow and sedge stem and root clumps provide structural complexity used by turtle prey (small aquatic invertebrates) and are used for security cover by turtles. The sedge has a unique growth form in which its roots are clumped ("stub footed") and often hanging over the shoreline. WPT are often seen at the base of these sedge clumps. Peninsular and island rocks are regularly used for basking. Water more than 3 feet deep offers escape cover whenever threatening conditions prevail

The second dominant habitat condition (Figure 10) in the shallow shoreline water zone (0.5 to 2 feet deep) of slow moving, warmer water. The river bed within the geologic Riddle Formation is nearly vertical in places and differential erosion results in undulating backwater embayments. These embayments provide structural diversity which, in turn, provides turtle foraging, basking, resting, and probably rearing habitat. The embayments contain ridges upon which little to no vegetation grows. Between the ridges there are pools with a sand-silt floor where vegetation, such as curly-leaf pondweed, grows and where algae often accumulate in mid to late summer. The European pondweed (*Potamegeton crispus*) growth form is dense, wide spreading, and flexible, resulting in effective hiding cover for turtles and possible heat sinks in which water is further warmed and retained. Pondweed roots in the riverbed and extends dense stems through the water column and often up to the surface. WPT have been observed taking refuge in pondweed patches to avoid being captured.

Holland (1994) found that juvenile WPT use the same habitat as adults, though it is likely juveniles will seek microhabitats which afford greater security cover, warmer water temperatures to facilitate growth, and greater food abundance.

Holland (1994) describes nest site attributes, which include compact soils and alluvium with higher amounts of clay or silt and a smaller proportion of sand. Nest sites generally occur on S, SW, or SE aspects and on slopes greater than 25 degrees. Nest site distance to water averages 161 feet above the average high-water line. Nest sites have not been located in the project area but are likely to be present.

Figure 2: Second habitat type, shallow shoreline water zone slow moving water

WPT distribution within the project area is uneven. At least 95% of the WPT sightings have been in the Wild Rogue Section and upper half of the Recreational Rogue Section. The turtle distribution indicates habitat differences which are suspected to be positively correlated with the geologic Riddle Formation. Using the 2002-2003 average population estimate, Adult/juvenile ratios are, under normal circumstances, quite variable (Holland 1994) and would generally consist of 55 to 70 percent adults. The project area shows an adult- biased population structure (98 percent adults). The reason for this is unknown. Predation and or disease associated with introduced species, such as bullfrog (*Rana catesbeiana*) and red-eared slider (*Pseudemys scripta*), might play a substantial role in juvenile mortality. WPT wintering sites also found in the project area.

MONITORING

Monitoring data results from systematic surveys and opportunistic detections. Systematic surveys are conducted specifically for the purpose of detecting WPT activity. Opportunistic detections occur when a WPT is observed and reported while a person is conducting other business. Systematic commenced in 2001 and have through 2003 (Galea 2001, 2002, 2003). The portion of the river monitored with systematic surveys has varied each year (Table 3) though the techniques and personnel involved have been similar.

Table 3: Western pond turtle detection methods and areas for the Rogue River Special Use Permits project area

YEAR	SURVEY TYPE	ROUTE
2001	Systematic	Foster Bar to Blossom Bar
2002	Systematic	Foster Bar to Blossom Bar; Grave Creek to Foster Bar (downstream float survey)
2003	Systematic	Foster Bar to Blossom Bar; Grave Creek to Cougar Lane (downstream float survey)
YEARLY	Opportunistic	Varies but often Quosatana boat ramp to Blossom Bar

Table 4 summarizes WPT detections for the same 12 mile portion of the river, Blossom Bar to Foster Bar, monitored each year. The variability in the results shown in Table 4 may be due to such factors as differences in sampling conditions (weather), sampling dates, and sample size. As sample size has increased, the WPT per mile value has decreased. With sufficient sampling, normal levels of variation should become evident. The larger a sample size, the more probable variation in weather conditions.

Table 4: Western pond turtle survey results for the 12 mile Rogue River section between Blossom Bar and Foster Bar

YEAR	AVG. # OF WPT DETECTED (Std.Dev.)	SAMPLE SIZE (days)	DATE RANGE	WPT PER MI.
2001	17.5 (2.4)	4	8/3 - 9/5	9.8
2002	10.3 (3.9)	6	7/15 - 9/25	5.8
2003	5 (5.0)	20	4/17 - 9/13	2.8

2001: Baseline monitoring of the WPT was initiated with a population and nest site survey from Blossom Bar to Foster Bar. Thirty-three (33) WPT were captured and marked. One of the 33 WPT captured was a hatchling between Clay Hill Lodge and Clay Hill rapids. A population size of 127 total WPT (106 adults plus an estimated 21 subadults) The adult to subadult ratio was 91.5 to 8.5. A detection ratio of basking WPT of 15.1 was calculated. This survey indicated clumped, relatively low densities of turtles along this portion of the river, compared to other large river systems. The report suggested three several factors which may be causing the apparently low densities, (1) generally poor habitat conditions, (2) a lack of nesting habitat, (3) high predation.

2002: Thirty-four (34) miles of the Rogue River extending from Grave Creek downstream to Foster Bar, were surveyed for WPT. A population size of 136 WPT (113 adults plus an estimated 23 subadults) was calculated. Seven WPT were hand captured and none had been previously marked. As observed in 2001, WPT clumping reoccurred. Sites where WPT had been detected in 2001 were also in use during 2002. The Biscuit Fire of 2002 prevented the more extensive monitoring that was planned.

2003: Forty-one (41) miles of the Rogue River extending from Grave Creek downstream to Agness were surveyed for WPT. This rendered a reliable count of 146 WPTs (Mendez-T. 2003) resulting from twenty-seven opportunity searches. Average WPT detections per search was 5.4 (Standard Deviation = 6.2, Range = 0- 28). WPT movement between their wintering and summer grounds along the Rogue River was documented in 2003. WPT activity tended to be located in the same areas as in previous sightings.

Six sub-adult turtles were observed in 2003: four above and two below Blossom Bar. The limited number of observations affirms the difficulty in detecting sub-adult and juvenile WPT. The presence of the sub-adults indicates reproduction in both the motorized and non-motorized portions of the river. a). A single sub-adult turtle sighting at Lone Tree Creek is the furthest downstream on the Rogue River that has a record of WPT. This location is in the Recreation Section of the river, and receives both motorized and non-motorized activity during the spring to fall period. b). A single Clayhill Lodge sighting was made in the Wild Section of the river. The Clayhill Lodge area also receives both motorized and non-motorized traffic. The sub-adult detection site includes a sandy beach area with easy access to the river. Cleared and/or trampled vegetation indicates human use, i.e. lunch stops, camping. This area also seems suitable at least as a pathway for turtles leaving or returning to the river during nesting and/or wintering phases. c). Four WPT sub-sightings occurred in the vicinity of Corral Creek and Battle Bar. This area is in the primarily non-motorized section above Blossom Bar, and is a popular camping and lunch stop. The greater number of sub-adult WPT sightings here indicates a high likelihood of nearby nesting.

Project area monitoring in 2004 has documented pond turtle terrestrial activity on March 11th and 24th, and riverine activity April 7th through 9th. The March 11th observation was of two adult female WPTs, radio-tagged in 2003, at their wintering sites. The wintering sites are located between Foster Bar and Lone Tree Creek, both on the north side of the Rogue River, on National Forest System (NFS) land. The most upstream of the two sites (150.663 MHZ), in the vicinity of Illahe Campground, is located about 55 feet away from the river's edge within a former river ten foot high soil-gravel bank that demarcates the transition between the upslope 30-60 year old Douglas-fir forest, and the downslope grass-forb-shrub-young-conifer community of a frequently (<30 year cycle) flooded bench. The second wintering site, 150.683 MHZ, is about 110 feet east of Lone Tree and about 450 feet from the Rogue River's edge. Both turtles were observed above ground during monitoring on March 11, 2004. The March 24, 2004 sighting was of an adult male located close to a private residence, in the vicinity of Billing's Creek, and about 1400 feet from the Rogue River. Three WPT were observed on April 8th and two on April 9th shoreline and or within the Rogue River. One of the three individuals of April 8th was detected in an area (Solitude Bar) with no prior documented activity.

