United States Department of Agriculture

Forest Service

Wallowa-Whitman National Forest

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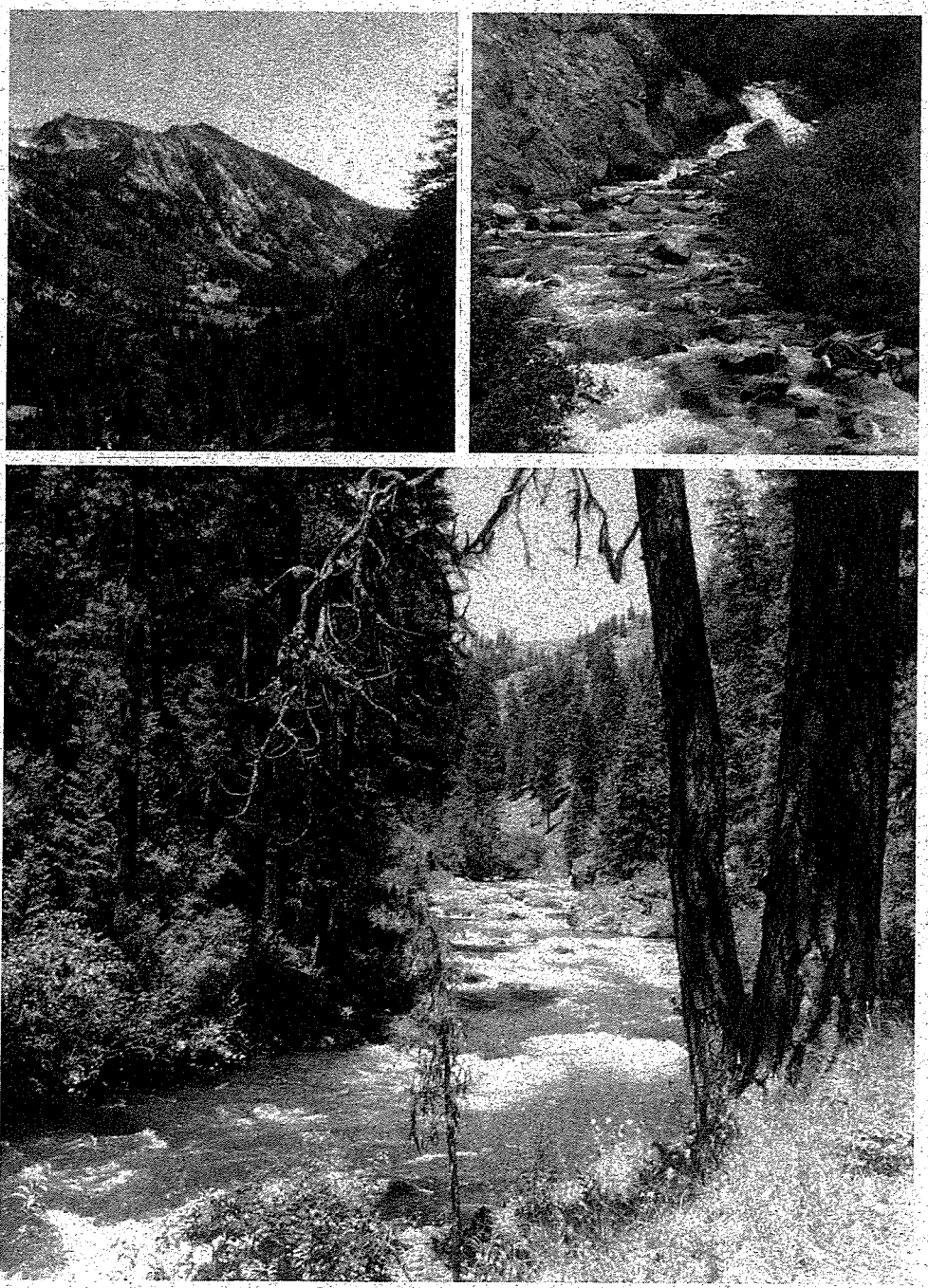
Eagle Creek

Wild and Scenic River Management Plan



MANAGEMENT PLAN

EAGLE CREEK WILD AND SCENIC RIVER

Wallowa-Whitman National Forest
U.S.D.A. Forest Service
Baker and Union Counties, Oregon

DECISION NOTICE
AND
FINDING OF NO SIGNIFICANT IMPACT

ENVIRONMENTAL ASSESSMENT FOR THE EAGLE CREEK WILD AND SCENIC RIVER MANAGEMENT PLAN

Forest Plan Amendment No. 15

USDA Forest Service
Wallowa-Whitman National Forest
Eagle Cap, Pine, and La Grande
Ranger Districts

Union and Baker Counties, Oregon

The Environmental Assessment (EA) for the Eagle Creek Wild and Scenic River Management Plan on the Wallowa-Whitman National Forest is available for public review at the Wallowa-Whitman National Forest Supervisor's Office in Baker City, Oregon. The EA analyzes alternatives for managing the Eagle Creek Wild and Scenic River in accordance with the Wild and Scenic Rivers Act. The selected alternative described below amends the Wallowa-Whitman National Forest Land and Resource Management Plan (Forest Plan).

DECISION

As Forest Supervisor for the Wallowa-Whitman National Forest, it is my decision to implement Alternative B of the EA for the Eagle Creek Wild and Scenic River Management Plan. Alternative B protects and enhances the Outstandingly Remarkable (OR) Values while emphasizing water quality and the Fisheries and Recreation OR values and prescribes the following activities:

1. Adopts a management plan for the Eagle Creek Wild and Scenic River to protect the Outstanding Remarkable (OR) values with an emphasis on water quality, fisheries, and water quality.

2. Modifies the Management Area boundary for MA-7 surrounding Eagle Creek to better protect and enhance the OR values. It is also my decision to recommend this boundary change to the Regional Forester as the final boundary for the Eagle Creek Wild and Scenic River corridor in accordance with the Wild and Scenic Rivers Act.

3. Provides a detailed monitoring plan to ensure the intent of the Act and management plan are being met.

4. Changes the Recreation Opportunity Spectrum from Semi-primitive Motorized to Semi-primitive Non-motorized in the one-mile Recreational River segment from the Eagle Creek Trailhead to the Wilderness Boundary.

My decision also includes the following change to the Forest Plan to further clarify the management of the Eagle Creek Wild and Scenic River.

> On page 4-75, add a new heading: **"#27. Eagle Creek Wild and Scenic River."** Followed by: **The Eagle Creek Wild and Scenic River corridor within National Forest Lands, will be managed according to the Eagle Creek Wild and Scenic River Management Plan on file at Forest Headquarters.**

ALTERNATIVES

I considered three other alternatives before selecting Alternative B.

- Alternative A (No Action) consisted of managing the river corridor in accordance with the Standards and Guidelines of Management Areas 4,7, 15, and 16 in the Forest Plan and with other Forest wide Standards and Guidelines and Forest Service manual and policy direction. The river corridor boundary would be a quarter mile either side of the river as specified by the Wallowa-Whitman National Forest Land and Resource Management Plan. Alternative A provided little direction for managing the corridor to protect and enhance the OR Values.

- Alternative C consisted of protecting and enhancing the OR values with an emphasis on maximizing developed recreation capacity. It also modifies the Management Area boundary for MA-7 surrounding Eagle Creek to better protect and enhance the OR values. This alternative was not selected due to its direct and cumulative impacts on the primitive recreation experience in the corridor.

- Alternative D consisted of an emphasis on the perpetuation and enhancement of the natural functioning ecosystems and a natural-appearing corridor. It also modifies the Management Area boundary for MA-7 surrounding Eagle Creek to better protect and enhance the OR values. This alternative was not selected due to its impacts on the Recreation OR values in the corridor.

REASONS FOR THE DECISION

I selected Alternative B because it best achieves project objectives and attains the desired future condition.

Of the four alternatives, Alternative B provides for the best opportunity to emphasize water quality, recreation, and fisheries, and to protect free flow, while still protecting and enhancing the other Outstandingly Remarkable Values.

Alternative B best implements my decision to maintain existing recreation uses and experiences to the extent that the river's Outstandingly Remarkable Values are protected.

Expanding the wild and scenic river boundary to include an additional 654 acres along Eagle Creek, would provide additional protection for riparian vegetation, the Historic Sparta Ditch, sensitive visual areas, and other OR values.

SCOPING AND PUBLIC INVOLVEMENT

The public has been involved throughout the process. Initially, approximately 12 public meetings were held throughout northeastern Oregon to discuss issues and concerns. Letters were also sent to acquire additional information from public and private landowners and to inform the public on the progress of the management plan.

ISSUES

Several issues were identified during the scoping process. Three significant issues were identified by the interdisciplinary team for analysis in the EA:

- Recreation: What types of recreation facilities and opportunities will be provided, and what level of use will be accommodated within the river corridor, consistent with the requirements to protect and enhance Recreational OR values?

- Scenery: How to perpetuate the predominantly natural appearing landscape over time to ensure protection and enhancement of Scenic OR Values, in light of the effects of activities occurring in the river corridor and larger seen area, and concerns with forest health?

- Fisheries: How to protect and enhance the habitat for salmonids, to ensure that Fisheries OR Values are adequately protected and enhanced?

- Watershed/Water Quality: How to protect water quality and soils in the corridor from the effects of past and continuing activities occurring throughout the watershed, including timber harvest, recreational development and use, grazing, mining, and road building, which may be potentially compounded by naturally unstable and sensitive soils?

- Vegetation Management: What vegetation management activities are most compatible with river objectives that can be used to maintain and improve vegetation diversity, old-growth and late seral stage stands, riparian communities, and long-term forest health, while still protecting and enhancing the OR Values?

Management of each of the Outstandingly Remarkable Values were also addressed as issues. The Outstandingly Remarkable Values are Recreation, Scenery, Fisheries, Geology/Paleontology, and Historic Cultural Resources.

MONITORING

Monitoring will be in accordance with the monitoring plan outlined in the Eagle Creek Wild and Scenic River Management Plan and with the existing direction specified in the Forest Plan. This includes the monitoring for the protection and enhancement of the OR values, free flow, and water quality.

SPECIFICALLY REQUIRED DISCLOSURES

There are no unavoidable, adverse effects associated with implementing Alternative B that are not already identified in the Final EIS for the Forest Plan.

There are no short-term uses proposed in the project. Promoting long-term health and productivity of the Forest's ecosystems is a project objective.

There are no irreversible or irretrievable losses from implementing Alternative B that are not already identified in the Final EIS for the Forest Plan.

There are no unusual energy requirements associated with implementing Alternative B.

Wetlands and floodplains do exist within the river corridor. There are no major projects planned within the wetlands or floodplains. There are however several projects planned within the Eagle Creek floodplain. There is a planned campground construction project to complete a campground loop at the Eagle Creek Trailhead and a reconstruction project planned at the Two Color Campground. In addition, other campgrounds, trails, and dispersed sites would have some minor construction, reconstruction, relocation, and rehabilitation to prevent soil erosion and protect resource values within the Eagle Creek floodplain. A site specific Environmental Analysis would be completed before any of these activities could take place.

The management plan will cause no adverse effects on any Threatened or Endangered species or critical habitat; prime farmland, rangeland, or forest land; cultural resources; or civil rights, women, and minorities not already identified in the Final EIS for the Forest Plan.

FINDING OF NO SIGNIFICANT IMPACT

Based on the site-specific environmental analysis documented in the Environmental Assessment, I have determined that the Wild and Scenic Eagle Creek Management Plan and Forest Plan Amendment #15 are not major Federal actions significantly affecting the quality of the human environment. Therefore an Environmental Impact Statement will not be prepared. The direct, indirect, and cumulative environmental impacts discussed in the EA have been disclosed within the appropriate context and will have little intensity. My determination is based on the incorporation of mitigation measures and monitoring requirements associated with Alternative B and the following factors from Title 40 CFR 1508.27:

1. The beneficial and adverse environmental effects described in the EA for Alternative B were considered independently to determine if the project would significantly affect the human environment. No significant impacts were identified.

2. Public response to the project has indicated that the project is not likely to cause effects that are highly controversial. Refer to Chapter I of the EA for a description of the public scoping process.

3. The project causes no highly uncertain effects and no effects that involve unique or unknown risks.

4. There will be no significant adverse cumulative effects from implementing the plan in conjunction with past, present, and foreseeable future actions.

5. The plan will not adversely affect any sites or features listed or eligible to be listed in the National Register of Historic Places, or any significant scientific, cultural, or historical resources.

6. The effects of the plan on Threatened and Endangered species were analyzed in a Biological Evaluation (BE). There will be no risk of adversely affecting these species with the plan as described in the EA. The plan will have no adverse effects on Threatened and Endangered species habitat. Over time, the plan is expected to have positive effects on Threatened and Endangered species.

7. The plan is consistent with all known Federal, State, and local laws. Regulations related to the National Forest Management Act and the Endangered Species Act have been incorporated into the project. Environmental Protection Agency herbicide application requirements will be followed.

FINDINGS REQUIRED BY OTHER LAWS

I have determined that this amendment is not significant in relation to the National Forest Management Act of 1976. Adoption of this amendment will not significantly alter Forest Plan goals, objectives, standards, guidelines, or management direction. Indeed, this amendment will enable managers to better meet the Wild and Scenic Rivers Act, and existing Forest Plan objectives, standards, guidelines, and management direction.

PROJECT IMPLEMENTATION

Implementation of this decision shall not occur within 30 days following publication of the legal notice of the decision in the Baker City Herald.

APPEAL RIGHTS

This decision is subject to appeal pursuant to 36 CFR 217. Any Notice of Appeal of this decision must be fully consistent with 36 CFR 217.9 (Content of a Notice of Appeal) and must be filed with John Lowe, Regional Forester, P.O. Box 3623, Portland, Oregon 97208 within 45 days of the date legal notice of this decision appears in the Baker City Herald.

CONTACT FOR FURTHER INFORMATION

For further information regarding the Wild and Scenic Eagle Creek Management Plan, contact Steve Davis at the Wallowa-Whitman National Forest Supervisor's Office, P.O. Box 907, Baker City, Oregon 97814 or at (503) 523-1316.

R. M. Richmond 12/22/94

R. M. RICHMOND
Forest Supervisor
Wallowa-Whitman National Forest

DATE

MANAGEMENT PLAN
for the
Eagle Creek National Wild and Scenic River

Table of Contents

I. INTRODUCTION

Wild and Scenic Rivers Background
Summary
Classification
Outstandingly Remarkable Values
Relationship With Existing Direction
How To Use This Plan

II. MANAGEMENT DIRECTION

Management Direction
Desired Future Condition
- Recreation (OR Value)
- Scenery Management (OR Value)
- Fisheries (OR Value)
- Historic Cultural Resources (OR Value)
- Geology/Paleontology (OR Value)

Standards and Guidelines
- River Management
- Recreation
- Landscape Management
- Fisheries
- Historic Cultural Resources
- Geology/Paleontology
- Watershed
- Vegetation Management
- Timber Management
- Range
- Old Growth
- Wildlife
- Wilderness
- Minerals
- Private Lands
- Land and Land Uses
- Facilities
- Fuels
- Insects and Disease
- Adjacency
- Monitoring

III. IMPLEMENTATION

Management Actions
Monitoring
Budget

CHAPTER I. INTRODUCTION

SUMMARY

The Omnibus Oregon Wild and Scenic Rivers Act of 1988 amended the Wild and Scenic Rivers Act of 1968 to add Eagle Creek to the National Wild and Scenic Rivers System. The 1968 Act required the Forest Service to develop a management plan within three fiscal years of designation.