Figure 3: Percent western pond turtle seasonal activity in the project area.

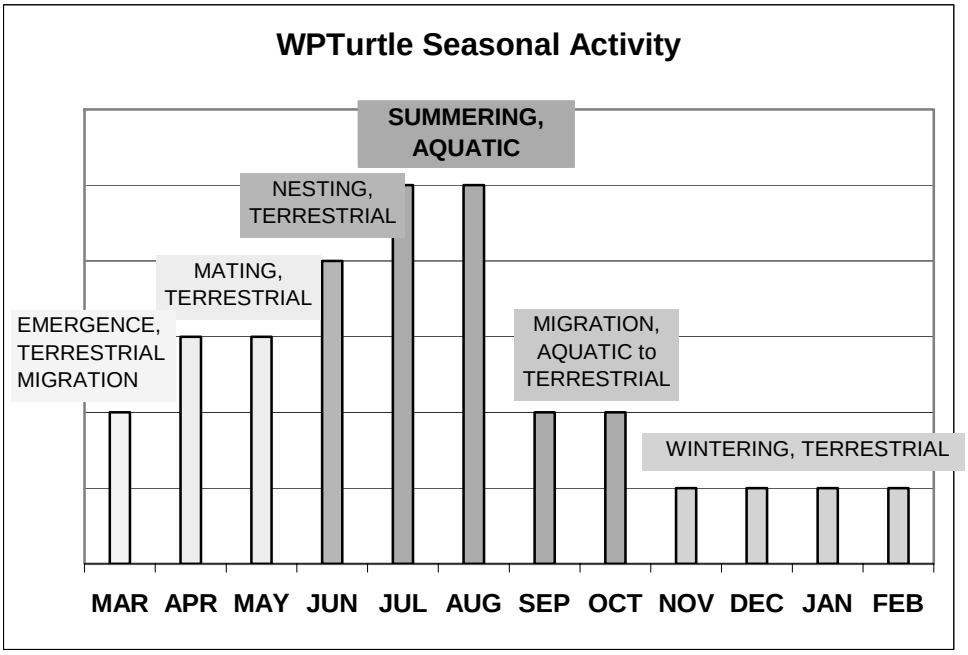

Figure 3 generalizes the percent of WPT activity within the project area over a calendar year. Each histogram bar represents a month. The bar height is a relative measure, in comparison to the other months, of the likelihood of a person seeing a WPT on the ground surface during that month. For example, the "WINTER, TERRESTRIAL" period has the shortest bars, indicating that even though this period covers 33 percent of the year, it has the least likelihood of a WPT being detected above ground. Conversely, the "SUMMERING, AQUATIC" period, 17 percent of the year, has the greatest likelihood for a WPT to be detected above ground. The only absolute part of the histogram is that WPT are present year-round in the project area.

Direct Effects

The proposed activities occur at a time of year when this species is along the shore and/or in the river and subject to impact. The most likely avenues for measurable impact on this species relate to direct collision between boat and turtle, as well as splashing of basking turtles by the wake of passing motor boats. Larger boats that are plowing, versus on-plane, have a greater potential of generating larger wakes. Furthermore, the larger wakes have high energy levels with a resultant increased potential of physically displacing turtles and/or displacing vegetative cover. Physical collision between boat and turtle could result in serious turtle injuries. Monitoring turtle populations in this river system during 2002 and 2003, including the direct observation and/or handling of 148 individuals, resulted in no detectable evidence of boat-turtle collisions. Turtles that were examined commonly showed signs of attempted depredation (e.g., tooth scrapes and indentations).

A second likely pathway for direct impact to WPT is involuntary displacement. In *Riverhawks v. Zepeda*, Dr. Holland (2003) declared, "motorized watercraft can interfere with normal foraging, basking, movement, reproductive and other behaviors for all age and size classes of WPT. Second, motorized watercraft can interfere with normal development of eggs in gravid females by altering basking behavior, altering basking site selection and/or deep body temperatures by wave action, and/or creating noise that disturbs them." The noise or presence of a boat or boats could cause WPT to abandon its location and take cover.

After two years of monitoring, WPT are seldom seen (less than five percent of the time) leaving their post when a motorized boat approaches or passes. As observed by District personnel, non-motorized boat activity has generated at least as much, if not more, involuntary displacement as motorized boat activity.

The limited degree of evasive action may be explained by desensitization (Holland, 1994) though each event is unique to individual WPT and particular circumstances (e.g., the proximity of a boat to a WPT). As observed, most turtles are tolerant of motorized boat traffic, though the circumstances around each event varied. Generally, the closer a boat is to a WPT and the greater the wake caused by the boat, the greater the likelihood of involuntary displacement. Wakes resulting from motorized boat traffic could negatively affect microhabitat for hatchling and juvenile WPT (Holland, 2003). Riverine areas used by WPT are subjected to significantly greater disturbance forces each winter. These winter storm flows control WPT habitat: shorelines, vegetation, pools, floor composition, basking sites, and other areas. Wakes caused by from the proposed action could result in micro-scale impacts on habitat during any one season, but thus far the change has been immeasurable. The effects determination for the WPT is "May Impact Individuals or Habitat, but will not likely contribute to a trend towards Federal listing or cause a loss of viability to the population or species (MIIH).

Indirect Effects

Habitat degradation can result when shoreline vegetation is lost due to trampling, excavation, soil loss, and undercut bank collapse from human activity (e.g., boat take-out, lunch spots, camping) and/or boat-generated wave action. Water quality degradation may occur as a result of pollutants from internal combustion engines or other chemicals lost from motor boats or rafts. Litter accumulation from human activity along shorelines attracts animals, such as bear, raccoon, or gray fox, which could prey on these species. Vehicles for pulling and/or carrying boats could collide with WPT as it moved across a road.

Cumulative Effects

Motorized and non-motorized boat traffic, terrestrial or aquatic, already occurs and is expected to continue to occur with or without the proposed action. Impacts from vehicles, terrestrial and/or aquatic, may have the same type of impacts on WPT as those associated with the proposed activities. At times, District personnel have observed recreationists on rafts and/or kayaks purposely maneuver their craft to more closely observe or touch WPT.

All but one channel maintenance site (Illahe Island/Allen's Alley) occurs below where western pond turtles have been observed in the project area. Western pond turtle are present near the mouth of Billings Creek which is approximately 1000 feet downstream from the channel maintenance site. If a western pond turtle were to move to the shore line where channel maintenance is occurring, they could be temporarily displaced.

The potential for impacts is proportional to the amount of boat activity. For WPT, there is the additional variance to potential impacts that is related to the seasons of activity. Boat activity that occurs between April and September has a greater likelihood of causing WPT impacts than if conducted outside this period when the species are less likely to be in the river or on the river's edge. Impacts on individual WPT and/or their habitat are expected to be very small in scale and immeasurable. The proposed action neither fragments the population nor creates a barrier to movement

Management Indicator Species

Table 6 below identifies Management Indicator Species and their habitat represented in the project area. Only those species not already evaluated, in this FEIS or in the Wildlife Biological Evaluation for this project, are included.

Table 5: Wildlife management indicator species and the habitat represented for the project area.

Species	Habitat Represented
Osprey	Habitat corridors along large creeks and rivers
Pileated woodpecker, pine marten	Mature forest
Woodpeckers	Snags (standing dead trees)
Black-tailed deer, Roosevelt elk	Early successional forest stages

Osprey

Ospreys (*Pandion haliaetus*) are commonly observed in the project area. Ospreys arrive during early spring (March), nest, and then leave for wintering grounds by October. Their primary diet includes fish and eels, which they hunt while in flight. Foraging and nesting occur in the project area; district monitoring between 1992 and 2004 has shown an increase in active territories from 33 to 54 and an increase in the number of young produced from 33 to 75.

Direct Effects

There is the unlikely possibility of boat activity noise resulting displacement or disturbance of a roost or nest site. It is also unlikely that a collision between a foraging osprey and motorized boat could occur. Motorized boat activity could disrupt foraging behavior by causing osprey to feed elsewhere at locations not occupied by motorized boats, and/or by distraction which results in "missed" prey captures. No removal of habitat, nest or roosting trees, is proposed for modification by the action alternatives

Indirect Effects

Smaller fish injured during angling by people could become easier prey for osprey. Smaller fish that are removed by people would no longer be available as osprey food.

Cumulative Effects

Fishing and motorized boat activities already occur and are projected to continue to occur with or without the proposed action. Impacts from these activities are likely to have the same type of impacts on osprey as those associated with the proposed action.

Pileated Woodpecker and Marten

Pileated woodpecker and marten are mature forest habitat associated species.

Direct Effects

There is the unlikely possibility of boat activity noise resulting in displacement or disturbance. Removal of down wood and small snags for firewood could reduce foraging habitat for pileated wood pecker or cover for the marten or its prey.

Indirect Effects

Vehicles for pulling and/or carrying motorized boats create additional noise and pose the risk of collision. The presence and activity of these vehicles contributes to the potential for noise disturbance as well as the potential for desensitizing of animals to human activity. A lowered habitat quality situation is promoted by continued human activity.

Cumulative Effects

The action alternatives do not propose to directly remove snag habitat. However, snag habitat is likely to be removed as needed for public safety in proximity to campgrounds which are used for overnight stays by recreationists and/or for boat launching. Human presence and/or noise activity could degrade habitat quality resulting in decreased use and/or reduced reproductive effectiveness.

Woodpeckers

The woodpecker group includes acorn, black-backed, downy, hairy, Lewis', and white-headed woodpeckers, as well as northern flickers and red-breasted sapsuckers. White-headed and black-backed woodpeckers are unlikely inhabitants of the analysis area as white headed woodpeckers are high elevation species and flammulated owls are a pine forest associated species.

Direct Effects

There is the unlikely possibility of boat activity noise resulting in displacement or disturbance. Removal of down wood and small snags for firewood could reduce foraging habitat for woodpeckers.

Indirect Effects

Vehicles for pulling and/or carrying motorized boats create additional noise and pose the risk of collision. The presence and activity of these vehicles contributes to the potential for noise disturbance as well as the potential for desensitizing of animals to human activity. A lowered habitat quality situation is promoted by continued human activity.

Cumulative Effects

The action alternatives do not propose to directly remove snag habitat. However, snag habitat is likely to be removed as needed for public safety in proximity to campgrounds which are used for overnight stays by recreationists and/or for boat launching. Human presence and/or noise activity could degrade habitat quality resulting in decreased use and/or reduced reproductive effectiveness.

Blacktail Deer and Roosevelt Elk

Black-tailed deer and Roosevelt elk do occur in the project area. Deer are commonly sighted along the Rogue and Illinois Rivers. Elk populations in the project are stable, while black - tailed deer populations are showing a downward trend due to loss of early seral habitat and other factors including disease, parasites and predation

Direct Effects

A small amount of foraging habitat may be impacted. There is the unlikely possibility of boat activity noise resulting in displacement or disturbance. .

Indirect Effects

Vehicles for pulling and/or carrying motorized boats create additional noise and pose the risk of collision. The presence and activity of these vehicles contributes to the potential for noise disturbance as well as the potential for desensitizing of animals to human activity.

Cumulative Effects for all Management Indicator Species

Human presence and/or noise could degrade habitat quality due to disturbance resulting in decreased use and/or reduced reproductive effectiveness.

Disturbance from private residences, businesses, roads, motorboats, rafts, and people has been occurring in the project area for decades and is expected to continue at some level with or without commercial boating.

The cumulative effects of all projects in the Rogue River and Illinois basins are expected to be minimal to these species. These projects are consistent with LRMP Standards and Guidelines and Management Requirements, therefore these projects will not have a cumulative effect on these species in the lower Rogue or lower Illinois River corridor.

Protection Buffer Species

The Record of Decision "To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning documents within the Range of the Northern Spotted Owl" (USDA Forest Service and USDI Bureau of Land Management 2004) (Survey and Manage ROD) removed many species from the Survey and Manage requirements. Standard and Guidelines for certain cavity nesting birds, Canada Lynx, and some bat roosts remained. Species potentially in the project area include white-headed and black-backed woodpeckers, flammulated owl which require large (>20 inches), and bats that use caves, mines, and abandoned wooden bridges and buildings. White-headed and black-backed woodpeckers and flammulated owl are unlikely inhabitants of the analysis area as white headed woodpeckers are high elevation species and flammulated owls are a pine forest associated species. Townsend's big-eared bat has been observed at one location in the project area.

Direct Effects

White-headed and black-backed woodpeckers and flammulated owl: Large snags are not expected to be impacted by the proposed activities. There is the unlikely possibility of boat activity noise resulting in displacement or disturbance. Removal of down wood and small snags for firewood could reduce foraging habitat for woodpeckers.

Bats: The proposed activities does not modify bat habitat and is sufficiently removed from known roost, nursery, and/or hibernation sites so as not to pose an impact. The twilight period of bat activity overlaps with some boating activity, creating an unlikely collision potential.

Indirect Effects

Vehicles for pulling and/or carrying boats pose the risk of collision.

Cumulative Effects

Motorized traffic, terrestrial support and/or aquatic, already occurs and is projected to continue to occur with or without the proposed action.

The action alternatives do not propose to directly remove snag habitat. However, snag habitat is likely to be removed as needed for public safety in proximity to campgrounds which are used for overnight stays by recreationists and/or for boat launching. Human presence and/or noise activity could degrade habitat quality resulting in decreased use and/or reduced reproductive effectiveness.

The Lower Rogue and Lower Illinois Rivers Special Use Permits (all alternatives) is considered "May have negative effect to some individuals or some habitat but effect is minimal" for the white-headed and black-backed woodpeckers, flammulated owl, fringed myotis, long-eared myotis, long-legged myotis; silver-haired bat, pallid bat, and Townsend's big-eared bats. The alternatives differ in their potential for impacts primarily as a function of use level; the greater the boat activity (e.g., Alternative 2), the greater the potential for impacts.

Neo-Tropical Migrant Birds

As per the Partners In Flight Bird Conservation Plan for Oregon and Washington (2000), "… if you provide all of the habitats to some degree over some landscape, then you will probably be taking care of most if not all of the landbirds in that habitat. The conservation emphasis is on ecosystems, habitats, and habitat conditions, not species." Priority bird species for varying habitats in the project area are summarized in Table 6.

Bird conservation objectives are tied to focal species that represent habitat attributes and/or ecological functions of various forest age classes. For example, Vaux's Swifts use large snags in old-growth systems, olive-sided flycatchers use residual canopy trees in early seral stages, and hermit warblers use the closed canopy in young to mature-aged forests. These habitats and their attributes, in certain quantities and combinations, should be maintained on landscapes in a shifting mosaic of conditions. Portions of the project area provide for nesting, dispersal, foraging, and cover for variety of bird species.

Table 6: Partners in Flight focal bird species by habitat within the project area.

Habitat	Condition	Attribute	Bird species
Coniferous forest	Old-growth / Mature	Large snags	Vaux's swift, pileated woodpecker
Coniferous forest	Old-growth / Mature	Large trees; conifer cones; mid-story tree layers	Brown creeper; red crossbill; varied thrush
Coniferous forest	Mature / Young	Varied canopy closure; deciduous canopy understory; complex forest floor	Hermit warbler; Hammond's flycatcher; Pacific-slope flycatcher; Wilson's warbler; winter wren
Coniferous forest	Young / Pole	Deciduous canopy	Black-throated gray warbler
Coniferous forest	Pole	Deciduous subcanopy / understory	Hutton's vireo
Coniferous forest	Early-seral	Residual canopy trees, snags, deciduous vegetation; nectar-producing plants	Olive-sided flycatcher western bluebird; orange-crowned warbler; rufous hummingbird
Coniferous forest	Unique	Mineral spring	Band-tailed pigeon
Oak woodlands (including non-forested prairie)			California quail, western screech-owl, Nutall's woodpecker, oak titmouse, wrentit, California thrasher, black-chinned sparrow.