This River Management Plan is accompanied by an Environmental Assessment. The Environmental Assessment gives the public information about the planning process used and documents the environmental analysis completed by the river planning team. The alternative chosen by the Forest Supervisor from the Environmental Assessment is the basis for the River Management Plan. The Forest Supervisor's decision is in the Decision Notice, which accompanies the Environmental Assessment.

The Eagle Creek Wild and Scenic River Management Plan will be incorporated into the Forest Plan through an amendment to the Wallowa-Whitman National Forest Land and Resource Management Plan (Forest Plan). All other Forest Plan direction (unless noted otherwise) still applies. Any future changes to this river plan will be through the Forest planning process or through environmental analyses and amendments to the Forest Plan.

BACKGROUND

Eagle Creek is located in northeast Oregon on the Wallowa-Whitman National Forest. It starts within the Eagle Cap Wilderness and flows generally south for 37 miles to its confluence with the Powder River, a tributary of the Snake River. A 27.0 mile segment of Eagle Creek was designated as part of the National Wild and Scenic Rivers System by the Omnibus Oregon Wild and Scenic Rivers Act of 1988 an amendment to the Wild and Scenic Rivers Act passed by Congress 1968 (Public Law 90-542, 82 Stat. 907). The designated segment length has however, been corrected to 28.9 miles by this document.

The Wild and Scenic Rivers Act (hereafter referred to as the W&SR Act), declared it a national policy that selected rivers of the United States which:

> "...possess outstandingly remarkable scenic, recreational, geologic, fish, and wildlife, historic, cultural or other similar values, 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."

The W&SR Act gives direction to the administering agency, in this case the USDA Forest Service, to prepare a comprehensive management plan for each river to provide protection of river values:

> ".... The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purpose of this Act. The plan shall be coordinated with and may be incorporated into resource management planning for affected adjacent national forest lands. The plan shall be prepared, after consultation with State and local governments and interested publics within three full fiscal years after the date of designation. Notice of the completion and availability of such plan shall be published in the Federal Register."

The administering agency must also establish detailed boundaries for each river corridor. Final boundaries may vary somewhat in width to ensure protection of important river values; however, the W&SR Act directs that the final boundary should not exceed an average of 320 acres per river mile. The boundary must be published in the Federal Register and shall not become effective until 90 days after they have been forwarded to the President of the Senate and the Speaker of the House of Representatives.

CLASSIFICATION

The W&SR Act defines three classifications for a Wild and Scenic River (W&SR), based on the degree of development and access. The classifications are:

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.

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.

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 impoundments or diversion in the past.

The Omnibus Oregon W&SR Act specified the following classification segments of the designated portion of Eagle Creek:

Segment A. (Wild) - 4.5 miles. From the headwaters of Eagle Creek at the outlet of Eagle Lake (Section 16, T.5S., R.44E., W.M.) to the Eagle Cap Wilderness boundary near Hummingbird Mountain.

Segment B. (Recreational) - 16.9 miles. From the Eagle Cap Wilderness boundary near Hummingbird Mountain to Paddy Creek.

Segment C. (Scenic) - 6.0 miles. From Paddy Creek, to Little Eagle Creek.

Segment D. (Recreational) - 1.5 miles. From Little Eagle Creek to the National Forest Boundary near Skull Creek (Section 7, T.8S., R.45E., W.M.).

Activities within the Eagle Creek corridor must be compatible with the maintenance of these classifications into the future. The classifications cannot be changed to a lower classification through management actions; they can only be changed by further congressional action.

OUTSTANDINGLY REMARKABLE VALUES

The W&SR Act requires that a river be free-flowing and possess at least one "outstandingly remarkable value" (OR value). Values qualify as "outstandingly remarkable" if they are unique, rare, or exemplary features significant at a regional or national level.

When the Eagle Creek River was designated in 1988, the Congressional Record indicated that recreation, scenery, and geology qualified as OR values. Through the resource assessment process (a site-specific assessment of the resource values on the river and part of the Pacific Northwest Region river planning process), two additional OR values of "fisheries" and "historic cultural resources" were identified. In addition, "paleontology" was added to the "geology" OR value. A short description of the OR value findings are included in the Desired Future Condition Statements section. All of the OR values are described in detail in the Eagle Creek Resource Assessment (Appendix C).

RELATIONSHIP WITH OTHER DIRECTION

The designated portion of Eagle Creek falls within the Wallowa-Whitman National Forest boundary and must continue to be managed according to a variety of legislation set up for the purpose of managing public lands.

In addition to the W&SR Act, these include the National Forest Management Act (NFMA), Resource Protection Act (RPA), National Environmental Policy Act (NEPA), Clean Water Act, Endangered Species Act and Wilderness Act.

The river corridor overlaps a portion of Eagle Cap Wilderness. In most cases, the management the two areas are compatible. The goal is to manage for the intent of each area while protecting the other. However, there are times that this may not be possible. In this case, according to Section 10 (b) and (c) of the W&SR Act, the more restrictive provision shall apply. This has been incorporated into the management plan. If conflicts arise between the other management plans and this plan, the more restrictive shall apply.

Currently there are no federally listed threatened and endangered species within the river corridor, although the US Fish and Wildlife Service (USFWS) is currently conducting a status review of bull trout. In the event that a species is listed under the Endangered Species Act, the intent will be to manage according to both Acts, with neither taking priority over the other. If conflicts arise that cannot be resolved, then they should be settled by using the more restrictive provisions or more restrictive management plan, if possible. If the conflict is resolved in favor of the Endangered Species Act because of the wording of that Act, then the activity should be modified to best meet the needs of the W&SR Act.

The corridor is composed primarily of National Forest system lands, but includes some private land (approximately 13%) within the boundaries. Activities on private land within the corridor must continue to comply with existing State and local land use regulations and law. The Federal government does not have any additional authority to regulate what happens on private land within the W&SR corridor. Private property rights need to be addressed in any planned activity.

The W&SR Act does provide the Federal government the authority to purchase land from willing sellers, or enter into land exchanges or scenic easement agreements if deemed necessary to protect the OR values that contributed to the river's designation. The W&SR Act specifically prohibits the use of condemnation in the fee title purchase of lands if 50 percent or more of the land within the boundary is already in public ownership, as is the case with the designated Eagle Creek corridor.

HOW TO USE THIS PLAN

This plan is divided into three sections: Introduction, Management Direction, and Implementation.

The chapter on management direction addresses the Desired Future Conditions (DFCs) for the river corridor and the management practices (standards and guidelines) that will be used to implement them. It also includes actions that will or will not be taken by the Forest Service in the management of the river corridor.

The chapter on implementation describes specific management action that the Forest Service will take as a result of this management plan, describes the monitoring process, and describes the budget process.

CHAPTER II. MANAGEMENT DIRECTION FOR THE EAGLE CREEK WILD AND SCENIC RIVER CORRIDOR

Because this area is managed to meet the intent of the Wild and Scenic Rivers Act and other Congressional Acts, as well as other National Forest objectives, these standards and guidelines must be considered in conjunction with the standards and guidelines of other areas involved, such as the Eagle Cap Wilderness. These standards and guidelines should be consulted before the general Forest Plan standards and guidelines. The following is a guide to other management areas (MA) that should be consulted before implementing any projects.

Wild Section	See also MA 4	(Wilderness)
Scenic Section	See also MA 15	(Old Growth Preservation)
Recreational Sections	See also MA 15 See also MA 16	(Old Growth Preservation) (Administrative and Recreation Site Retention)

In case of conflict between the standards and guidelines of these management areas or conflicts between the provisions of the Congressional Acts (Wilderness Act or Wild and Scenic Rivers Act), the more restrictive standard and guideline or provision shall apply.

In the event that species found in the river corridor are listed as threatened and endangered, the Endangered Species Act would also be applicable. This Act shall be coordinated with the W&SR Act to achieve the objectives of both Acts. In any case, any activity that must take place under the Endangered Species Act should be modified, if needed, to best meet the requirements of the W&SR Act.

The following are the standards and guidelines for the management of the Eagle Creek Wild and Scenic River. These apply to Federal lands or identify actions that need to take place on National Forest System lands to facilitate the management of the river corridor. The intent or objectives of these standards and guidelines also apply to private land. Those more specific to private lands are under the heading "Private Lands". The Desired Future Conditions are applicable for the river corridor.

For each resource that is also an outstandingly remarkable value, a description of the desired future condition (DFC) is given.

MANAGEMENT DIRECTION (STANDARDS AND GUIDELINES)

The following are the standards and guidelines for the management of the Eagle Creek Wild and Scenic River. These apply to Federal lands or identify actions that need to take place on National Forest System lands to facilitate the management of the river corridor. The intent or objectives of these standards and guidelines also apply to private land. Those more specific to private lands are under the heading "Private Lands". The Desired Future Conditions are applicable for the river corridor.

These standards and guidelines follow the same order as shown in Chapter 4 of the Forest Plan. For each resource that is also an outstandingly remarkable value, a description of the desired future condition (DFC) is given.

MANAGEMENT AREA 7 WILD AND SCENIC RIVERS

Goal - Manage classified Wild and Scenic River segments to appropriate standards as National W&SR System components, as defined by the W&SR Act (Public Law 90-542, October 2, 1968), as amended by the Omnibus Oregon W&SR Act of 1988 (Public Law 100-557).

Description - The Wild and Scenic Eagle Creek corridor begins where it flows out of Eagle Lake (Section 16, T.5S., R.44E., W.M.) and runs south for 28.9 miles to the Forest Boundary located near the confluence of Skull Creek and Eagle Creek (Section 7, T.8S., R.45E., W.M.).

When Eagle Creek was designated as a Wild and Scenic River by the Omnibus Oregon W&SR Act of 1988 it was listed as 27.0 miles and classified in four segments of 4.0, 15.5, 6.0, and 1.5 miles each. The Forest Service recalculated the designated river mileage using Geographic Information Systems and stream survey measurements and has revised it from 27.0 to 28.9 miles. This has resulted in a change of segment lengths as listed below:

Segment A. (Wild) - From the headwaters of Eagle Creek at the outlet of Eagle Lake, to the Eagle Cap Wilderness boundary near Hummingbird Mountain; 4.5 miles.

Segment B. (Recreational) - From the Eagle Cap Wilderness boundary near Hummingbird Mountain, to Paddy Creek; approximately 16.9 miles.

Section B has been divided into two distinct sections based on existing resource values for management purposes:

Segment B-1 - This portion of the Recreational River segment, accessible only by trail, will be managed mostly within Wild River classification guidelines standards to meet Wild Rivers desired future conditions, to protect existing roadless recreation experience, the adjacent Wilderness experience, and existing river resource values.

Segment B-2 - The roaded portion of the corridor, from Main Eagle Trailhead, to Paddy Creek. This sub-segment will be managed consistent with the Recreational River classification guidelines and desired future condition, to provide diverse river related recreation opportunities in a rustic forest setting, while providing for protection and enhancement of river value.

Segment C. (Scenic) - From Paddy Creek, to Little Eagle Creek; 6.0 miles.

Segment D. (Recreational) - From Little Eagle Creek, to the National Forest Boundary near Skull Creek; 1.5 miles.

The entire designated portion of Eagle Creek is managed under these classifications as further described in the Desired Future Condition.

Desired Future Condition - Each component of the Wild and Scenic River system will be administered to protect and enhance the values for which the river was designated and to provide public use and enjoyment of those values. Emphasis will be given to protecting the outstandingly remarkable (OR) values for which the river was designated. Thus, the OR values of fish, recreation, scenery, cultural (historic) resources, geology/paleontology will be protected and enhanced. The entire river corridor will be free of impoundments.

Enhancement of river corridor ecosystems, riparian vegetation, and water quality will receive high emphasis, balanced with improved management of recreation uses in all future management activities in the Eagle Creek corridor.

The free-flowing nature of Eagle Creek will be protected and enhanced at every opportunity, and the river will be allowed to function and occupy as much of its natural floodplain as is practicable. Only existing minor diversions and minimal streambank armoring necessary to protect existing structures will be present.

Water quality will improve over time with the emphasis on OR values and water quality, and the requirement to protect river values in all adjacent area activities. Watershed enhancement projects will continue to be identified and accomplished over time.

Although the protection and enhancement of water quality and OR values related to the function of river ecosystems may be emphasized over enhancement of the others, all OR values will be fully protected and enhanced. Esthetic, archeologic, and scientific features will also continue to receive a high level of emphasis in the administration of the river corridor.

The level of activities, development, and access in the corridor will be very similar to that which was present at time of designation, and will be consistent with river classifications.

Vegetation management within the corridor will emphasize maintaining a healthy and diverse river ecosystem. As time goes by riparian vegetation will become more abundant as streamside management units receive more management emphasis. The corridor will have a predominance of late seral stands, abundant snags, and old growth groves. All vegetation management activities within the corridor will contribute to the protection and further enhancement of OR values. Prescribed fire will often be used to meet river management objectives. Small selective cuts and timber sale units will used in the regulated portion of the corridor to provide a highly diverse mosaic of vegetative types and enhance OR values. Range allotment management plans will be revised to incorporate river management objectives. Fuelwood cutting and gathering within the river corridor will not be visible within 300 feet of the river and will be limited to dead and down material at least 300 feet from the river. Improvements in administration of recreational animal grazing and other recreation uses will further protect river values.

Continuity within the corridor will be maintained for wildlife and plant species movement. Healthy riparian areas, good wildlife travel routes, and good to excellent habitat for cavity nesting birds will be provided. A wide variety of birds and mammals will be present within the corridor with occasional sightings of those animals that avoid human activities.

Landownership patterns will be similar to what existed at time of designation. Public lands will remain in public ownership, a few private land parcels however, could be purchased from willing sellers. Achievement of river management objectives and protection of OR values will be accomplished through application of existing State and local regulations to activities occurring on private lands. Developments on private land will continue to be few in number and primarily rustic, compatible structures. The Forest Service will work proactively to identify cooperative strategies and develop co-management partnerships with private landowners in the river corridor. Fee title acquisitions would be considered from willing sellers only. Easements, including easement condemnations, would be considered only as a last resort when existing laws and regulations do not sufficiently protect OR values and all other methods to resolve the issue have been exhausted.