All of the action alternatives have the potential impact of noise disturbance and/or direct physical impact. Disturbance could result from human presence and/or noise generation which would cause animals to take evasive action, flight, resulting in decreased effectiveness at courting, nesting, foraging, and/or resting. Direct collision between vehicles, used for transporting motorized boats as well as people, and songbirds has a moderate likelihood of occurring. The likelihood of collision is considered moderate because of the high level of abundance of neo-tropical birds in the project area. Habitat modification is not proposed by any of the action alternatives.

The Lower Rogue and Lower Illinois Rivers Special Use Permits (all alternatives) is considered may impact individuals and/or habitat but not likely to cause a trend to federal listing or a loss of viability for neo-tropical birds. The alternatives differ in their potential for impacts primarily as a function of use level; the greater the boat activity (e.g., Alternative 2), the greater the potential for impacts.

Channel Maintenance

The Endangered brown pelican utilizes habitat below where channel maintenance occurs, therefore there will be No Effect to brown pelicans. Because of the ongoing activities in the estuary, channel maintenance impacts are discountable and produce no additional effects to the Steller sea-lion. The effects determination for Steller sea-lion is No Effect.

One channel maintenance site (Illahe Island/Allen's Alley) occurs in northern spotted owl critical habitat. One channel maintenance site (Coffee Pot) occurs in marbled murrelet critical habitat. Late-successional habitat occurs above the high waterline at these locations and will not be affected by channel maintenance. Channel maintenance will have No Effect to Northern spotted owl or marbled murrelet critical habitat.

Channel maintenance effects to the bald eagle, northern spotted owl and marbled murrelet are not likely to adversely affect these species, similarly to the powerboat effects discussed earlier.

All but one channel maintenance site (Illahe Island/Allen's Alley) occurs below where western pond turtles have been observed in the project area. Western pond turtle are present near the mouth of Billings Creek which is approximately 1000 feet downstream from the channel maintenance site. If a western pond turtle were to move to the shore line where channel maintenance is occurring, they could be temporarily displaced. Channel maintenance is a MIIH for the pond turtle.

There are no known foothill yellow-legged frog sightings where channel maintenance may occur. There is unsurveyed suitable habitat at these locations. Foothill yellow-legged frog eggs and tadpoles could be destroyed. Juvenile and adult frogs could be temporarily displaced. Channel maintenance is a MIIH for the frog because the impacted area is limited to a small portion of the suitable habitat within the project area; the species occurs at other locations in the project area, watershed and Forest; this activity has been occurring in the project area for decades and the species is reproducing.

The remaining sensitive, protection buffer, management indicator and neo-tropical migratory bird species that occur outside the water channel may be directly affected by disturbance and the very small amount of vegetation alteration (<1 acre). Channel maintenance is a MIIH for these species because the impacted area is limited to a very small portion of the project area, watershed and Forest.

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APPENDIX H

BIOLOGICAL EVALUATION
FOR SENSITIVE PLANT SPECIES

AND

SUPPLEMENTARY BOTANICAL REPORT

FOR

Vascular Plants, Bryophytes, Lichens, Fungi, Noxious Weeds, And Site Restoration

FOR THE

Rogue River Special Use Permits

Gold Beach Ranger District
Rogue-Siskiyou National Forest

PREPARED BY: *Jenifer Hutchinson* **DATE:** 3/28/05

Jenifer Hutchinson
Zone Botanist

I. Introduction

A. Purpose:

The purpose of this biological evaluation (BE) is to review the Rogue River Special Use Permits in sufficient detail as to determine whether the proposed action will result in a trend toward Federal listing of any sensitive plant species listed in Attachment A.

B. Description of the Situation and Proposal

Commercial operations on the lower Rogue River from Blossom Bar to Lobster Creek are administered by the Rogue-Siskiyou National Forest. Commercial operators include: guided fishing trips, scenic tours, half-day float trips, and the transport of guests to the lodges in the wild section of the Rogue River. These commercial operations require special use permits by USFS policy (Forest Manual 2700). There is a need to respond to those permittees that want to continue their existing special use permits that expire on December 31, 2004 and April 30, 2006. As a connected action there is also a need to respond to owners of the three commercial lodges in the Wild and Scenic portion of the Rogue River and issue or reissue special use permits for the boat docks at those properties.

Alternatives:

1. No Action: The existing special use permits would not be reissued when they expire. Affects use on the wild section of the river only. Non-commercial boats would be allowed on the wild section.
2. Proposed Action: Previous special use permits would be reissued under old terms. Permits for existing docks at Paradise and Half Moon Bars would be renewed. Clayhill would be offered a permit to replace a dock that was previously at that location.
3. Reissue the previous special use permits, but exclude commercial boats from the wild section on Sundays and Mondays. Special use permits for the docks are the same as Alternative 2.
4. Reissue the previous special use permits but cap the average of the two highest years (2000-2004) in the wild section, plus 25% on case by case basis. Special use permits for the docks at Paradise and Half Moon are the same as Alternative 2. A permit for a replacement dock at Clay Hill would not be offered.
5. Reissue the previous special use permits but cap the average of the two highest years (2000-2004) in all sections, plus 25% on case by case basis. Special use permits for the docks are the same as Alternative 2.
6. Reissue the previous special use permits but cap the average of the two lowest years (2000-2004) for commercial tour boats and commercial transport of lodge guests. Terms for livery, training, scenic, raft trips, and fishing guides would be the same as Alternative 2. Special use permits for the docks are the same as Alternative 2.

C. Plant Species of Concern

Current management direction mandates the conservation for several categories of rare plants on the Siskiyou National Forest. The Endangered Species Act mandates protection of federally listed Threatened and Endangered species. Sensitive species are protected by USDA Forest Service regulations and manual direction. No federally listed Threatened, Endangered, or proposed plants, nor suitable habitat are known to occur in the project area.

The potential of the proposed project area to support suitable habitat for sensitive plant species was determined by pre-field analysis of soils and topographic maps, knowledge of sensitive plant species range, distribution, and habitat characteristics; and review of the district's sensitive plant files. Field surveys subsequently verify the suitability of the habitat.

All known records of vascular and nonvascular plant species as well as sensitive plants and noxious weeds occurring on the Gold Beach Ranger District were reviewed in regards to potential effects on any of these species by project activities.

The most recent plant surveys along the Rogue River occurred July 20-24, 2004. The focus was aquatic and riparian noxious weed species, with supplemental surveys for the sensitive lichen species *Usnea longissima* and the sensitive plant species *Scirpus pendulus*. *Scirpus pendulus* was found near Lookout Rock above Blossom Bar, and at Brushy Bar. No *Usnea longissima* was found in the immediate riparian corridor. Noxious weed species found in the riparian corridor included: *Centaurea pratensis*, *Centaurea solsitialis*, *Cirsium arvense*, *Cirsium vulgare*, *Cytisus scoparius*, *Gensita monspessulana*, *Brachypodium sylvaticum*, and *Lythrum salicaria*.

II. Current Management Direction

A. Desired Future Condition and Land Allocations (see LRMP 4 87-90)

The Siskiyou National Forest Land and Resources Management Plan (LRMP) desired future condition (DFC) is to maintain seral stages of terrestrial and aquatic plant associations to insure an even distribution of native vegetation and plant communities. Plant life inhabiting this ecosystem will continue to flourish. The goal is to protect, preserve, and enhance the botanical features of this area. "Every effort should be made to protect botanical resources and their habitat, especially sensitive plant species" (LRMP). Siskiyou NF LRMP allocates additional NF land area to General Forest, Partial Retention Visual, and Riparian Reserves.

B. Forest-wide Standards and Guidelines for Sensitive Plants (see LRMP 4 26-27, 33).

Standards and guidelines applicable at the project level are:

1. *Monitor the effects of management activities on sensitive plants. If monitoring results show a decline in species viability, alter management strategy.*

2. *Analyze the potential effects of all ground disturbing projects on sensitive plants and their habitat. Mitigate project effects to avoid a decline in species viability at the Forest level.*

3. *Map, record, and protect essential habitat for known and sensitive plant species. Species management guides should be prepared to address the effects of land management activities on local populations of sensitive species at a broader scale, and to identify opportunities to enhance and develop habitat.*

III. Existing Environment

For information on special habitats, vegetation, and soils see *Rogue River Watershed Analysis Marial to Agness* and *Rogue River below Agness Watershed Analysis*, available through the Gold Beach Ranger District of the Siskiyou National Forest.

A. Area - Habitats

The Rogue River corridor from Blossom Bar to Lobster Creek is botanically diverse stretch of river. Habitats for plants include steep slopes with exposed rock outcrops, arid rocky benches, springs and seeps, creeks, gravel bars, forested benches, and the river itself. Plants that live in rock crevices along the river include the brilliant red California fushcia, stonecrops, ferns, and Siskiyou daisy. Rocky seeps are home to drooping bulrush, monkey flowers, ferns, many types of sedge and other rushes. Waterfalls and creek confluences provide habitat for monkey flowers and stream orchid and many shrubs. Arid rock benches support wild onions, brodiaea, wild iris, annual and perennial grasses. White and black oaks, madrone, myrtle, and Douglas-fir are the trees most commonly encountered on old benches along the Rogue river. The forests are generally dry mesic to xeric. Shrubs on benches and slopes along the river include poison oak, honeysuckle, hazel, wild grape, currants, evergreen huckleberry, salal, and occasionally California smilax.

Disturbance related habitats

Plants are frequently washed downstream with silt and sand during high water. Some of the plants that wash downstream and re-establish are natives such as willows. Other plants that wash downstream and establish in freshly deposited silt as well as on gravel bars are noxious weeds, such as purple loosestrife and meadow knapweed. Flooding can carry seeds as well as plant parts downstream. Noxious weeds such as meadow knapweed, yellow star thistle, French broom, Scotch broom, and Spanish broom are able to thrive in areas with frequent disturbance and nutrient rich soils that flooding can create. Native species such as willows and alder can also thrive in frequently disturbed habitats. Sensitive species such as Leach's brodiaea require openings that disturbances such as fire, landslides and scouring can create. Pillar sedge, a large green tuft of "grass" atop a dark 'pillar' made of roots, grows among rocks in the river. Pillar sedge appears to be relatively impervious to the dynamic flows of the Rogue and is likely unaffected by the wake created by jet boat traffic.

Lightening-caused fire is another natural component of Rogue River ecology (Rogue River Watershed Analysis Marial to Agness Iteration 1.0, 1999). Fire, like other natural disturbances creates habitat for disturbance-loving plant species by removing competition for light, water and nutrients. Fire is important in increasing nitrogen availability, which promotes plant growth. Root sprouting species such as madrone can grow around 6 inches in two weeks following intense fire events. Plants such as Leach's brodiaea and wild onion are able to survive fire provided fire occurs after plants become dormant, which is late summer to midwinter.

Human related disturbance and transport of plant materials

Humans were part of Rogue River ecology long before the advent of northern European settlement (Rogue River Watershed Analysis Marial to Agness Iteration 1.0, 1999). Old mines and homesteads are reminders of the extent and duration of northern European settlement along the Rogue. Some non-native plants such as asparagus and sweet pea most likely were planted by homesteaders. Other plants such as teasel, orchard grass, and bull thistle probably arrived with livestock. Occasionally, escaped houseplants such as fiery orange Crocosmia wash downstream and lodge in the banks above the water.

Humans are a well known vector for seed dispersal and it is likely that present day rafters, fishermen, and hikers transport seeds from one campsite to the next. The wake from jet boats may possibly dislodge plants such as purple loosestrife and these plants may reattach downstream, but it is unlikely the wave action caused by jet boats is as effective at moving purple loosestrife as are seasonal high water events.

Human caused fires also have an impact on vegetation. However, from 1991 through 2003 the numbers of human caused fires along the river were few and originated from abandoned campfires (Mel Wann, 2004).

B. Species Accounts

The following sensitive plants are considered as having potential habitat and/or presence within the active areas of the proposed project:

Sensitive Species (see A Guide to Rare Plants of the Siskiyou NF, 2000, GB district records of sensitive plants and the Jepson Manual Higher Plants of California 1993)

Dermatocarpon luridum
Streamside stippleback is an aquatic lichen found on rocks in seepy terraces, slopes and riparian edges with alder, Douglas-fir, western hemlock, and maple. Streamside stippleback has not been found along the Rogue River. It is well adapted to the effects of moving water and would not be affected by any of the proposed activities.

Erigeron cervinus
Siskiyou daisy grows in rocky places or crevices on solid rock, especially along stream banks at low elevations near seeps or vernally wet spots. The sites are above the level of the wake created by jet boats.

Leucogaster citrinus
This false truffle is found in association with the roots of white fir, lodgepole pine, alpine fir, white pine, Douglas-fir, and western hemlock and is endemic to the Pacific northwest. The sites are above the level of the wake created by jet boats.

Scirpus pendulus
Drooping bulrush grows in marshes wet meadows, river terraces and ditches. There are three known sites on the Gold Beach RD – two of which are on rocky terraces within the flood zone of the Rogue River between Blossom Bar and Brushy Bar. The sites are above the level of the wake created by jet boats.

Scirpus subterminalis
Water clubrush grows in quiet relatively shallow water, typically in lakes, ponds and marshes. There are no known sites of water clubrush on the Rogue River.

Trillium angustipetalum
Siskiyou trillium is found in coniferous forest, woodland, and chaparral at low to moderately high elevations. There are occurrences of Siskiyou trillium on benches above the Rogue River. The sites are well above the level of the wake created by jet boats.

Triteleia hendersonii var. *leachiae*
Leach's brodiaea is found on wooded or open slopes, brush, forest and open meadows. It is found on slopes above the Rogue River. The sites are above the level of the wake created by jet boats.

Usnea longissima
Tinsel or beard lichen is found on the branches of old growth Douglas-fir and on oaks in open areas associated with streams and rivers. There is one known site along the Rogue River and potential habitat in oak flats above the Rogue River. The species is considered rare in Curry, Josephine counties in Oregon and rare in California (Lichens of the PNW and ROD 2000). The site is above the level of the wake created by jet boats.

Wolffia borealis
Dotted water-meal grows in fresh water in areas with less than 3000 ft.elevation. There are no known sites of dotted water-meal on the Siskiyou National Forest.

Wolffia columbiana
Columbia water-meal is free-floating in quiet water. There are no known sites of Columbia water-meal on the Siskiyou National Forest.

Other species of concern (See the Jepson Manual 1993 and GB District sensitive plant records)

Adiantum jordanii
California maidenhair is found on shaded hillsides with moist woods. It is found near the Illinois and Rogue Rivers, but is otherwise uncommon on the Gold Beach RD. The sites are above the level of the wake created by jet boats.

Carex nudata
Pillar sedge is found along the banks of, and in, the Rogue River. It grows in large clumps with a pillar like base of roots that is normally exposed and is found throughout Oregon and in northern California. This plant grows within the area potentially affected by the wake of jet boats.

Smilax californica
California smilax is found along stream banks in coniferous forest. There are a number of occurrences on forested terraces along the Rogue River. It is uncommon on the Gold Beach RD outside of the Rogue River Corridor. The sites are above the level of the wake created by jet boats.

IV. Effects Of Proposed Project

Determinations of effect in this EIS are based on existing information and field surveys for noxious weeds, riparian vegetation, and sensitive plants conducted May 30 to June 2 2002 and September 23-26, 2002 (Declaration of Maria Ulloa in the United States District Court for the District of Oregon: Riverhawks; Northwest Rafters Association; Klamath-Siskiyou Wildlands Center v. Gilbert Zepeda, District Ranger, Gold Beach Ranger District; Ann Veneman Secretary, U.S. Department of Agriculture Civil No. 01-3035-AA). Additional surveys for noxious weeds, drooping bulrush and tinsel lichen were conducted July 19-24, 2004.