Coordination between the three managing Ranger Districts will be improved through the common focus of the river management plan, annual implementation plans, Supervisor's Office coordination, and review of the monitoring plan.

The "Wild" River segment will continue to be managed Wilderness consistent with Wilderness objectives, with an additional emphasis on OR values and maintaining the river's free-flowing nature. The river corridor will be free of impoundments and continue to be accessible only by trail. The river and shorelines will continue to be essentially primitive and unpolluted. There will be no shoreline development beyond a minor amount necessary to protect the three trail bridge abutments. Signs of human activity will be inconspicuous. There will be no use of motorized vehicles or equipment. Interpretive materials will generally not be developed for

the Wild River corridor to avoid increasing use levels in the area. The "Recreation" River segment from the Eagle Creek Trailhead would be managed similar to the "Wild" River segment to protect the existing roadless area experience, the adjacent Wilderness experience, and existing resource values. However, it would be easily accessible by road from the Eagle Creek Trailhead and some engine noise would be noticeable in the area, and some other exceptions are listed in the individual resource DFCs.

The "Scenic" River segment will be free of impoundments, with the exception of the minor diversion and impoundments already existing on private land. The river will be accessible primarily by trail, but will be accessible in a few places by road. Shorelines and viewing areas will have a largely natural appearance. Some minor recreation structures, evidence of timber harvest, and other evidence of human activity may be present but will not detract from the near natural appearance and scenic qualities of the immediate environment. A small number of compatible private cabins will continue to be present on private land in the corridor within guidelines of existing covenants.

The other "Recreational" River segments will be free of impoundments and be readily accessible by roads. Some compatible major public use facilities, such as developed campgrounds, administrative facilities, road and trail bridges, and some rustic private cabins will exist within the corridor. Although past and ongoing activities such as timber harvest and other developments may be evident near the river, the landscape will still appear to be predominantly natural appearing to the general forest visitor.

Recreation OR Value DFC

The quality and diversity of recreation opportunities available in the Eagle Creek corridor, as well as excellent opportunities to interpret the area's unique natural history and the region's gold mining history qualified recreational values in the corridor as outstandingly remarkable.

Those conditions that contributed to the OR value finding will be enhanced over time. A diversity of recreation opportunities that are dependent on or enhanced by the largely free-flowing nature of the river, and including those that were provided at time of designation in 1988, will continue to be provided throughout the year. Visitors will find forested, uncrowded settings with rustic facilities. Recreation use would be monitored and low to moderate increases would be allowed as long as consistent with protection and enhancement of river values and WRS and ROS use density guidelines are met. These include the following DFC standards:

> Eagle Cap Wilderness Area-Primitive WRS (except Semi-primitive WRS at entry portals) - The area, maintains the primitive wilderness experience (Semi-primitive along portals). There is a very high probability (moderate at portals) of experiencing isolation, solitude, freedom, closeness to nature, tranquility, and self reliance through primitive recreation skills in an environment that offers challenge, and risk. The area is characterized by an essentially unmodified natural environment. Access is limited. Low to moderate increases in use would be allowed but the interaction between users would be very low and evidence of other users minimal (Primitive WRS) or low (at portals). The area is managed to be essentially free from evidence of human-induced restrictions and controls (Primitive WRS) or with minimum and subtle on-site controls (at portals). Motorized travel within the area is not permitted. Access for people with difficulties be extremely difficult and extremely challenging. Trails would be maintained at current design and maintenance levels, except that the Main Eagle Trail difficulty level would change from "Easiest" to "More Difficult". No new trails will be constructed. Interpretation will be through self-discovery. There are no facilities provided for user comfort and convenience. Visitors are encouraged to disperse to desirable existing sites to minimize contact with other people. Emphasis will be on maintaining the quality of the wilderness experience.
>
> Most of the Scenic Segment - Semi-primitive Motorized ROS. There is a moderate probability of experiencing solitude, closeness to nature, self-reliance, challenge and risk in using motorized equipment. The area is characterized as a predominately natural appearing environment. Access to the corridor is available by a main road, but most of the area is only accessible by trail. Off-road motorized

opportunities are available but would be discouraged and limited. Low to moderate increases in use would be allowed but user concentration would be low (except there is often evidence of other users on roads and trails). Dispersed camping would be limited to current levels by controlling off-highway access. The area is managed with minimum on site controls and restrictions, but these would be subtle. Access for people with difficulties is difficult and challenging. Interpretation will be through maps or brochures rather than on site facilities. Trails would be maintained at current design and maintenance levels. Some new trails may be constructed to accommodate increased use. No new major recreation facilities would be planned. Existing facilities would be rustic, rudimentary, and primarily for site protection and would use native undimensioned materials. Emphasis would be on maintaining the quality and variety of recreational experiences rather than on adding facilities to accommodate increases in recreational use.

The one-mile trailed Recreational River segment (from Main Eagle Trailhead to the Wilderness boundary) and very small unroaded areas on extreme edges of Scenic segment - Semi-primitive Nonmotorized ROS. There is a high probability of experiencing solitude, closeness to nature, self-reliance, challenge and risk. The area is characterized as a natural appearing environment. Access and travel is nonmotorized on trails, but some primitive roads exist to one edge of the area. Low to moderate increases in use would be allowed but there would be only some evidence of and low interaction between users. The area is managed with minimum of subtle on site controls. Access for people with difficulties is difficult and challenging. Interpretation will be through self-discovery with some use of maps or brochures. Trails would be maintained at current design and maintenance levels, except that the Main Eagle Trail difficulty level would change from "Easiest" to "More Difficult". Some new trails may be constructed to accommodate increased use. No recreation facilities would be planned. Existing facilities would be rustic, rudimentary, and primarily for site protection and would use native undimensioned materials. Emphasis would be on maintaining the quality and variety of recreational experiences rather than on adding facilities to accommodate increases in recreational use.

All Other Recreational River Segments - Roaded Natural ROS. There is an opportunity to affiliate with other users in developed sites with some chance for privacy. Self-reliance on outdoor skill is only of moderate importance. There is little challenge and risk. The area is characterized as a mostly natural appearing environment as viewed from the river or the main roads. Access and travel is by conventional motorized travel including sedans, trailers, RVs, and some motor homes. Interaction between users at developed camp sites is of moderate importance. Dispersed sites would be limited to current levels by controlling off-highway access. There are some obvious on site controls of users. Access for people with disabilities is available to all developed sites and is of only a moderate challenge. Interpretation would be of by wayside signs made out of rustic materials and some casual interpretation in campsites by forest staff. Trails would be maintained at current design and maintenance levels. Some new trails may be constructed to accommodate increased use. Recreation facilities would be available and designed for user comfort and convenience. Some synthetic but harmonious materials may be incorporated. Off-road motorized opportunities would be readily available. Recreation facilities would be maintained at current levels but would be modified to provide increased access for those with disabilities, to separate recreational stock users from nonstock users, and to better protect and enhance OR values. Some increase in developed site overnight capacity would be allowed to accommodate some increased visitor use but emphasis would be on maintaining the quality and variety of developed and dispersed recreational experiences rather than on adding facilities to accommodate moderate to large increases in recreational use.

Scenery OR Value DFC

The Visual Quality Objective (VQO) within the river corridor would be Preservation in the Wild River segment and the trailed section of the Recreational River segment (Wilderness boundary to Main Eagle Trailhead) and Retention in all other river segments. The highly diverse and scenic attractions of the Eagle Creek drainage, and the overall undisturbed natural appearance of the valley contributed to the outstandingly remarkable value finding for scenic values in the Eagle Creek corridor.

The areas with a VQO of Preservation would be characterized as a natural appearing landscape (essentially unmodified) with ecological changes only. The areas with a VQO of Retention would be characterized as a natural appearing landscape in which management activities are not visually evident. There will be a pleasing variety of open and closed forest spaces, with accentuation of views toward mountain tops, hillsides, and valley floor meadows. A pleasing mix of tree species and ages, including deciduous species, will also be present. Emphasis will be to perpetuate a characteristic landscape that visually mimics natural processes. Late seral stages, large trees, and increased desirable species (ponderosa pine, larch, aspen, hardwoods) will be emphasized in the corridor. Campgrounds will be predominantly screened from the road and river. Activities will be subordinate or unnoticed by forest visitors.

Fisheries OR Value DFC

Eagle Creek was one of the most important fish producing streams in the Powder River system in the past. Eagle Creek's excellent water quality, good to excellent quality fisheries habitat capable of supporting native fish, and natural hydrologic regime are important factors contributing to outstandingly remarkable fisheries habitat values. Eagle Creek would provide suitable habitat for anadromous fish if the technology were developed to reintroduce them to the Powder River basin.

HABITAT: Water quality will be excellent in the W&SR portion of Eagle Creek, and in most cases exceed State standards. The cold, clear, highly oxygenated water will maintain thriving populations of aquatic species typical of cold water river ecosystems. Water temperatures will be well within the optimum range for bull trout, the most sensitive fish in the river (temperatures less than 55 degrees fahrenheit). The river will contain a sufficient quantity of water to support thriving populations of resident fish into the future.

Excellent quality fish habitat will be provided in Eagle Creek, maintaining a range of future fish population management options, which could include managing for wild runs, or for future re-establishment of anadromous fish in the stream, if and when the necessary technology is developed. Channel morphology conditions will be maintained or improved to reflect more natural conditions over time with natural levels of woody debris recruitment, and increased woody debris amounts will be present due to onsite potential and riparian improvement. Improved water quality and quantity, stable streambanks (>80%), natural levels of woody debris recruitment, and increased woody debris amounts will be present due to on-site potential and upstream riparian improvement. Embededness (used as a measurement of fine sediment) will be lowered to less than 35 percent. Stream shade/canopy cover will increase to 20 to 30 percent due to improved riparian conditions. Pools per mile (important habitat for fish) will be at least 3 in the lower portion (Forest boundary to O'Brien Creek, and at least 6 in the upper portion (O'Brien Creek to Eagle Lake).

POPULATIONS: Maintain and improve naturally occurring populations of salmonids or resident species of fish over time. By maintaining excellent habitat, options for future management of fish populations will be preserved, including the potential to manage for wild stocks, as well as the potential to re-establish anadromous fisheries in Eagle Creek, if and when the technology is developed. A cooperative co-management partnership with ODFW will be in place to protect and enhance fisheries and other OR values of Eagle Creek.

Historic Cultural Resources OR Value DFC

The settlement of Northeast Oregon is tied to the discovery of gold, and Eagle Creek has some evidence of this history. Outstanding opportunities exist to interpret a number of features located in fairly close proximity within the corridor. These features qualify historic cultural resources as an outstandingly remarkable value.

Historic and prehistoric sites are protected. Several historic cultural resource sites in the corridor will be stabilized and interpreted for forest visitor enjoyment. Sites within the corridor related to regional mining activities will be emphasized. Sites that may be stabilized and interpreted include the Martin Bridge stage stop site, Sparta Ditch, and a representative hydraulic mine site.

Geology/Paleontology OR Value DFC

The variety of exemplary geologic features in the corridor, particularly in the upper reaches of Eagle Creek, and the opportunities for paleontological research and interpretation merit the recognition of geology as an outstandingly remarkable value.

The DFC for geology/paleontology will be a natural appearing landscape. All major geologic features will remain unchanged by human activity. The public visiting the area will be aware of some of the key geologic/ paleontologic features in the area. Interpretive information of the area's geologic/paleontologic history will be available to enhance visitor's enjoyment and understanding. One or two outstanding geologic/paleontologic features may be interpreted with on-site displays. Although research groups will continue to have access to fossil formations under special use permit requirements, protection of the fossil beds from unauthorized activities will be improved.

Standards and Guidelines

1. **River Management.** New dams, diversions, levees, hydroelectric power facilities, or other structures licensed under the Federal Power Act, are prohibited. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct or adverse effect on the values for which such river was established.

2. Construction of water impoundments, diversions, straightening, rip-rapping, and other modifications of Eagle Creek will generally not be allowed. Exceptions would include necessary maintenance of existing structures or protection of existing major improvements. Under Section 7(a) of the Wild and Scenic Rivers Act, the agency must determine whether the proposed water resources project has a "direct and adverse effect on the values for which such river was established." **Following the regional guidelines, a Section 7(a) analysis will be completed for any project affecting the flow, bed, or banks of the river.** Specialists representing each OR value will be involved in the Section 7(a) analysis process. The outcome of the analysis will clearly demonstrate a compelling need for the project and consistency with achieving the DFC's for it to be authorized.

   Examples of projects that would likely be subject to Section 7(a) analysis include, but are not limited to:

   a. Log removal for protection of major improvements or safety;
   b. Fisheries habitat and watershed enhancement projects;
   c. Bridge and other roadway construction or reconstruction projects;
   d. Bank stabilization projects;
   e. Recreation facilities such as boat ramps, fishing piers, etc.;
   f. Activities that require a 404 permit from the Corps of Engineers.

3. For any proposed activity affecting free-flow in which there will be another Federal agency "assisting by loan, grant, license, or otherwise ...," the responsible official will be the Regional Forester (reference 2354.04e).

4. OR values of the river must be protected and enhanced. Give protection and enhancement of OR values, water quality, and free-flow priority over uses described or implied in all other management direction and standards and guidelines. If potential conflicts arise between the OR values which cannot be resolved within the direction of the W&SR Act or this plan, then they shall be resolved according to the following priorities: 1) Fisheries, 2) Recreation, 3) Scenery, 4) Historic Cultural Resources, 5) Geology/Paleontology.

5. The highest designated classification must be maintained. Activities, development, and access in the river corridor cannot be allowed to increase to the degree that classification would be changed (i.e., classification cannot be changed from Wild to Scenic or Scenic to Recreational).

6. Require bonding for any operation within the river corridor that has the potential to impact a river related value. Bonding would be in an amount no less than the actual cost to the government, assuming work would be contracted out, to correct or mitigate any damage that could reasonably be caused by the operation. This would include, but not be limited to, move-in and move-out costs, heavy equipment costs, operator costs, cost of any materials needed, revegetation costs, hazardous material handling and clean-up (if any quantity of hazardous materials are on site), reclamation costs, and administrative costs.

   Some operations have established direction concerning bonding (example might be some mining activities). Some of these may take priority over this management plan. In these cases bonding will be to the maximum needed to protect river values that the established direction may allow.

7. Because the corridor is a congressionally designated area, an environmental assessment will normally be the minimum NEPA documentation for any ground or vegetation disturbing activity.

8. **Recreation.** The following standards and guides apply to all three river classifications. Also refer to Forest Plan direction for Recreation, Management Area 4 (Wilderness), Management Area 16 (Administrative and Recreation Site Retention), and FSM 2354. The most restrictive direction applies, unless there is an exception below:

9. Recreation use levels will be monitored. Low to moderate increases in recreation use will be allowed as long as consistent with protection and enhancement of OR values and WRS and ROS use density guidelines. Keep use increases at these lower levels by not adding major recreational developments and keeping road surfacing and road access at current levels. Management actions to limit use to protect river values may be required at some time in the future.

10. Change ROS Spectrum from Semi-primitive Motorized to Semi-Primitive Non-motorized for the one-mile trailed "Recreation" section from the Eagle Creek Trailhead to the Wilderness boundary.

11. Current mix of recreational opportunities would be maintained. New uses will be allowed but only if they ensure Protection and enhancement of OR values. No major recreation developments not listed in the Forest Plan are proposed.

12. New proposed outfitter and guide special use permits may be approved as submitted if consistent with DFC's and other river management objectives. No need for additional outfitter guide operations were identified in this planning process.

13. Sluicing, gold panning, and dredging is allowed adjacent to Eagle Forks Campground. Measures would be taken to protect and enhance OR values.

14. Existing facilities would be maintained at minimum levels. An active program to close and rehabilitate incompatible sites where resource damage is occurring would be pursued.

15. All proposed Forest Plan recreation projects could be constructed. In addition, the Boulder Park Slide would be interpreted and the Two Color Campground would be rehabilitated to better delineate sites, reduce erosion, and protect riparian vegetation.

16. New recreation facilities would be discouraged but upgrades to existing recreation facilities, and new facilities would be allowed for resource protection and user safety. A site-specific environmental

analysis will be completed prior to any construction and would addresses the protection and enhancement of OR values, water quality, and free-flow. Expansion of existing facilities, or construction of new facilities, will be discouraged within 200 feet of Class I and II streams unless no other reasonable alternative exists and all OR values can be protected and enhanced.

17. Opportunities to upgrade existing facilities to provide additional barrier-free opportunities will be pursued.

18. Facilities for recreational stock use including corrals, hitching docks, and loading ramps would be constructed in selected campgrounds and trailheads for resource protection and to better accommodate existing stock use.

19. Trail reconstruction and maintenance is permitted in all classifications. Trail upgrades will be allowed for resource protection, user safety, or to better accommodate existing uses.

20. Trail construction may be permitted in Recreational and Scenic River segments, consistent with OR value protection. New trails will not be constructed within 200 feet of Class I and II streams in the corridor, unless no other feasible alternative exists and all OR values can be protected and enhanced.

21. Close or rehabilitate dispersed sites where OR values are being impacted. Additional dispersed sites may be developed in the Scenic and Recreational River segment (south of Eagle Creek Trailhead) to maintain approximately the same level of sites and opportunity. Dispersed camping will be discouraged in sensitive riparian areas and meadows by eliminating access of the main road in these areas. Short pull-offs and very short spur road construction might be needed in some areas to replace some closed roads and sites.

22. A frequent and visible management presence will occur in the corridor. The three districts will coordinate to provide regular recreation and fire prevention patrols.

23. Off highway vehicle (OHV) use may be permitted on designated routes in the Scenic or Recreation segments south of the Main Eagle Creek Trailhead. Opportunities for OHV use in the Scenic River section would; however, be reduced over current levels by not promoting motorized activities on the Martin Bridge Trail and by maintaining the trail primarily for pack and saddle use rather than motorized use.

24. Recreation standards and guides specific to individual river classifications follow:

    a. WILD RIVER:

        1) Manage wilderness areas consistent with Primitive WRS, using the Wilderness Recreation Spectrum (WRS). Semi-primitive WRS may be appropriate near portal areas where use is concentrated. Manage one-mile trailed Recreation segment as Semi-primitive Non-motorized.

        2) Access will be mostly for walk-in or horseback opportunities in the Wild segment. Existing access level is the maximum amount provided, and no new access will be developed.

        3) No motorized use will be permitted in the Wild segment of Eagle Creek within the Eagle Cap Wilderness consistent with Wilderness direction and in the trailed one-mile recreation segment from the Eagle Creek Trailhead north to the Wilderness boundary.

b. SCENIC RIVER:

1) Manage areas for a Semi-primitive Motorized ROS setting.

2) Existing access level will be maintained. No new access will be developed. Current road use and motorized use of Martin Bridge Trail will be allowed but non-motorized uses will be favored off the existing roads throughout the scenic river section.

3) Recreation developments are permitted but will not exceed development Level 2.

4) Recreation facilities will not exceed Development Level 2.

5) Interpretive materials will generally be off-site in nature (brochures, self-guided tours), and will be designed to protect and enhance OR values.

c. RECREATIONAL RIVER:

1) Manage areas for a Roaded Natural setting. However, activities shall be managed towards the less developed end of Roaded Natural.

2) Road access will be provided to most areas along the Recreational sections. Existing level of access will be maintained. No new access will be developed.

3) Off highway vehicle use may be permitted on designated routes. New OHV areas will not be developed in the corridor.

4) Recreation developments are permitted but will not exceed development Level 3. Native materials, or native appearing, will be the norm.

5) Interpretive brochures, turnouts, signs and displays may be developed, consistent with protection and enhancement of OR values. Favor OR values or other river-related themes in developing displays.

25. **Landscape Management.** Manage visual resources to meet the following visual quality objectives (VQO's) within the corridor and adjacent seen areas.

River Classification	Visual Quality Objective
Wild	Preservation is the norm, all distance zones
Scenic	Retention foreground Retention middleground Retention background
Recreational	Retention foreground Retention middleground Retention background

(See Glossary for description of terms.)

25. River corridor viewshed management direction has been established in the "Eagle Creek Viewshed Corridor Plan" completed by Walker and Macy, April 1992. The Viewshed Corridor Plan will be used to achieve protection and enhancement of the Scenic OR value. In particular, the VQO maps, visual sensitivity maps, DFC recommendations, and suggested mitigations will be considered in all activity planning. The DFC recommendations will guide management of overall landscape character and specific activities, including: Vegetation Management, Developed Recreation Sites, Dispersed Recreation Sites, Transportation Facilities, Administrative Sites, Private Land Development, and Other Uses (i.e. Utilities ROW).

26. Analysis of the visual effects of proposed activities within the corridor will be considered from two vantages: all existing riverside viewpoints and from Sensitivity Level 1 travelways within the corridor (Forest Roads 77, 7755, 7735, Martin Bridge Trail, Main Eagle Trail).

27. The Sensitivity Level of the Martin Bridge Trail and Road 7735 from Eagle Forks Campground to the National Forest Boundary near Skull Creek are upgraded to Sensitivity Level 1 to more accurately reflect the OR value status of Scenery.

28. Landscapes containing negative visual elements will be rehabilitated. Landscapes may be enhanced by opening views to distant peaks, unique rock forms, unusual vegetation, or other features of interest, consistent with protection and enhancement of OR values, water quality and free-flow.

29. Short-term visual impacts of prescribed fires that depart from established VQO direction may be considered acceptable if necessary to protect and enhance scenic values and to meet the VQOs in the long term. Such departures must be approved by a landscape architect.

30. Locate utility corridors so they will not be visible from river segments.

31. **Fisheries.** This RMP will be the basis for the recovery of Bull Trout populations. In the event that bull trout or other fish species in Eagle Creek are listed, the direction in this plan may be superseded by species recovery plan requirements.

32. Utilize current and additional direction for maintaining and improving water quality (water quality at the time of river designation or closest estimate) as it relates to fish habitat, including but not limited to sediment, stream temperature, shading, and large woody debris. Current direction for habitat management is defined in the Forest Plan and FSM 2354, with the following exceptions:

33. Stream flows are an important factor to fish habitat and water quality. There are few diversions on this portion of the river and they were determined to have minimal impacts at this time. Any new request to remove water from the river would protect W&SR values.

34 Correct sediment source problems by relocating dispersed site and their access roads. Also close and rehabilitate unneeded roads within the corridor.

35. Cooperatively work with the Oregon Department of Fish and Wildlife and American Indian tribes with treaty rights (CTUIR, Nez Perce) concerning fish stocking as it relates to the protection and enhancement of the Fisheries OR value. Protection of Wild river and Wilderness values would be of concern as well as maintaining wild fish runs. This would be an ongoing process reviewed annually.

36. Cooperatively work with the Oregon Department of Fish and Wildlife and American Indian tribes with treaty rights (CTUIR, Nez Perce) concerning sport fishing regulations and instream work periods as it relates to the protection and enhancement of the Fisheries OR value. This would be an on-going process reviewed annually.

37. Fish habitat enhancement projects may be approved to optimize native populations or habitat and to protect and enhance OR values.

38. Manage for high levels of large woody debris (LWD) in the channel. There will be no removal of LWD from the bed or banks unless it is demonstrated that there is an immediate threat to a structure or road. In such cases every effort will be made to re-locate the LWD within the stream channel. An Analysis of Proposed Activities that satisfies W&SR Act Section 7(a) requirements will be required for any proposed project within bed or banks. A fisheries biologist and/or hydrologist will be involved in the analysis process or will approve final project proposal.

39. Hazard trees that need to be felled will be left where they fall or moved to a desirable location within the corridor.

40. Improvements in administration of recreational animal grazing and other recreation uses will further protect and enhance OR values.

41. Eagle Creek will be surveyed to determine species present, populations and distribution.

42. **Historic Cultural Resources.** Direction for management is defined in the Forest Plan, Forest Programmatic Memorandum Of Agreement (PMOA), FSM 2354, and in conference and agreement with the American Indian Tribes with treaty rights (Confederated Tribes of the Umatilla Indian Reservation and Nez Perce Tribe). Conflicts between any of these documents will be resolved by deferring to the more restrictive unless stated otherwise. Exceptions or additions to this direction follow:

43. Cultural resource sites may be stabilized and enhanced where appropriate. Interpretation of cultural resource sites may be pursued consistent with protection and enhancement of OR values. Emphasis for enhancement and interpretation will generally favor historic cultural resource sites such as past mining history, Sparta ditch, and Martin Bridge state stop. Incorporate on site cultural resource information at campgrounds or other appropriate interpretive sites in the Recreational River segment. Off site interpretive materials such as brochures may be developed for sites in the Scenic River segment.

44. A systematic survey of the river corridor will be conducted to identify, evaluate and protect historic and prehistoric cultural resource sites.

45. **Geology/Paleontology.** Paleontological resources will be protected under existing laws and policies. Permit research only when it meets the following criteria:

    a) Necessary to support the values set forth in the W&SR Act or cannot be accomplished outside the corridor.

    b) Is done in compliance with protection and enhancement of OR values, W&SR Act, and Wilderness Act. Special use permits will be required to collect and remove fossils from the river corridor, and will address river management requirements.

    c) Meets Wilderness management criteria in Wild River segment.

46. Interpretive materials or displays about geologic resources or features interest may be developed, such as at the Boulder Park slide, consistent with protecting the integrity of the resource and river values. Pull outs and displays will be located in or near other developed recreation sites in the river corridor. Only off-site interpretation is allowed in the Scenic and Wild River segments.

47. **Watershed.** Utilize existing direction in the Forest Plan and FSM 2354 to provide for protecting watershed conditions, water quality, and soil stability, with the following exceptions and additions:

48. Watershed impacts will be insignificant. No human-caused action may be undertaken which will result in a measurable reduction in water quality.

49. Requests for new or increased diversion of water will consider protection and enhancement of water quality and OR values.

50. Establish five new monitoring stations in the corridor to monitor water temperature and flows. Suggested locations are at the Main Eagle Trailhead, Tamarack Campground, East Eagle confluence, Paddy Creek confluence, and Skull Creek confluence. Within two years baseline water quality will be determined to protect and enhance OR values and existing water quality. Monitoring of water quality parameters will occur with all site specific projects.

51. Only those activities designed to protect and enhance OR values will be permitted within streamside management units. Existing interim timber harvest buffers will be maintained as a minimum.

52. State Forestry Practices Act requirements and other State and local regulations continue to apply on private parcels.

53. Identify potential watershed improvement projects from the 1990-91 Eagle Creek stream survey and other stream surveys completed within the watershed. Continually monitor for watershed improvement projects in the corridor and watershed.

54. A water development analysis (section 7a W&SR Act) will be required for any activities within the watershed which may have an effect on water quality, stream channel, or fish habitat within Eagle Creek.

55. Toilet facilities shall be provided where people are concentrated. Where toilets are not provided, the "cat hole" or other appropriate methods for all human waste disposal will be encouraged at least 200 feet from the river. In any case, human body waste shall not be deposited within the high water lines of the river.

56. Improve road maintenance levels on roads to reduce sedimentation.

57. **Vegetation Management.** Direction related to vegetation management (including timber, range, diversity, old growth, fuelwood) in the Forest Plan and FSM 2354 would continue with the following exceptions. Conflicts between these documents would be resolved by deferring to the most restrictive direction.

58. Recognize, promote, and enhance qualities which will preserve the ecological corridor.

59. Prescribed fire will generally be the favored tool to meet vegetation management objectives. Emphasis will be to perpetuate old growth and other late seral forested stands, large trees, and visually desirable species such as larch, ponderosa pine, aspen, and hardwoods.

60. As is reasonable, rehabilitate disturbed sites with native species. Short-lived annuals/perennials seed mixes may be used to stabilize the sites until native vegetation re-establishes on site, or until locally collected materials are available to plant.

61. Snags and other potential large woody debris will be protected.

62. Fuelwood cutting and gathering within the river corridor will not be allowed within 300 feet of the river and will be limited to dead and down material only. The fuelwood program may be employed to meet river management objectives, such as reduction of fuels, removing hazard trees, or enhancing visual resources.

63. Brochures or other materials may be developed to interpret the importance of riverine and riparian ecosystems, old growth, and snags.

64. **Timber Management.** In the Wild River section and the trailed Recreational River segment no commercial timber harvest will occur.

65. Timber within the unroaded Recreational segment would be withdrawn from the regulated timber base. Salvage is allowed only if protection and enhancement of OR values is ensured. No timber harvest or salvage is allowed within the Eagle Cap Wilderness.

66. Uneven-aged management will be the preferred and most commonly used silvicultural system; even-aged management techniques may also be used to meet objectives. Scheduling of treatments, timber harvest, logging systems, debris disposal, reforestation, and stand improvement practices will be designed and implemented to accomplish river management objectives.

67. Timber within the roaded Recreational and Scenic segments would remain in the regulated timber base. Scheduled harvest and salvage would be allowed in these areas as long as OR values were protected and enhanced. Standard silvicultural practices and intensities consistent with river objectives are permitted. These may include such things as protecting and enhancing OR values, improving/maintaining forest health, or providing for public safety.

68. The State Forestry Practices Act and other State and local regulations continue to apply to timber harvest and related activities on private lands within the corridor.

69. **Range.** Domestic livestock grazing levels and allotment management practices existing prior to designation of the river will generally be permitted, consistent with free-flow, water quality, and OR values. Allotment management plans shall be modified when grazing practices or other activities are found to adversely impact Wild and Scenic river values.