No sensitive plants were found or are known from the immediate edge of, or in the Rogue River at the water levels that occur during boating season. Drooping bulrush is found on rocks above the water level near Brushy Bar and is probably affected by seasonal flooding, as it occurs above the summer waterline. The aquatic plants, Columbia and dotted water-meal have not been found on the Siskiyou National Forest. The water-meals require calm water. The only potential habitat would be in protected sloughs, which would not be affected by boat traffic and somewhat protected from seasonal water level fluctuations. Streamside stippleback, as mentioned above, is well adapted to the effects of moving water and would not be adversely affected by the wake of jet boats, or other motorized boat traffic. There are no known populations or habitat for sensitive plants in the vicinity of the docks. *There will be no effects to known sensitive plant populations as a result of implementation of any of the alternatives*.

Channel maintenance will not impact any sensitive plants or habitat because the activities associated with channel maintenance are confined to the channels in the river, with the exception of cutting willows to remove blind spots along the river and the maintenance done at Illahe Island. Willow cutting will not affect sensitive plants or sensitive plant habitat. Willows that are cut will resprout. At Illahe Island a cat is driven from near Billings Creek along the edge of the river to the maintenance site where it is then used to move sand and gravel out of the channel onto the island. Willows are buried, but resprout readily. There are no known sensitive plants sites in the area the cat is driven. Mitigation for ground disturbance caused by the cat along the bank is spreading native grass straw and native seed over tracks. See Noxious Weed Section for mitigations to prevent the spread of noxious weeds and for guidelines for restoration.

Direct and indirect effects

Direct negative effects There are no known sensitive plant sites on the river banks. No direct negative effects to any sensitive species are anticipated from this project for any of the alternatives. **Indirect effects** to sensitive plant species could result from seasonal fluctuations in water levels. Speed and force of the river at flood stage cause both erosion and soil deposits (Rood, et al. 2003) which is conducive to the spread of noxious weeds as well as providing new habitats for sensitive plants. The amount of disturbance caused by season fluctuations in water levels is highly variable from year to year, so it is difficult to gauge the magnitude of its effects on the spread of noxious weeds or creation of new plant habitats. The wake of jet boats was not observed to have any direct or indirect effects on displacement of riparian or aquatic plants during the July 19-24, 2004 float trip.

Cumulative Effects

Throughout their existing range, occurrences of sensitive plants have been impacted to varying degrees by past management activities such as fire suppression, timber harvest, road and landing construction. Natural events such as wild fire and landslides have also contributed to changes in habitat and loss of sensitive plants. The intensity and duration of these impacts has varied considerably and has not been tabulated, but given the magnitude of these actions over the past 150 years of human intervention, it is likely that some plants have been destroyed and some populations extirpated. Other projects within the Rogue River corridor were considered and cumulative effects for all alternatives of this proposal are not considered to be of sufficient magnitude to result in a trend toward federal listing or loss of viability for the sensitive plant species listed in Attachment A.

B. Compliance With Management Direction

This Biological Evaluation has documented the completion of the steps outlined in the Regional Office directive in the 2670 section of the Forest Service Manual and Siskiyou National Forest LRMP direction for management of sensitive plants, including the Aquatic Conservation Strategy.

V. Determinations

The Rogue River Special Use Permits **will not significantly impact** individuals, or habitat. The proposed project is not likely to contribute to a trend towards federal listing or cause loss of viability to sensitive species.

VI. Management Recommendations

Measures that would minimize impacts to vegetation resources:

- Clean all equipment and vehicles prior to entry onto USFS land.
- Avoid parking equipment in wet areas at Oak Flat. The wet areas at Oak Flat are habitat for *Scirpus pendulus*.
- Revegetate using local native seed and transplants.
- If bulbs or plants are dug up during construction, replant in adjacent undisturbed areas.

These recommendations are consistent with Forest Service policy to "Develop and implement management practices to ensure that species do not become threatened or endangered because of Forest Service Actions" (FSM 2670.33).

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IX. Attachments

Attachment A:
Sensitive plant species known or suspected to occur on the west side of the Siskiyou portion of the Rogue-Siskiyou National Forest, potential effects of proposed project on sensitive plant species, and rationale for determination of no effect.

Attachment B:
Supplemental botanical report for noxious weeds, and site restoration.

Attachment A: Sensitive vascular plant species known or suspected to occur on the Westside of the Siskiyou National Forest, potential effects of proposed project on sensitive plant species, and rationale for determination of effects.

Species	Potential Effects	Habitat	Rationale for Determination of Effects
Adiantum jordanii	NI	Shaded hillsides and moist woods. Elevations less than 3600 feet.	Not detected during surveys.
*Arabis macdonaldiana**	No Effect	On barren to shrub covered shallow rocky serpentine soil and Jeffrey pine woodlands at 500 to 4000 ft elevation.	Not suitable habitat. Not detected during surveys.
Arctostaphylos hispidula	NI	Dry rocky ridges and gravelly soils, often on serpentine. Shrub communities or sparse forest in often growing with A. columbiana	Not detected during surveys.
Bensoniella oregana	NI	Relatively deep soils in moist meadows, and along streamside, 3000-5000 ft. Upper slope sites and ridge saddles with northerly aspects.	Not detected during surveys.
Carex gigas (C. scabriuscula)	NI	Wet serpentine above 2800 ft to 5000 ft. Grows in open, sunny sites with little cover. In wettest sites, often associated with CYCA4, DACA5 and RHOC. In drier sites often with PIJE. Habitat often appears dry by flowering time.	Not detected during surveys.
Clintonia andrewsiana	NI	Redwood forests, in deep soil on flats, gentle slopes, alluvial bottoms or terraces.	Known only from southernmost coastal portion of Curry County
Cypripedium fasciculatum	NI	Open coniferous forest, sometimes with Pacific dogwood on north facing slopes and elevations 1000-3500 ft.	Not detected during surveys.
Draba howellii	NI	North facing rock crevices, above 4000 ft	Not detected during surveys.
Ericameria arborescens	NI	Dry foothills, woodlands, open forest chaparral, 1200-2700 ft).	Not detected during surveys. Has only been found near Snaketooth Butte, south of the Chetco River.
Erigeron cervinus	NI	In rocky places or crevices on solid rock. Also in open areas, medium to high elevations and sometimes glaciated areas. Stream banks at lower elevations, usually near seeps or vernally wet areas.	Not detected during surveys.
Eriogonum lobbii	NI	Gravelly ridges and talus slopes at moderate to high elevations. Not generally found on serpentine soils.	Habitat not present in project area.
Erythronium howellii	NI	In open woods, often on serpentine soils or in ecotonal areas.	Not detected during surveys.
Frasera umpquaensis	NI	In open woods, or at edges of meadows. In mid to upper elevation true fir dominated forests or mixed conifer forests (4000-6000 ft) generally in partial shade or openings.	Habitat not present in project area.

Attachment A: vascular plant species, continued

Species	Potential Effects	Habitat	Rationale for Determination of Effects
Fritillaria glauca	NI	Gravelly serpentine slopes and ridges.	Habitat not present in project area.
Gentiana setigera	NI	Serpentine wet meadows and bogs, seeps on slopes at low elevations.	Not detected during surveys.
Hazardia whitneyi var. discoidea	NI	Rocky open coniferous forest slopes 3000-7000 ft.	Habitat not present in project area. ONHP list 4
Iliamna latibracteata	NI	Moist sites, stream sides in coniferous forests. Often in open or partial shade, disturbed ground. Elevation 300-4000 ft.	Not detected during surveys.
Lewisia cotyledon var. purdyi	NI	Granitic or serpentine rock outcrops, full sun or partial shade at elevations between 2000 and 4000 ft.	Not detected during surveys. ONHP list 4
Lilium kelloggii	NI	Dry woods, gaps and roadsides in coniferous forests, redwood forests or brush-fields below 3500 ft	Not detected during surveys. Known only from south of Brookings.
Microseris howellii	NI	Narrow endemic known only from the Illinois River Valley on serpentine. Kept on list because we have potential habitat.	Not detected during surveys. Known only from the Illinois Valley.
Monardella purpurea	NI	Rocky open slopes on serpentine soils, 1400-4000 ft	Not detected during surveys.
Polystichum californicum	NI	Creek banks and canyons in redwood and mixed evergreen forests, rocky open slopes to 1000 ft	Habitat not suitable. Not detected during surveys.
Salix delnortensis	NI	Streambeds, stream-banks, and gullies on serpentine. Habitat may be dry in summer. Low elevations to 1500 ft.	Not detected during surveys.
Saxifragopsis fragarioides	NI	Rocky crevices, 4500 to 9000 ft	Habitat not present in project area.
Scirpus pendulus	NI	Marshes and wet meadows, river terraces, ditches. 2500 to 3000 ft	Habitat not present in project area.
Scirpus subterminalis	NI	Quiet relatively shallow water. Lakes, ponds, marshes.	Habitat not present in project area.
Sidalcea malachroides	NI	Woodlands and clearings along the coast below 2000 ft.	Not detected during surveys.
Sidalcea malvaeflora ssp. patula	NI	Coastal. Open woodlands, openings within mixed forests, meadows, or grassy places at low elevations. Often serpentine.	Not detected during surveys.
Streptanthus howellii	NI	Dry rocky serpentine slopes in open conifer/ hardwood forests from 1000 to 4500 ft.	No suitable habitat. Not detected during surveys.
Trillium angustipetalum (T. kurabayashii)	NI	Coniferous forest, woodland, and chaparral at low to moderately high elevations.	Not detected during surveys.
Triteleia hendersonii var. leachiae	NI	Wooded or open slopes, brush, forest and meadow ridges.	Not detected during surveys. Not habitat.

Attachment A: vascular plant species, continued

Species	Potential Effects	Habitat	Rationale for Determination of Effects
Triteleia laxa	NI	Coastal. Sunny places at low to mid elevations. Open forests, woodlands, and grasslands.	Only one historical documented occurrence Harbor in Curry County,
Viola primulifolia ssp. occidentalis	NI	Serpentine Darlingtonia fens at lower elevations	Not detected during surveys.
Wolffia borealis	NI	Freshwater, less than 3000 ft	This species has not been recorded for Curry or Coos Counties.
Wolffia columbiana	NI	Free floating in quiet water.	This species has not been recorded for Curry or Coos Counties.

Attachment A: Nonvascular plant species

Species	SM Cat	type	Effects	Habitat	Rationale for Determination of effects
Chaenotheca subroscida	E	L	NI	Usually in shaded moist situations, esp. close to the base of trunks. On old THPL, PIEN trunks, decorticated stumps and dry twigs of Picea under canopy.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area.
Cudonia monticola	B	F	NI	On Picea spp. Needles and coniferous debris. Fruits in late summer to autumn.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area. Habitat not present in project area.
Dermatocarpon luridum	E	L	NI	Fresh water aquatic. Seepy terraces, slopes and riparian edges with ALRU, PSME, TSHE, and Acer spp. and on granite rocks along stream edges.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area. Habitat would not be affected by proposed activities.
Encalypta brevicolla var. crumiana (Former S&M)	B	B	NI	On soil in shaded crevices in igneous rocks, along ridge tops with frequent fog penetration.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area.
Heterodermia leucomelos (Former S&M)		L	NI	Occurs on large PISI on windswept forested headlands. Also in coastal redwood forests, low coastal scrub. Conifers in hyper-maritime localities.	No known sites exist in the project area. Project area does not contain appropriate habitat.

Attachment A: Nonvascular plant species

Species	SM Cat	type	Effects	Habitat	Rationale for Determination of effects
Leptogium brebissonii (Former S&M)		L	NI	Maritime and ocean-influenced locations. On PISI, Salix on stabilized dunes. Found on Powers RD on Malus sp. near McGribble meadow.	No known sites exist in the project area. Habitat would not be affected by proposed activities.
Leptogium burnetiae var. *hirsutum*	E	L	NI	Over bark of deciduous trees and shrubs and occasionally on Picea, in deciduous or spruce/deciduous forests.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area. No suitable habitat in project area.
Leptogium cyanescens	A	L	NI	On bark of Alnus, Salix, Picea, rotten logs and rocks.	Not detected during surveys.
Leucogaster citrinus	B	F	NI	Found in association with the roots of Abies concolor, A. lasiocarpa, Pinus contorta, P. monticola, Pseudotsuga menziesii and Tsuga heterophylla from 280-2000 ft. Fruits August through November.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area.
Mycena monticola (Former S&M)	B	F	NI	In conifer forests above 1000 ft, esp. with Pinus spp. And usually found in gregarious caespitose clusters in duff. Fruits August through November and in March.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area.
Pannaria rubiginosa	E	L	NI	Moist lowland habitats, largest populations for OR and WA in coastal thickets of old shrubs on wet deflation plains.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area.
Peltigera neckeri (Former S&M)		L	NI	Low elevation moist forests on soil, moss, rocks, logs, and tree bases.	Not detected during surveys for USNLON. Habitat will not be impacted by project.
Peltigera pacifica	E	L	NI	Low elevation moist forests on soil, moss, rocks, logs, and tree bases.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area.
Ramalina pollinaria (Former S&M)	E	L	NI	Low elevation swamps, often with Picea on bark and wood.	Pre-disturbance surveys for this species are not required. No known sites exist in the project area.
Teloschistes flavicans (OR only)	A	L	NI	Forested headlands with old PISI/TSHE stands growing on PISI and hooker's willow. Closest known site is Cape Blanco.	No known sites exist in the project area. No suspected habitat within the project area.
Usnea longissima	A/F	L	NI	Coast Range on deciduous trees and shrubs as well as PSME. Often in or near riparian settings or on ridge tops above rivers.	Not detected during surveys.

* Arabis macdonaldiana is listed as federally endangered.

Siskiyou (SIS): D= documented, S= suspected.

Determination of Effects

FS Sensitive:

NI = no impact

MIIH = May impact individuals or habitat, but will not likely contribute to a trend towards federal listing, or cause a loss of viability to the population or species

WIFV = Will impact individuals or habitat with a consequence that the action may contribute to a trend towards federal listing or cause a loss of viability to the population or species

BI = beneficial impact

Former Survey and Manage Category (SM Cat)

A = Rare, pre-disturbance surveys practical

B = Rare, pre-disturbance surveys not practical

C = Uncommon, pre-disturbance surveys practical

D = Uncommon, pre-disturbance surveys not practical or not necessary

E = Rare, status undetermined

F = Uncommon or concern for persistence

= unknown, status undetermined

Nonvascular Types: L = lichen, B = bryophyte, F = fungi

Attachment B

Supplemental botanical report for noxious weeds, and site restoration

Definition of a Noxious Weed:

Those plant species designated as noxious weeds by the Secretary of Agriculture or by the responsible State official. Noxious weeds generally possess one or more of the following characteristics: aggressive and difficult to manage, poisonous, toxic, parasitic, a carrier or host of a serious insect or disease, or being native or new to or not common to the United States or parts thereof.

Further management direction on this subject is given in the LRMP under forest-wide standards and guidelines item 12-6: *"Control of noxious weeds should be accomplished in cooperation with state, county, and private organizations through Weed Control Districts or Coordinated Resource Management Agreements. Preventive management is critical to an effective control program."*

Current Management Direction for noxious weeds as stated in the Forest Service Manual 2080, Amendment No. 2000-95-5, effective November 29, 1995 includes the following:

1. For projects having moderate to high risk of introducing or spreading noxious weeds, the project decision document must identify noxious weed control measures that must be undertaken during project implementation.

2. Use contract and permit clauses to prevent the introduction or spread of noxious weeds by contractors and permittees. For example, where determined to be appropriate, use clauses requiring contractors or permittees to clean their equipment prior to entering National Forest System lands.

Policy: When any ground disturbing action or activity is proposed, determine the risk of introducing or spreading noxious weeds associated with proposed action.

District Rangers are responsible for:

1. Determining the risk of noxious weeds introduction or spread as part of NEPA process for
   proposed actions, especially for ground disturbing and site altering activities.

2. Enforcing closure or prohibition orders issued under 36 CFR parts 261.50 (a) and 261.58 (t)
   and enforcing contract specifications intended to prevent and control the spread of noxious
   weeds.