70. Range Allotment Management Plans which encompass part of the W&SR corridor will be considered high priority for revision. AMPs will address protection and enhancement of water quality and OR values as they are revised.

71. Development and maintenance of range improvements will be permitted.

72. **Old Growth.** Apply Forest-wide standards and guides.

73. **Wildlife.** Forest-wide standards and guides apply, with the following exceptions or additions:

74. Improvement projects for protection, conservation, rehabilitation, or enhancement of wildlife habitat may be pursued when not in conflict with OR values.

75. Dead and down trees and snag habitat will be managed to provide or maintain 100 percent of the potential population level for all primary cavity excavators. The 100 percent level is defined in the Forest Plan.

76. Actively manage for bald eagles and peregrine falcons. Over time, quality habitat will be maintained or increased for PETS species, with no reductions in PETS wildlife populations or habitat.

77. **Wilderness.** The Eagle Cap Wilderness Stewardship Plan will incorporate W&SR management requirements outlined in this Plan for the Wild River segment. River sections located within the Wilderness will be managed under Wilderness or W&SR principles and standards and guidelines, whichever is most restrictive.

78. **Minerals.** Mining of common mineral material is not allowed within the river corridor.

79. The following objectives, standards, and guidelines are not absolutes and must be tempered with reason, an understanding of the Mining Laws, the W&SR Act, and other appropriate direction. These are objectives and guidelines to help administrator understand what level of protection is needed for OR values, what process should be followed to alter these guides, and options available to resolving conflicts.

a. For those lands within the river corridor the following process would be used:

1. Work with the mining claimant through the Plan of Operation to meet those objectives, standards, and guidelines needed to protect water quality, free-flow, and OR values. These objectives, standards, and guidelines are listed below as item b. Emphasize preventing pollution and unnecessary impairment of scenery.

   Because the standards and guidelines are a means to achieve an objective, they are not intended to be mandatory rules. They are to be used as starting points to achieve river objectives within the framework of the mining laws.

2. Work through a district interdisciplinary process to modify the standards and guidelines (if needed) to protect the river-related values and objectives. These new standard and guidelines would then be used in the Plan of Operation. Additional standards or guidelines may be proposed by the Forest Service or the mining claimant. The district process, as a minimum, shall include people who are knowledgeable in each of the OR values, the W&SR Act, and mining rights.

   Approved plans and additional standard and guidelines must be feasible, reasonable and do not materially interfere with uses reasonably incident to prospecting, mining, or processing operations (43 CFR 3710; also PL 167).

3. If conflicts still exist with the Plan of Operations that cannot be resolved, then the District Ranger may deny the Plan of Operation or approve a Plan of Operation that the District Ranger feels is reasonable and feasible. In either case the claimant would then have appeal rights through 36 CFR 215.

4. In addition to the above, use a district process to review all current and proposed operating plans. Incorporate to the extent possible the above guidelines to protect OR values. Modify existing operating plans to provide Wild and Scenic River protection.

b. The objectives, standards, and guidelines are listed below according to river-related values:

1. Recreation OR value: Protect all recreation facilities, developed or undeveloped. Provide for quality and safe recreational experiences.

- No developed or undeveloped recreational facility would be damaged or negatively changed.

- Displacement of recreational campers from campsites in the corridor will be avoided.

- Safety will be provided for all recreational visitors.

- The quality of the recreational experiences will not be unreasonably altered.

2. Scenic OR Value: Protect the Scenic quality of the river at the same standard that applies to other activities within this plan.

   - Utilize the Retention Foreground and Retention Middleground mapping and guidelines found in the "Eagle Creek Viewshed Corridor Plan."

3. Fisheries OR Value: Protect the fisheries habitat and populations at no less than its quality and quantity at the time of the W&SR Act. Enhance, without short term losses, fisheries habitat over time.

   - Within 25 feet of the river's ordinary high water line, any Class I, II, III, IV streams, or any wetlands, no vegetation or ground disturbance will take place.

   - Within 100 feet of the river's ordinary high water line, any Class I, II, or III stream, or any wetlands, no reduction of vegetation that provides shade to any water or wetlands will occur. Ground disturbance will be limited to no more than 10 percent, taking into account existing, past, or planned disturbances. In all cases, best management practices will be used so that the operation reasonably assures that no sediments will reach the river.

   - Within 200 feet of the river's ordinary high water line, any Class I, II, or III stream, or any wetlands, ground disturbance would be limited to no more than 20 percent, taking into account existing, past, or planned disturbances. In all cases, best management practices will be used so that the operation reasonably assures that no sediments will reach the river.

   - Disturbance will include any action that exposes, compacts, or displaces soils. An area will be considered disturbed until the impact has recovered to within 10 percent of undisturbed areas. Example: If an area had 100 percent vegetative ground cover, it would need to have 90 percent vegetative ground cover to be recovered.

   - Beyond 200 feet of the river's ordinary high water line, best management practices will be used to reasonably assure that no sediments will reach the river.

   - Reclamation of any disturbed area will be in accordance with the Forest Plan Watershed Standards and Guidelines.

4. Historic Cultural Resource OR Value: Protect and enhance historic cultural resource sites, which includes past mining activities.

- Protect, through cooperative agreements or withdrawals, those areas needed for interpretation, education, or preservation. Some areas may need to be mitigated before operations start.

5. Geologic/Paleontologic OR Value: Protect and enhance geologic features within and adjacent to the river corridor.

   - Protect, through cooperative agreements or withdrawals, those areas needed for interpretation, education, or preservation. Some areas may need to be mitigated before operations start.

c. Establish an Interdisciplinary Team to review all current and proposed operating plans. Incorporate the above guidelines to protect OR values. Modify existing operating plans to provide W&SR protection.

d. In addition, suction dredging within the river corridor requires a National Pollution Discharge Elimination System Water Discharge Permit (NPDES permit) issued by the Oregon Department of Environmental Quality. This permits contains the basis guidelines for suction dredging.

For all mining activities, a site-specific reclamation plan will be completed and implemented as soon as possible.

80. **Private Lands.** Essential to river management is the Forest Service's understanding that it does not have regulatory authority over private lands. The Act clearly states that the Forest Service is to assist, advise, and cooperate with landowners to plan, protect, and manage river resources (Sec. 11 (b)(1) of the Act). The only recreation opportunities that are available on private lands are sightseeing and photography from road right-of-ways, unless permission is obtained from the landowner. Private land rights must be respected.

81. Forest Service policy, in accordance with the Wild and Scenic Rivers Act, established a process for managing the private lands within the river corridor. This process includes:

82. Assist, advise, and cooperate with landowners to plan and protect river resources (Sec. 11 (b)(1) of the Act). Forest Service policy, in accordance with the Wild and Scenic Rivers Act, established a process for managing the private lands within the river corridor. This process includes:

a. Cooperatively working with landowners to meet the objectives of the Wild and Scenic River as well as to meet the objectives of the landowner.

b. Work towards agreed upon solution acceptable to both parties (See Sec. 11 of the Act).

c. Identifying opportunities and incentives that landowners may employ which would protect and enhance the OR values.

d. Working through Federal, State, and county laws, regulations, or zoning to protect OR values.

e. Discuss the alternative of buying/selling an easement to protect the OR values.

f. Only as a last resort will the Forest Service identifying the need to condemn in order to acquire an easement to protect the OR values.

83. The Forest Service will work with private landowners to post the boundaries between public and private lands to minimize private land trespass and to assist the public to identify public lands.

84. Identify private lands on all brochures, maps and in literature which identify the Eagle Creek W&SR corridor. Provide explanation that W&SR designation does not change private land rights. Work with County and State agencies to accurately reflect the relationship between the Eagle Creek W&SR designation and private lands in any literature they produce.

85. Inform Public Affairs Officers, Receptionists, or others who give out information to the media or public about the relationship between the private lands and the Eagle Creek W&SR designation.

86. Work with County and State agencies to improve coordination and information sharing concerning the river corridor. Request notification of permit applications for proposed private land developments or activities within the corridor.

87. Pursue cooperative agreements with private owners to employ practices that better meet DFCs and river management objectives.

88. Nothing in any alternative precludes the Forest Service from actively pursuing easements from willing or unwilling sellers when an OR value is about to be or is being threatened or damaged. The use of condemnation authority to purchase easements will be used only as a last resort, after all other methods of resolving the issue have been exhausted. Condemnation of land in fee title is expressly prohibited in the Eagle Creek corridor by provision of the W&SR Act of 1968 (Section 6b).

89. **Lands and Land Uses.** All National Forest system lands within the corridor are withdrawn from entry, sale, or other disposition under the public land laws of the United States.

90. Landownership patterns will be similar to what existed at time of designation. A few private land parcels however could be purchased from willing sellers.

91. Where opportunities exist, acquire easement from willing sellers on private land within the Wild and Scenic River corridor to ensure the protection of riparian areas, and protection of OR values.

92. Consider river management objectives when recreational cabin special use permits come up for renewal. Inventory for and correct conditions impacting river values.

93. Wild sections are "Excluded Areas" from the development of new utilities (transmission lines, gas lines, etc.). Scenic and Recreational areas are "Avoidance Areas." Where no reasonable alternative exists, additional or new facilities should be restricted to existing right-of-ways.

94. Existing roads and trails may be operated and maintained in keeping with overall management and river segment objectives.

95. New roads in the Recreational River segment, and trails in all classifications may be permitted, consistent with maintaining and protecting Wild and Scenic River values.

96. Sediment source problems on all roads in the corridor, primarily roads 77, 7735, 7750-025, and 7755 shall to be corrected to protect and enhance the water quality and the fisheries OR value. These sediment source problems are due to the proximity of the road to the river and inadequate drainage and low maintenance in some areas.

97. Continue with the existing travel management plan. Where OR values are threatened, implement closures for specific areas. These may be seasonal or yearly. Off highway vehicle (OHV) use may be permitted on designated routes in the roaded Recreational segment only (New OHV areas will not be developed in the corridor).

98. **Facilities.** Maintain existing facilities that support W&SR management objectives. Fences, gauging stations, and other management facilities may be permitted if there is no major effect on the character of the area. New facilities, including recreation facilities, may be permitted, consistent with maintaining and protecting W&SR values.

99. **Fire.** The fire suppression activities within the Wild Section of the river will adhere to the Eagle Cap Wilderness Fire Management Plan. In the Scenic and Recreational sections, follow current Forest Service Manual direction for initial attack and extended attack of fires giving high priority to protection of water quality and OR values.

100. The minimum acceptable suppression response to wildfires will be "confine" at FIL 1-2-3, and "contain" for FIL 4 and greater. For moderate to high intensity wildfires, the appropriate suppression response will emphasize a control strategy. Emphasis should be on protecting life and facilities.

101. Wildfire suppression efforts should utilize low impact methods, since use of heavy equipment may require restoration efforts to mitigate visual impacts.

102. **Fuels.** The use of prescribed burning will be encouraged to help meet river management objectives. Low intensity prescribed fires, producing minimal scorch and rapid recovery, will be the most desirable.

103. **Insects and Disease.** Use integrated pest management (IPM) principles and methods. Prescribed fire may be used to help reduce stocking and conditions favorable to bark beetle and other insects and diseases.

104. Suppress insects and diseases when outbreaks threaten users and/or managed resources. Use suppression methods that minimize site disturbance, are compatible with protection and enhancement of water quality and OR values and management objectives of contiguous national forest system lands (FSM 3400).

105. **Adjacency** - For Federal land management, the Wild and Scenic Rivers Act, Sec. 12(a) addresses adjacency. Management of lands bordering or adjacent to the river (and its associated corridor) will not diminish the special values which caused the river to be included in the National Wild and Scenic Rivers System.

106. Address impact to the river corridor during project planning if the project is adjacent to the river corridor and has the potential to affect identified river values (water quality, free-flow, and OR values). Examples include, but are not limited to, the viewshed outside the river corridor when considering the Scenic OR value or the tributaries when considering water the Fish and Water Quality OR value.

107. **Monitoring.** Incorporate into the Forest's monitoring plan, the monitoring of implementation of the Wild and Scenic River Management Plan.

CHAPTER III. IMPLEMENTATION

MANAGEMENT ACTIONS

The Management area standards and guidelines would be carried out by the Forest Service. The three Ranger Districts involved: Eagle Cap, La Grande, and Pine, would be responsible for administering the portion of the river corridor within their District boundaries.

1. District responsibilities:

   a. Plan Implementation - The Districts, in conjunction with other agencies, will oversee the management of the river, implementation of the management plan, and coordination with private landowners to protect the values for which the river was designated (free-flow, OR values, river related resources).

   b. The Districts, in conjunction with other agencies, will be responsible for monitoring the OR values to bring these resources to their Desired Future Conditions as specified in the Management Plan. The OR values include: 1) Recreation, 2) Scenery, 3) Fisheries, 4) Historic Cultural Resources, and 5) Geology/Paleontology.

   c. Plan implementation will begin the day of the published Decision Notice for the Environmental Assessment for the Eagle Creek Wild and Scenic River Management Plan.

2. Recreation Projects

   a. Issue a Code of Federal Regulations (CFR) closure to prohibit all motorized vehicles within the trailed recreation segment from the Eagle Creek Trailhead to the Wilderness boundary.

   b. Develop an interpretive strategy to best provide an educational program to inform the public on the protection of fisheries and other resource values from recreational sluicing, gold panning, and dredging.

   c. Annually monitor recreational sluicing, gold panning, and dredging as to impacts on OR values. Also, monitor recreation dredging in accordance with Waste Discharge permit issued by State of Oregon Department of Environmental Quality. Additional measures may be taken to protect and enhance OR values if needed.

   d. The Pine District would make an annual assessment of recreational sluicing, gold panning, and dredging to determine to ensure OR values are protected and to assess whether these activities should continue.

   e. Develop a coordinated interpretive plan between districts including interpretive signs, brochures, and turnouts in the river corridor. Include interpretive displays for the Boulder Park Slide, historic features of the Sparta Ditch, and historic and mining activities at the Martin Bridge Stage Stop. Other sites that may be interpreted include the Dixie Creek historic hydroelectric site and several hydraulic mining sites in the corridor. Also, interpret the importance of old-growth, ecosystems, and snags.

   f. Annually, inventory dispersed recreation sites and their access roads within the river corridor. Close or rehabilitate those sites and roads that are adversely impacting OR values. Sites may be left open if their impacts can be mitigated. Provide new sites and access (mostly limited to

road pull-offs) for closed dispersed sites only. New sites would be discouraged within 200 feet from the river.

g. Annually, inventory existing campground and trailhead facilities. Rehabilitate or close problem sites. Upgrades to existing facilities will be allowed for resource protection, user safety, to convert facilities to barrier-free designs, or to better accommodate existing uses. Upgrades to campgrounds may be considered to accommodate Recreational Vehicles (RV's).

h. Implement restoration projects if camping, recreation use, grazing, or other management activities impact fisheries or the the riparian areas. Take appropriate action to prevent further impacts.

i. Monitor recreation use in the river corridor. When use levels are determined to be approaching levels inconsistent with protection and enhancement of river values or WRS or ROS use density guidelines management actions may be taken to limit use.

j. Restore and rehabilitate the Two Color campground to better delineate sites, reduce erosion, and protect riparian vegetation.

k. Maintain and upgrade all barrier-free facilities at developed campgrounds in the river corridor.

l. Annually, monitor recreational stock use and provide additional facilities such as corrals, hitching racks, and loading docks at Boulder Park.

m. Increase recreational and law enforcement patrols in the river corridor.