3. Ensuring that the contracts and permits contain appropriate clauses concerning the prevention or spread of noxious weeds.

Site Account:

Direct and Indirect Effects: Existing noxious weed populations at Clay Hill include: purple loosestrife, Scotch broom, yellow star thistle, and meadow knapweed. Ground disturbance while installing the Clay Hill Dock or removing the Clay Hill Dock for seasonal flooding will not cause subsequent spread of noxious weed seeds if mitigations for noxious weeds are followed. Existing populations of noxious weeds at Foster Bar include: Scotch broom, fennel, teasel, and yellow star thistle. Ground disturbance while installing or removing the Foster Bar Dock for seasonal high water events will not cause subsequent spread of noxious weed seeds if mitigations for noxious weeds are followed. Noxious weed populations are present in the vicinity of Paradise and Half Moon Lodges, but are not adjacent to or affected by the docks or removal of docks for winter flooding.

Channel Maintenance at Illahe Island causes some ground disturbance when the cat is moved from the Billings Creek area to the maintenance site. This disturbance is mitigated through using native grass seed and straw on the tracks after work is completed. The cat is washed prior to entering the forest as per mitigations below.

Cumulative Effects: Existing noxious weeds found on the gravel bars between Marial and Lobster Creek include: fennel, yellow star thistle, meadow knapweed, bull thistle, Canada thistle, teasel, purple loosestrife, as well as French, Scotch, and Spanish brooms. Noxious weeds compete with native plant species for habitat niches. Purple loose strife, which grows on gravel bars in the Rogue River between Marial and Lobster Creek, may possibly spread through stem and root fragments that are dislodged during high water events. It is unlikely that jet boats cause wake with the power sufficient to dislodge or break purple loose strife stems or roots. Human travel through river corridors may increase the risk of spreading noxious weeds within the riparian corridor. This travel may be along trails or via boats and rafts. This travel has been a part of the Rogue River corridor prior to settlement. Jet boat traffic may distribute some people upstream, but overall has little effect on other forms of travel along the corridor, or subsequent spread of noxious weeds.

Considering the other projects in the Rogue River Corridor, the cumulative effects of building boat docks included in all alternatives are not likely to spread existing noxious weed populations during placement and/or seasonal removal for high water events, if mitigations for noxious weeds are followed.

Considering the other projects in the Rogue River Corridor, the cumulative effects of building boat docks included in all alternatives and the cumulative effects of moving the cat to Illahe Island for channel maintenance are not likely to spread existing noxious weed populations during placement and/or seasonal removal for high water events, if mitigations for noxious weeds are followed.

Mitigations to prevent the spread of Noxious Weeds along the Rogue River Corridor

- Avoid parking equipment or docks on existing populations of noxious weeds.
- Avoid driving through noxious weed populations at Clay Hill and Foster Bar while moving docks or the cat for channel maintenance at Illahe Island.
- Treat weed sites through pulling up plants and mark weed locations with flagging or more permanent markers prior to constructing docks or moving the cat to Illahe Island.
- Treat weed sites through pulling up plants and mark weed locations with flagging prior to moving docks for high water events.
- Avoid pulling boats up onto gravel bars in the vicinity of noxious weed populations.
- Provide information on noxious weeds to commercial boat operators.

Plant Materials for Restoration & Erosion Control

Current Management Direction
USDA Forest Service Region 6 policy on the use of native vegetative materials on National Forests (6/30/94) is:

To the extent practicable, seeds and plants used in erosion control, fire rehabilitation, riparian restoration, forage enhancement, and other vegetation projects shall originate from genetically local sources of native plants.

Guidelines for implementing this policy are summarized as follows:

- Prescriptions for use of plant materials must be developed by knowledgeable plant resource specialists.
- All revegetation facets must be evaluated early in the planning process for Forest projects, including soil stockpiling, mechanical methods of erosion control, and both natural and artificial regeneration alternatives.
- Promote natural regeneration, or use mechanical means to stabilize soil so that native plants can become reestablished. Alternatively, collect seed as near to the site as possible.
- Use commercially sold natives only if collected from within the same ecological section (National Hierarchy of Ecological Stands) or geographic subdivisions as mapped at the district level in your analysis area.

- Use healthy, pest-free, properly cared for materials whether collected or purchased. In order to comply with Region 6 policy, prescriptions for seeding should be developed prior to project implementation so that collection of local seeds, if needed, can be accomplished during the previous field season.

Further management direction on this subject is given in the LRMP under standards and guidelines for construction and reconstruction of roads section 11-2: Item 2 and 4.

Working References for Supplemental Botanical Report

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APPENDIX I

POWERBOAT EMMISSIONS GENERATED DAILY, BY ALTERNATIVE
(HC=Hydrocarbons, NOx= Oxides of Nitrogen)
(03/28/05)

TOUR BOATS (269kw x 3)											
	Round Trip Time (hrs)	Alt 2		Alt 3		Alt 4		Alt 5		Alt 6	
		HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)
L to A & W	0.66	30013	22190	27882	20615	27882	20615	13941	10308	8709	6439
Trips Daily		8.03	8.03	7.46	7.46	7.46	7.46	3.73	3.73	2.33	2.33
L to B	2	40774	30146	24464	18088	19821	14655	19821	14655	10873	8039
Trips Daily		3.6	3.6	2.16	2.16	1.75	1.75	1.75	1.75	0.96	0.96
TOTAL		70786	52337	52347	38703	47703	35270	33762	24962	19582	14478

Formula for HC- [(807kW x 75% load factor) x 9.36 g/kW-h] x round trip hours x trips/day

Formula for NOx- [(807kW x 75% load factor) x 6.92 g/kW-h] x round trip hours x trips/day

FISHING GUIDES- ALL (269kw x 1)											
	Round Trip Time (hrs)	Alt 2		Alt 3		Alt 4		Alt 5		Alt 6	
		HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)
L to W	1.33	118897	87881	118897	87881	118897	87881	9105	6730	118897	87881
Trips Daily		47.4	47.4	47.4	47.4	47.4	47.4	3.63	3.63	47.4	47.4
Wild Section	0.66	1344	994	1046	773	560	414	560	414	1344	994
Trips Daily		1.08	1.08	0.84	0.84	0.45	0.45	0.45	0.45	1.08	1.08
Wild Section- w	0.66	199	147	199	147	75	55	75	55	199	147
Trips Daily *		0.16	0.16	0.16	0.16	0.06	0.06	0.06	0.06	0.16	0.16
TOTAL		120441	89021	120142	88801	119532	88350	9740	7199	120441	89021

Formula for HC- [(269kW x 75% load factor) x 9.36 g/kW-h] x round trip hours x trips/day

Formula for NOx- [(269kW x 75% load factor) x 6.92 g/kW-h] x round trip hours x trips/day

* Winter trips pro-rated over entire year (number of trips allowed x 0.5)

LOWER ILLINOIS FISHING GUIDES (269kw x 1)											
	Round Trip Time (hrs)	Alt 2		Alt 3		Alt 4		Alt 5		Alt 6	
		HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)
RR to NANCY cr	0.5	11316	8364	11316	8364	11316	8364	94	70	849	627
Trips Daily		12	12	12	12	12	12	0.1	0.1	0.9	0.9
TOTAL		11316	8364	11316	8364	11316	8364	94	70	849	627

COMMERCIAL TRANSPORT OF LODGE GUESTS (269kw x 2)											
	Round Trip Time (hrs)	Alt 2		Alt 3		Alt 4		Alt 5		Alt 6	
		HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)
F.B. to P.L.	0.85	3206	2370	2308	1706	2148	1588	2148	1588	1154	853
Trips Daily		1	1	0.72	0.72	0.67	0.67	0.67	0.67	0.36	0.36
TOTAL		3206	2370	2308	1706	2148	1588	2148	1588	1154	853

ALL POWER BOAT USE										
	Alt 2		Alt 3		Alt 4		Alt 5		Alt 6	
	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)	HC (g)	NOx (g)
TOTALS BY ALT	205749	152092	186113	137574	180699	133571	45744	33819	142025	104980