2. Fisheries and Water Quality Projects

a. A stream survey of Eagle Creek was conducted in 1991 and 1992. However, the final stream survey report was not completed at the time of publication of this document. The report will identify management recommendations. These recommendations should improve fish habitat at specific locations. Any of the recommendations that are consistent with the river management plan may be implemented after further analysis.

b. Cooperatively work with the Oregon Department of Fish and Wildlife and the Confederated Tribes of the Umatilla Indian Reservation concerning fish stocking as it relates to the protection and enhancement of the Fisheries OR Value. Protection of Wild river and Wilderness values would be of concern as well as maintaining wild fish runs. This would be an on-going process that would be developed into a MOU and reviewed annually.

c. Cooperatively work with Oregon State Department of Fish and Wildlife and American Indian tribes with treaty rights concerning seasons, tackle, or take as it relates to the protection and enhancement of the Fisheries OR Value. This would be an on-going process reviewed annually.

d. Identify fisheries enhancement projects. Prioritize and implement as needed.

e. Continually monitor, prioritize, and correct sediment source problems such as those from dispersed and developed recreation sites, unneeded roads, existing roads with poor maintenance, and off-corridor grazing. Utilize the Eagle Creek stream survey to identify additional sediment sources.

f. Projects may be approved provided projects are intended to optimize native populations, and are compatible with free-flow, water quality, and OR Values protection and enhancement. Enhancement projects will utilize unobtrusive, natural appearing instream structures without the

use of anchoring devices such as cable or re-bar. An Analysis of Proposed Activities that satisfies Section 7 of the W&SR Act will be required for any proposed project within bed and banks.

g. Recreational livestock grazing in the corridor will be annually monitored for consistency with river management objectives.

h. Conduct a survey of fish species, including populations and distributions within the river corridor.

i. Use existing Hankin/Reeves survey, to gather baseline information of water temperature, water quality, and fisheries habitat. This baseline information will include such items as water temperature, sediment, woody debris, streambank stability, embededness, shading, and other water quality factors that affect fish habitat. This will quantify the water quality and fish habitat at the time of the Act or best estimate. Utilize the Eagle Creek stream survey, Soil Conservation Service data, Oregon Department of Fish and Wildlife data, or other sources to achieve this objective. Conduct a Hankin/Reeves survey at 10 year intervals to measure activities against current baseline to determine if water quality and the fisheries OR value are being protected and enhanced.

j. Activities will be measured against this baseline to determine if water quality and the Fisheries OR Value is being protected.

k. Inventory river corridor to identify watershed improvement projects. Prioritize and implement as possible.

l. Inventory and close all unneeded roads in the corridor to reduce density to Forest Plan Standards and protect and enhance OR values.

m. Develop a cooperative agreement with other agencies and volunteer groups to provide water quality monitoring in the river corridor.

3. Cultural Resource Programs

a. Conduct a survey of cultural resources in the corridor to identify, evaluate, and protect cultural resources. Significant historic cultural resource sites will be considered priority for stabilization and enhancement.

4. Vegetation Management Projects

a. Annually, monitor the fuelwood cutting for impacts to river values. Additional restrictions or closures may be utilized if necessary to protect and enhance OR Values and water quality.

a. Grazing activities will be monitored, and measures taken as necessary to protect and enhance OR Values and water quality. When problems or conflicts are identified, annual plans will be revised to incorporate measures to protect river values.

b. Revise Range Allotment Management Plans to address protection and enhancement of OR values and water quality.

5. Transportation

   a. Correct sediment source problems on all roads in the corridor to protect and enhance the water quality and the Fisheries OR Value. Sediment source problems are due primarily to the proximity of the roads to the river, slope failures, and inadequate drainage.

   b. Identify roads in the corridor that can be closed to protect and enhance water quality and the fisheries OR Value and meet Forest Plan direction.

   c. Improve road maintenance in the river corridor and annually review recurring maintenance activities and revise as necessary to protect water quality, OR Values, and free-flow.

6. Minerals

   a. Implement process for updating existing and completing Plan of Operations.

7. Coordination with Private Landowners

   a. Local District would work with private landowners to minimize impact of recreationists on their lands by clearly identifying private lands and landowner rights on any brochures or maps produced for the river corridor.

   b. Local District would work with landowners to get boundaries between public lands and private lands signed within the next 5 years.

   c. Local District would work with private landowners to minimize trespass and other potential problems associated with recreational use of the Martin Bridge Trail. This may entail relocation of the trail or securing rights of way.

8. Coordination with State Agencies and Local Governments

   a. The Supervisor's Office would work with the Districts to develop cooperative agreements or MOUs with the Baker County, Oregon State Department of Forestry and Oregon Division of State Lands concerning communication and cooperation for the activities planned in the river corridor. Included in the agreement would be notification of any new private developments, zoning changes, timber harvest, utilities, roads, and recreation projects within the river corridor.

MONITORING

1. Forest Level

   Monitoring of this plan will be incorporated into the Forest's Land and Resource Management Plan monitoring process. The standard and guides will be incorporated into the Forest monitoring check-list.

2. District Level

   The District, in conjunction with other agencies, will be responsible for evaluating current uses as well as projects within the river corridor or adjacent to the river corridor for compliance with the standards and guidelines.

   The District is also responsible for an annual report concerning the Wild and Scenic River, as directed by the Forest monitoring plan. This report will be submitted to the Forest and include a discussion

on the condition and changes, if any, for each of the OR Values. The following are threshold limits (key indicators) and management standards for each OR Value:

a. Recreation Monitoring - Annually, monitor recreation use and impacts to meet values described in the DFC to ensure the protection and enhancement of the Recreation and other OR values. DFCs would be met. The current mix of dispersed and developed camping would be maintained at current levels. Each of the WRS and ROS classes identified in the management plan for the river sections are maintained. Low to moderate increases in recreation use will be allowed as long as consistent with protection and enhancement of river values and WRS and ROS use density guidelines.

   1. Key indicators include: Number of visitors, impact on riparian area, quality of visitor experience, and visitor conflicts.

   2. Management standards are: Recreation visitor counts (trail user and vehicle counts), physical site condition and environmental impacts (dispersed site size and numbers, impacts to other resources from recreation use), number of encounters with other recreation visitors, numbers of reported conflicts, trespass/vandalism, number of safety incidents reported). If standards not met, identify cause of change and use indirect (more information, signing, education) or direct (more patrols, limiting access, permits). Emphasize indirect controls.

   3. Sampling procedure: Annually, monitor use levels through random surveys/counts, trailhead vehicle counts, conduct landowner survey and user survey for recreation use conflicts. Annually, monitor special-use permits, if any are issued, to ensure adequate protection and enhancement of OR Values. Annually, monitor effects of dispersed camping, developed camping, and recreational grazing, note number and size of dispersed campsites, number of fire rings, proximity to the river, and other damage and its severity to other resources caused by recreationists. Damage to be noted includes type, total square footage, and degree of damage (low, medium, severe). Definition of low: ground vegetation intact with no abnormal erosion. Definition of medium: vegetation growth somewhat retarded, minor erosion occurring. Definition of severe: Vegetation in used area is gone, abnormal erosion at site is correctable through maintenance; vegetation outside used area is still intact.

b. Landscape Management and Geology/Paleontology Monitoring - Annually, monitor the visual quality of the area against values described in the DFCs and to ensure the protection and enhancement of the Scenic and Geologic/Paleontologic OR Values. There would be no additional adverse impacts to scenery and no additional damage to significant geologic/paleontologic features. Both DFCs would be met. Emphasis will be to maintain undisturbed natural ecosystems in Preservation VQO and perpetuate a characteristic environment that mimics natural processes in the Retention VQO areas.

   1. Key indicators include: Projects or activities which alter landform, vegetation, water, color or character of the viewshed as seen from the river corridor or main roads, and the extent and amount of developments as indicated by buildings, structures, and other physical improvements.

   2. Management standards are: No additional adverse impacts. No damage to geologic resources. No additional recreational mining activities nor additional recreational dredging would have occurred. All activities in the river corridor meet Retention VQO downstream from the Eagle Creek Trailhead and a Preservation VQO upstream from the trailhead. Outside the river corridor in the foreground, middleground, and background areas, all

activities meet a Retention VQO. If standards not met, identify cause of change on the National Forest and correct it. On private land, work with the landowners to try to mitigate activity, work with county to change zoning, and as a last resort consider acquiring scenic easements. A variety of geologic and paleontologic features will be interpreted in the corridor so most visitors are aware of the geologic/paleontologic history of the area.

3. Sampling procedure: Annually, field monitor the area for visual changes on private land. Note the number and type of projects, houses, structures or improvements as seen from the river corridor and adjacent trails. Analyze individual projects on a case-by-case basis to ensure protection of viewshed and geology. Inspect National Forest lands annually, for evidence of mining activity. Conduct a VQM inventory every 5 years to ensure projects are consistent with DFCs and OR Values.

c. Fish and Water Quality Monitoring - Annually, monitor fish, fish habitat, water quality, and fish and water quality enhancement projects in accordance with the DFCs and Forest Plan to ensure the protection and enhancement of the Fish and Water Quality OR Value. DFC will be met. No reduction of fish habitat or no reduction in sensitive fish species related to management activities will occur.

Monitoring will be of simple parameters that will give an indication of whether more intense monitoring is needed. Although this monitoring is dependent on funding and assistance, a target time for having all monitoring stations in place is two years.

1. Key indicators include: Stream temperature, stream flow, shading, surface fines (sediment), embededness, woody debris, streambank stability, riparian condition, pool/riffle ratios, populations and habitat for trout and steelhead, condition of riparian zone.

2. Management standards are: Improved water quality and quantity, stable streambanks (>80%), improved fish habitat and populations of trout based upon ODF&W baseline data for populations and 1991 Hankin/Reeves survey for habitat conditions, natural levels of woody debris recruitment and increased woody debris. Maximum summer water temperatures will be at or decreasing toward 55 degrees Fahrenheit. Embededness (used as a measurement of fine sediment) will be lowered to less than 35 percent. Stream shade/canopy cover will increase to 20 to 30 percent due to improved riparian conditions. Pools per mile will be at lest 3 in lower portion (Forest boundary to O'Brien Creek, and at lest 6 in the upper portion (O'Brien Creek to Eagle Lake). If standards are not met identify the cause and mitigate or eliminate impact if inside the corridor.

3. Sampling procedure: Annually, measure stream temperatures and flow. Conduct a Hankin/Reeves survey at 10 year intervals inside the river corridor to to gather baseline information, monitor changes, and recommend improvements. Activities will be measured against this baseline to determine if the Fish OR value is being protected and enhanced. Collect daily maximum/minimum stream temperatures for the expected warmest 6 month period of the year at the locations described in the Water Quality Monitoring section.

d. Historic Cultural Resources - Annually, monitor cultural resources against values described in the Historic Cultural DFC and to ensure the protection and enhancement of Historic Cultural Resource OR Value. DFS would be met, historic as well as prehistoric sites are protected. No damage to cultural sites would occur.

1. Key indicators include: Cultural site integrity.

2. Management standards are: no additional adverse impacts or damage to cultural sites, a cultural resource inventory/and or assessment for each proposed project within the river corridor, and interpretation of cultural sites (at locations outside the river corridor) when adequate provisions are available to protect the cultural resource. If standards not met, do not approve the proposed activity. If use is affecting cultural resources, identify the cause, and take action to mitigate the cause and ensure protection of the site.

3. Sampling procedure: annually, review all projects and use in the river corridor to ensure that cultural resources are protected and surveys completed for proposed activities.

e. Range Monitoring - Monitor range conditions to ensure protection and enhancement of OR Values.

1. Key indicators include: Condition of late season grasses, amount of noxious weeds, variety of native plant communities, grazing damage to riparian zone.

2. Management standards are: The area will remain ecologically diverse and provide healthy riparian areas with no impacts on current water quality. No increases in noxious weed populations and no net loss or reduction in riparian habitat due to grazing. Recreational/ grazing conflicts, however few, will be reduced. If standards not met, identify cause of change and correct Range Allotment Plans to ensure standards are met.

3. Sampling procedure: Annually, monitor range conditions for riparian damage. Every 5 years inventory and monitor the river corridor for noxious weeds, non-native grasses, and range condition of late season grasses.

f. Water Quality Monitoring

1. Use level is currently within a range compatible with maintaining the Fisheries DFC. If use increases to the point where it is not compatible with the stated DFC, the need to take additional management actions will be re-evaluated.

2. Monitoring water quality is an important element in managing the National Wild and Scenic River system. Five monitoring points are recommended along the Eagle Creek to test at least water quantity and temperature. Only through cooperative agreements, use of volunteers, and other creative means can this part of the monitoring program be accomplished. Other items such as sediment, dissolved oxygen, pH and nitrates could also be monitored if initial parameters were developed and enough funding received. The following are the preferred locations for the monitoring points and possible cooperative parties or organization:

a). Main Eagle Trailhead -- Fishing Clubs, or Oregon Department of Fish and Wildlife.

b). Tamarack Campground -- Oregon Department of Fish and Wildlife, Campground Host, or Snowmobile Club.

c). East Eagle Confluence -- Oregon Department of Fish and Wildlife, American Indian tribes with treaty rights, Snowmobile Club.

d). Paddy Creek Confluence -- Oregon Department of Fish and Wildlife, American Indian tribes with treaty rights, or Snowmobile Club.

e). Skull Creek Confluence -- Oregon Department of Fish and Wildlife, Eagle Forks Campground Host, American Indian tribes with treaty rights, Snowmobile Club, Fishing Club.

Monitoring will be of simple parameters that will give an indication of whether more intense monitoring is needed.

The District Ranger will be responsible for establishing this monitoring program. Although this monitoring is dependent on funding and assistance, a target time for having all monitoring stations in place is two years.

BUDGET

Each year the District and Forest will provide out year budget request. The following outlines the budget process for all resources. Those dollars identified here are estimates at the time of development of this management plan. Each year the District's and Forest's will submit a more detailed budget.

1. Recreation Facilities Operation and Maintenance

Funds necessary to operate and maintain all existing recreation facilities.

$20,000.00 per year

As a separate item, indicate funding needs associated with **planned** recreation construction as identified in the River Management Plan. The dollars for plan, feasibility, survey/design, and construction should be identifies in the Regional capital investment of challenge cost-share program:

$ 70,000 Total (Interpretive program)
$ 80,000 Total (Improving Boulder Park Trailhead)
$ 120,000 Total (Providing barrier-free access at all campgrounds)
$ 50,000 Total (Improving trailer access at all campgrounds)
$ 125,000 Total (Rehabilitating Two Color Campground)
$ 20,000 Total (Improving Two Color Gaurdstation
$ 75,000 Total (Close and rehab existing roads and sites) (1997)
$ 50,000 Total (Dispersed campsite and access relocation) (1998

2. Roads

Funds necessary to maintain existing single-purpose recreation roads such as access to campgrounds, picnic sites, boat ramps, etc.

$ 5,000 per year

Funds necessary to maintain multi-purpose roads open to the public.

$100,000 per year

Funding needs associated with planned recreation road construction/ reconstruction as identified in River Management Plan. (The dollars for plan, survey/design, and construction/reconstruction should be identified in the Regional capital investment program.)

$0

3. Trails

Include the funds necessary to maintain *existing* trail systems.

$ 20,000 per year

As a separate line item, indicate funding needs associated with *planned* trail rehabilitation and construction/reconstruction as identified in River Management Plan. The dollars for plan, survey/ design, and construction/reconstruction will be identified in the Regional capital investment program.

No dollars planned at this time.

4. Forest Service Administration

Recreation

This section would include all recreation funds needed to administer the river corridor including:

a. outfitter guide permit administration
b. special use administration
c. user contact
d. Wild and Scenic River-related information/education programs
e. easement administration
f. interpretive activities
g. vehicular support (cost for vehicles and maintenance).
h. law enforcement

Total $54,000 per year

5. Cooperative Agreements

Include costs to maintain river-related cooperative agreements such as for law enforcement (with local sheriff, rescue agency, etc.), support to county and/or other public and private entities. Identify each cooperator by name and indicate funding needs as a separate line item.

$3,000 per year coop law enforcement agreement with County Sheriff.
$1,500 per year other cooperative agreements
County, Tribes, and ODFW

6. Management Plan Revision

Include costs associated with revisions of river management plans including amendment to the Forest Plan.

None identified at this time.

7. Special Studies as Scheduled in Management Plan

Include special studies identified in the river management plan. Special studies might include user survey, water quality/quantity survey/analysis, etc. Listed in order of priority:

$ 3,000 Road and dispersed site closure survey (1996)
$ 3,000 Watershed improvement project inventory (1996)
$ 10,000 Survey of fish species (1996)
$ 8,000 Hankin/Reeves survey of fish habitat (2001)
$ 10,000 Cultural survey (1999)

8. Monitoring

Include costs of monitoring programs as detailed in the river management plan. Separate monitoring elements by resource area such as water, recreation, fisheries. Provide via separate line or footnote one time costs for acquisition of equipment.

Water Quality	$4,500 One time cost for equipment ($900 each for five stream water temperature stations) (1998).
	$4,000 per year Operation, maintenance, and the monitoring. Stream water temperature monitoring will be done by the Forest Service and or cooperating agencies, groups, or individuals.
Range	$ 500 per year
Range vegetation	$1,000 every 5th year
Recreation	$6,000 per year
Scenery/Geology	$ 500 per year
Fish	$ 500 per year
Historic/cultural	$ 500 per year
Recreation mining	$2,000 per year
VQM inventory	$3,000 every 5th year
Firewood program	$ 300 per year

Install permanent water monitoring station in 1994 and the two stream water temperature monitoring devices in 1995. Monitoring annually as soon as stations installed

Total monitoring costs include a $4,500 one time cost plus a $15,300 monitoring cost per year, and $3,000 cost every 5 years.

9. Total Costs

Total one time cost	$620,500
Total annual costs	$217,800
Additional costs every 10 th year	$ 8,000
Additional costs every 5th year	$ 4,000

10. Priorities

Note that the activities in this Management Plan are dependent upon the District receiving adequate funds to cover one time costs as well as annual expenses noted here. In the event that full funding is not received the priorities for the expenditure of funds will be to ensure public safety and protect OR values

Appendix A

WILD AND SCENIC RIVERS ACT

[1]An Act
To provide for a National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that

SEC. 1. (a) This Act; may be cited as the "Wild and Scenic Rivers Act".

(b) It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values, 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. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

(c) The purpose of this Act is to implement this policy by instituting a national wild and scenic rivers system, by designating the initial components of that system and by prescribing the methods by which and standards according to which additional components may be added to the system from time to time.

SEC. 2 (a) The national wild and scenic rivers system shall comprise rivers (i) that are authorized for inclusion therein by Act of Congress, or (ii) that are designated as wild, scenic or recreational rivers by or pursuant to an act of the legislature of the State or States through which they flow, that are to be permanently administered as wild, scenic or recreational rivers by an agency or political subdivision of the State or States concerned, that are found by the Secretary of the Interior, upon application of the Governor of the State or the Governors of the States concerned, or a person or persons thereunto duly appointed by him or them, to meet the criteria established in this Act and such criteria supplementary thereto as he may prescribe, and that are approved by him for inclusion in the system... Upon receipt of an application under clause (ii) of this subsection, the Secretary shall notify the Federal Energy Regulatory Commission and publish such application in the Federal Register. Each river designated under clause (ii) shall be administered by the State or political subdivision thereof without expense to the United States other than for administration and management of federally owned lands. For purposes of the preceding sentence, amounts made available to any State or political subdivision under the Land and Water Conservation Act of 1965 or any other provision of law shall not be treated as an expense to the United States. Nothing in this subsection shall be construed to provide for the transfer to, or administration by, a State or local authority of any federally owned lands which are within the boundaries of any river included within the system under clause (ii).

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[1] The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) consists of Public Law 90-542 (October 2, 1968) as amended. P.L. 99-590 (October 30, 1986) was the last Act that added generic amendments to the Act. Additional footnotes can be found following the text of the Act. (Provisions of the Wild and Scenic Rivers Act that are applicable only to specific rivers have been deleted from this version of the Act in the interest of brevity. The Federal Power Commission is now the Federal Energy Regulatory Commission).

b) A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in Section 1, subsection (b) of this Act. 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, 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.

SEC. 3 (A) The following rivers and the land adjacent thereto are hereby designated as components of the national wild and scenic rivers system:

(Designation language for individual W&S rivers)(116 listed)

(b) The agency charged with the administration of each component of the national wild and scenic rivers system designated by subsection (a) of this section shall, within one year from the date of designation of such component under subsection (a) (except where a different date is provided in subsection (a)) establish detailed boundaries therefore; which boundaries shall include an average of not more than 320 acres of land per miles measured from the ordinary high water mark on both sides of the river); determine which of the classes outlined in section 2, subsection (b), of this Act best fit the river or its various segments. Notice of the availability of the boundaries and classification, and of subsequent boundary amendments shall be published in the Federal Register and shall not become effective until ninety days after they have been forwarded to the President of the Senate and the Speaker of the House of Representatives.

(c) Maps of all boundaries and descriptions of the classifications of the designated river segments, and subsequent boundary amendments to such boundaries, shall be available for public inspection in the offices of the administering agency in the District of Columbia and in locations convenient to the designated river.

(d) (1) For rivers designated on or after January 1, 1986, the Federal agency charged with the administration of each component on the National Wild and Scenic Rivers System shall prepare a comprehensive management plan for such river segment to provide for the protection of the river values. The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act. The plan shall be coordinated with and may be incorporated into resource management planning for affected adjacent Federal lands. The plan shall be prepared, after consultation with State and local governments and the interested public within three full fiscal years after the date of designation. Notice of the completion and availability of such plans shall be published in the Federal Register.

(2) For rivers designated before January 1, 1986, all boundaries, classifications, and plans shall be reviewed for conformity within the requirements of this subsection within 10 years through regular agency planning processes.

SEC. 4 (a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture, or, in appropriate cases, the two Secretaries jointly shall study and submit to the President reports on the suitability or nonsuitability for addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system. The President shall report to the Congress his recommendations and proposals with respect to the designation of each such river or section thereof under this Act.... In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers (i) with respect to which there is the greatest likelihood of developments which, if undertaken, would render the rivers unsuitable for inclusion in the national wild and

scenic rivers system, and (ii) which possess the greatest proportion of private lands within their areas. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.).

Each report, including maps and illustrations, shall show among other things the area included within the report; the characteristics which do or do not make the area a worthy addition to the system; the current status of land ownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which it is proposed the area, should it be added to the system, be administered; the extent to which it is proposed that such administration, including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary land and interests in land and of administering the area, should it be added to the system. Each such report shall be printed as a Senate or House document.

(b) Before submitting any such report to the President and the Congress, copies of the proposed report shall, unless it was prepared jointly by the Secretary of the Interior and the Secretary of Agriculture, be submitted by the Secretary of the Interior to the Secretary of Agriculture or by the Secretary of Agriculture to the Secretary of the Interior, as the case may be, and to the Secretary of the Army, the Chairman of the Federal Power Commission, the head of any other affected Federal department or agency and, unless the lands proposed to be included in the area are already owned by the United States or have already been authorized for acquisition by Act of Congress, the Governor of the State or States in which they are located or an officer designated by the Governor to receive the same. Any recommendations or comments on the proposal which the said officials furnish the Secretary or Secretaries who prepared the report within ninety days of the date on which the report is submitted to them, together with the Secretary's or Secretaries' comments thereon, shall be included with the transmittal to the President and the Congress.

(c) Before approving or disapproving for inclusion in the national wild and scenic rivers system any river designated as a wild, scenic or recreational river by or pursuant to an act of a State legislature, the Secretary of the Interior shall submit the proposal to the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Federal Power Commission, and the head of any other affected Federal department or agency and shall evaluate and give due weight to any recommendations or comments which the said officials furnish him within ninety days of the date of which it is submitted to them. If he approves the proposed inclusion, he shall publish notice thereof in the Federal Register.

(d) The boundaries of any river proposed in section 5(a) of this Act for potential addition to the National Wild and Scenic Rivers System shall generally comprise that area measured within one-quarter mile from the ordinary highwater mark on each side of the river. In the case of any designated river, prior to publication of boundaries pursuant to section 3(b) of this Act, the boundaries also shall comprise the same area. This subsection shall not be construed to limit the possible scope of the study report to address areas which may lie more than one-quarter mile from the ordinary high water mark on each side of the river.

SEC. 5. (a) The following rivers are hereby designated for potential addition to the national wild and scenic river system:

(designation language for individual W&S study rivers)

(b)(4) For the purposes of conducting the studies of rivers named in subsection (a) there are authorized to be appropriated such sums as necessary..

(c) The study of any of said rivers shall be pursued in as close cooperation with appropriate agencies of the affected State and its political subdivisions as possible, shall be carried on jointly with such agencies if request for such joint study is made by the State, and shall include a determination of the degree to which the State or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national wild and scenic rivers system.

(d)(1) In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potentials. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and

investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all Federal agencies as potential alternative uses of the water and related land resources involved.

(2) The Congress finds that the Secretary of the Interior, in preparing the Nationwide Rivers Inventory as a specific study for possible additions to the National Wild and Scenic Rivers System, identified the Upper Klamath River from below the John Boyle Dam to the Oregon-California State line. The Secretary, acting through the Bureau of Land Management, is authorized under this subsection to complete a study of the eligibility of such segment for potential addition to the National Wild and Scenic Rivers System. Such study shall be completed, and a report containing the results of the study shall be submitted to Congress by April 1, 1990. Nothing in this paragraph shall affect the authority or responsibilities of any other Federal agency with respect to activities or action on this segment and its immediate environment.

SEC. 6. (a) (1) The Secretary of the Interior and the Secretary of Agriculture are each authorized to acquire lands and interests in land within the authorized boundaries of any component of the national wild and scenic rivers system designated in section 3 of this Act, or hereafter designated for inclusion in the system by Act of Congress, which is administered by him, but he shall not acquire fee title to an average of more than 100 acres per mile on both sides of the river. Lands owned by a State may be acquired only by donation or by exchange in accordance with subsection (d) of this section. Lands owned by an Indian tribe or a political subdivision of a State may not be acquired without the consent of the appropriate governing body thereof as long as the Indian tribe or political subdivision is following a plan for management and protection of the lands which the Secretary finds protects the land and assures its use for purposes consistent with this Act. Money appropriated for Federal purposes from the land water conservation fund shall, without prejudice to the use of appropriations from other sources, be available to Federal departments and agencies for the acquisition of property for the purposes of this Act.

(2) When a tract of land lies partially within and partially outside the boundaries of a component of the National Wild and Scenic System, the appropriate Secretary may, with the consent of the land owners for the portion outside of the boundaries, acquire the entire tract. The land or interest therein so acquired outside the boundaries shall not be counted against the average one-hundred-acre-per-mile fee title limitation of subsection (a)(1). The lands or interests therein outside such boundaries, shall be disposed of, consistent with existing authorities of law, by sale, lease, or exchange.

(b). If 50 per centum or more of the entire acreage outside the ordinary high water mark on both sides of the river within a federally administered wild, scenic or recreational river area is owned in fee title by the United States, by the State or States within which it lies, or by political subdivisions of those States, neither Secretary shall acquire fee title to any lands by condemnation under authority of this Act. Nothing contained in this section, however, shall preclude the use of condemnation when necessary to clear title or to acquire scenic easements or such other easements as are reasonably necessary to give the public access to the river and to permit its members to traverse the length of the area or of selected segments thereof.

(c) Neither the Secretary of the Interior nor the Secretary of Agriculture may acquire lands by condemnation, for the purpose of including such lands in any national wild, scenic or recreational river area, if such lands are located within any incorporated city, village, or borough which has in force and applicable to such lands a duly adopted, valid zoning ordinance that conforms with the purposes of this Act. In order to carry out the provisions of this subsection, the appropriate Secret[illegible] shall issue guidelines, specifying standards for local zoning ordinances, which are consistent with the purposes of this Act. The standards specified in such guidelines shall have the object of (A) prohibiting new commercial or industrial uses other than commercial or industrial uses which are consistent with the purposes of this Act, and (B) the protection of the bank lands by means of acreage, frontage, and setback requirements on development.

(d) The appropriate Secretary is authorized to accept title to non-Federal property within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress and, in exchange therefor, convey to the grantor any federally owned property which is under his jurisdiction within the State in which the component lies and which he classifies as suitable for exchange or other disposal. The values of the properties so exchanged either shall be approximately equal or, if they are not approximately equal, shall be equalized by the payment of cash to the grantor or the Secretary as the circumstances require.

(e) The head of any Federal department or agency having administrative jurisdiction over any lands or interests in land within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress is authorized to transfer to the appropriate Secretary jurisdiction over such lands for administration in accordance with the provision of this Act. Lands acquired by or transferred to the Secretary of Agriculture for the purposes of this Act within or adjacent to a national forest shall upon such acquisition or transfer become national forest lands.

(f) The appropriate Secretary is authorized to accept donations of land and interests in land, funds, and other property for use in connection with his administration of the national wild and scenic rivers system.

(g)(1) Any owner or owners (hereinafter in this subsection referred to as "owner") of improved property on the date of its acquisition, may retain for themselves and their successors or assigns a right of use and occupancy of the improved property for noncommercial residential purposes for a definite term not to exceed twenty-five years or, in lieu thereof, for a term ending at the death of the owner, or the death of his spouse, or the death of either or both of them. The owner shall elect the term to be reserved. The appropriate Secretary shall pay to the owner the fair market value of the property on the date of such acquisition less the fair market value on such date retained by the owner.

(2) A right of use and occupancy retained pursuant to this subsection shall be subject to termination whenever the appropriate Secretary is given reasonable cause to find that such use and occupancy is being exercised in a manner which conflicts with the purposes of this Act. In event of such a finding, the Secretary shall tender to the holder of that right an amount equal to the fair market value of that portion of the right which remains unexpired on the date of termination. Such right of use or occupancy shall terminate by operation of law upon tender of the fair market price.

(3) The term "improved property", as used in this Act, means a detached, one-family dwelling (hereinafter referred to as "dwelling"), the construction of which was begun before January 1, 1967, (except where a different date is specifically provided by law with respect to any particular river), together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the appropriate Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures accessory to the dwelling which are situated on the land so designated.

SEC. 7. (a) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791a et seq.) on or directly affecting any river which is designated in section 3 of this Act as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation of a river as a component of the National Wild and Scenic Rivers System. 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 values for which such river was established, as determined by the Secretary charged with its administration, or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior or the Secretary of Agriculture, as the case may be, in writing of its intention so to do at least sixty day in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would effect the component and the values to be protected by it under this Act.

(b) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended on or directly affecting any river which is listed in section 5, subsection (a), of this Act, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water

resources project that would have a direct and adverse effect on the values for which such river might be designated, as determined by the Secretary charged responsible for its study or approval--

(i) during the ten-year period following enactment of this Act or for a three complete fiscal year period following any Act of Congress designating any river for potential addition to the national wild and scenic rivers system, whichever is later, unless, prior to the expiration of the relevant period, the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, on the basis of study, determine that such river should not be included in the national wild and scenic river system and notify the Committees on Interior and Insular Affairs of the United States Congress, in writing, including a copy of the study upon which the determination was made, at least one hundred and eighty days while Congress is in session prior to publishing notice to that effect in the Federal Register: *Provided,* That if any Act designating any river or rivers for potential addition to the national wild and scenic river system provides a period for the study or studies which exceeds such three complete fiscal year period the period provided for in such Act shall be substituted for the three complete fiscal year period in the provisions of this clause (i); and

(ii) during such interim period from the date a report is due and the time a report is actually submitted to Congress; and

(iii) during such additional period thereafter as, in the case of any river the report for which is submitted to the President and the Congress for inclusion in the national wild and scenic rivers system, is necessary for congressional consideration thereof or, in the case of any river recommended to the Secretary of the Interior under section 2(a)(ii) of this Act, is necessary for the Secretary's consideration thereof, which additional period, however, shall not exceed three years in the first case and one year in the second.

Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a potential wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or diminish the scenic, recreational, and fish and wildlife values present in the potential wild, scenic or recreational river area on the date of designation of a river for study as provided by section 5 of this Act. No department or agency of the United States shall, during the periods hereinbefore specified, recommend authorization of any water resources project on any such river or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture in writing of its intention so to do at least sixty days in advance of doing so and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would affect the component and the values to be protected by it under this Act.

(c) The Federal Power Commission and all other Federal agencies shall, promptly upon enactment of this Act, inform the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, of any proceedings, studies, or other activities within their jurisdiction which are now in progress and which affect or may affect any of the rivers specified in section 5, subsection (a), of this Act. They shall likewise inform him of any such proceedings, studies, or other activities which are hereafter commenced or resumed before they are commenced or resumed.

(d) Nothing in this section with respect to the making of a loan or grant shall apply to grants made under the Land and Water Conservation Act of 1965 (78 Stat. 897; 16 U.S.C. 4601-5 et seq.).

SEC. 8. (a) All public lands within the authorized boundaries of any component of the national wild and scenic rivers system which is designated in section 3 of this Act or which is hereafter designated for inclusion in that system are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States. This subsection shall not be construed to limit the authorities granted in section 6(d) or 14A of this Act.

(b) All public lands which constitute the bed or bank, or are within one-quarter mile of the bank, of any river which is listed in section 5, subsection (a), of this Act are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States for the periods specified in section 7, subsection (b), of this Act....

SEC. 9. (a) Nothing in this Act shall affect the applicability of the United States mining and mineral leasing laws within components of the national wild and scenic rivers system except that --

(i) all prospecting, mining operations, and other activities on mining claims which, in the case of a component of the system designated in section 3 of this Act, have not heretofore been perfected or which, in the case of a component hereafter designated pursuant to this Act or any other Act of Congress, are not perfected before its inclusion in the system and all mining operations and other activities under a mineral lease, license,or permit issued or renewed after inclusion of a component in the system shall be subject to such regulations as the Secretary of the Interior or, in the case of national forest lands, the Secretary of Agriculture may prescribe to effectuate the purposes of this Act;

(ii) subject to valid existing rights, the perfection of, or issuance of a patent to, any mining claim affecting lands within the system shall confer or convey a right or title only to the mineral deposits and such rights only to the use of the surface and the surface resources as are reasonably required to carrying on prospecting or mining operations and are consistent with such regulations as may be prescribed by the Secretary of the Interior or, in the case of national forest lands, by the Secretary of Agriculture; and

(iii) subject to valid existing rights, the minerals in Federal lands which are part of the system and constitute the bed or bank or are situated within one-quarter mile of the bank of any river designated a wild river under this Act or any subsequent Act are hereby withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto.

Regulations issued pursuant to paragraphs (i) and (ii) of this subsection shall, among other things, provide safeguards against pollution of the river involved and unnecessary impairment of the scenery within the components in question.

(b) The minerals in any Federal lands which constitute the bed or bank or are situated within one-quarter mile of the bank of any river which is listed in section 5, subsection (a) of this Act are hereby withdrawn from all forms of appropriation under the mining laws during the periods specified in section 7, subsection (b) of this Act. Nothing contained in this subsection shall be construed to forbid prospecting or the issuance of leases, licenses, and permits under the mineral leasing laws subject to such conditions as the Secretary of the Interior and, in the case of national forest lands, the Secretary of Agriculture find appropriate to safeguard the area in the event it is subsequently included in the system....

SEC. 10 (a) Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

(b) Any portion of a component of the national wild and scenic rivers system that is within the national wilderness preservation system, as established by or pursuant to the Act of September 3, 1964 (78 Stat. 890; 16 U.S.C., ch. 23), shall be subject to the provision of both the Wilderness Act and this Act with respect to preservation of such river and its immediate environment, and in case of conflict between the provisions of these Acts the more restrictive provisions shall apply.

(c) Any component of the national wild and scenic rivers system that is administered by the Secretary of the Interior through the National Park Service shall become a part of the national park system, and any such component that is administered by the Secretary through the Fish and Wildlife Service shall become a part of the national wildlife refuge system. The lands involved shall be subject to the provisions of this Act and the Acts under which the national park system or national wildlife refuge system, as the case may be, is administered, and in the case of conflict between the provisions of these Acts, the more restrictive provisions shall apply. The Secretary of the Interior, in his administration of any component of the national wild and scenic rivers system, may utilize such general statutory authorities relating to areas of the national park system and such general statutory authorities otherwise available to him for recreation and preservation

purposes and for the conservation and management of natural resources as he deems appropriate to carry out the purposes of this Act.

(d) The Secretary of Agriculture, in his administration of any component of the national wild and scenic rivers system area, may utilize the general statutory authorities relating to the national forest in such manner as he deems appropriate to carry out the purposes of this Act.

(e) The Federal agency charged with the administration of any component of the national wild and scenic rivers system may enter into written cooperative agreements with the Governor of a State, the head of any State agency, or the appropriate official of a political subdivision of a State for State or local governmental participation in the administration of the component. The States and their political subdivisions shall be encouraged to cooperate in the planning and administration of components of the system which include or adjoin State- or County-owned lands.

SEC. 11. (a) The Secretary of the Interior shall encourage and assist the States to consider, in formulating and carrying out their comprehensive statewide outdoor recreation plans and proposals for financing assistance for State and local projects submitted pursuant to the Land and Water Conservation Fund Act of 1965 (78 Stat. 897), needs and opportunities for establishing State and local wild, scenic and recreational river areas.

(b) (1) The Secretary of the Interior, the Secretary of Agriculture, or the head of any Federal agency, shall assist, advise, and cooperate with States or their political subdivisions, landowners, private organizations, or individuals to plan, protect, and manage river resources. Such assistance, advice, and cooperation may be through written agreements or otherwise. This authority applies within or outside a federally administered area and applies to rivers which are components of the Wild and Scenic Rivers System and to other rivers. Any agreement under this section may include provisions for limited financial or other assistance to encourage participation in the acquisition, protection and management of river resources.

(2) Whenever appropriate in furtherance of this Act, the Secretary of Agriculture and the Secretary of the Interior are authorized and encouraged to utilize the following:

(A) For activities on federally owned land, the Volunteers in the Parks Act of 1969 (16 U.S.C. 18g-j) and the Volunteers in the Forest Act of 1972 (16 U.S.C. 558a-558d).

(B) For activities on all other lands, section 6 of the Land and Water Conservation Fund Act of 1965 (relating to the development of statewide comprehensive outdoor recreation plans).

(3) For purposes of this subsection, the appropriate Secretary or the head of any Federal agency may utilize and make available Federal facilities, equipment, tools, and technical assistance to volunteers and volunteer organizations, subject to such limitations and restrictions as the appropriate Secretary or the head of any Federal agency deem necessary or desirable.

(4) No permit or other authorization provided for under provision of any other Federal law shall be conditioned on the existence of any agreement provided for in this section.

SEC. 12 (a) The Secretary of the Interior, the Secretary of Agriculture, and the head of any other Federal department or agency having jurisdiction over any lands which include, border upon, or are adjacent to, any river included within the National Wild and Scenic Rivers System or under consideration for such inclusion in accordance with section 2(a)(ii), 3(a), or 5(a), shall take such action respecting management policies, regulations, contracts, plans, affecting such lands, following the date of enactment of this sentence, as may be necessary to protect such rivers in accordance with the purposes of this Act. Such Secretary or other department or agency head shall, where appropriate, enter into written cooperative agreements with the appropriate State or local official for the planning, administration, and management of Federal lands which are within the boundaries of any rivers which approval has been granted under section 2(a)(ii). Particular attention shall be given to scheduled timber harvesting, road construction, and similar activities which might be contrary to the purposes of this Act.

(b) Nothing in this section shall be construed to abrogate any existing rights, privileges, or contracts affecting Federal lands held by any private party without the consent of said party.

(c) The head of any agency administering a component of the national wild and scenic rivers system shall cooperate with the Administrator, Environmental Protection Agency and with the appropriate State water pollution control agencies for the purpose of eliminating or diminishing the pollution of waters of the river.

SEC. 13 (a) Nothing in this Act shall affect the jurisdiction or responsibilities of the States with respect to fish and wildlife. Hunting and fishing shall be permitted on lands and waters administered as parts of the system under applicable State and Federal laws and regulations unless, in the case of hunting, those lands or waters are within a national park or monument. The administering Secretary may, however, designate zones where, and establish periods when, no hunting is permitted for reasons of public safety, administration, or public use and enjoyment and shall issue appropriate regulations after consultation with the wildlife agency of the State or States affected.

(b) The jurisdiction of the States and the United States over waters of any stream included in a national wild, scenic or recreational river area shall be determined by established principles of law. Under the provisions of this Act, any taking by the United States of a water right which is vested under either State or Federal law at the time such river is included in the national wild and scenic rivers system shall entitle the owner thereof to just compensation. Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

(c) Designation of any stream or portion thereof as a national wild, scenic or recreational river area shall not be construed as a reservation of the waters of such streams for purposes other than those specified in this Act, or in quanitites greater than necessary to accomplish these purposes.

(d) The jurisdiction of the States over waters of any stream included in a national wild, scenic or recreational river area shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purposes of this Act or its administration.

(e) Nothing contained in this Act shall be construed to alter, amend, repeal, interpret, modify, or be in conflict with any interstate compact made by any States which contain any portion of the national wild and scenic rivers system.

(f) Nothing in this Act shall affect existing rights of any State, including the right of access, with respect to the beds of navigable streams, tributaries, or rivers (or segments thereof) located in a national wild, scenic or recreational river area.

(g) The Secretary of the Interior or the Secretary of Agriculture, as the case may be, may grant easements and right-of-way upon, over, under, across, or through any component of the national wild and scenic rivers system in accordance with the laws applicable to the national park system and the national forest system, respectively: Provided, That any conditions precedent to granting such easements and rights-of-way shall be related to the policy and purpose of this Act.

SEC. 14 (a) The claim and allowance of the value of an easement as a charitable contribution under section 170 and title 26, United States Code, or as a gift under section 2522 of said title shall constitute an agreement by the donor on behalf of himself, his heirs, and assigns that, if the terms of the instrument creating the easement are violated, the donee or the United States may acquire the servient estate of its fair market value as of the time the easement was donated minus the value of the easement claimed and allowed as a charitable contribution or gift.

SEC. 14A. (a) Where appropriate in the discretion of the Secretary, he may lease federally owned land (or any interest therein) which is within the boundaries of any component of the National Wild and Scenic Rivers system and which has been acquired by the Secretary under this Act. Such lease shall be subject to such restrictive covenants as may be necessary to carry out the purposes of this Act.

(b) Any land to be leased by the Secretary under this section shall be offered first for such lease to the person who owned such land immediately before its acquisition by the United States.

SEC. 15...*(applies to components of NW & S Rivers Alaska)*

SEC. 16. As used in this Act, the term--

(a) "River" means a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, creeks, runs, kills, rills, and small lakes.

(b)"Free-flowing," as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway.

The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: *Provided*, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.

(c) "Scenic easement" means the right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the wild and scenic rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area, but such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement. For any designated wild and scenic river, the appropriate Secretary shall treat the acquisition of fee title with the reservation of regular existing uses to the owner as a scenic easement for the purposes of this Act. Such an aqcuisition shall not constitute fee title ownership for purposes of section 6(b).

SEC. 17....*(Appropriation language for specific rivers)*>

Selected Laws Amending or Related to the Wild and Scenic Rivers Act:

92-560
93-621
94-199
94-486
95-87
96-312
96-487
99-590
99-663
100-33
100-150
100-412
100-552
100-534
100-557
100-605
100-633
100-677
101-175
101-612
101-628

Appendix B

RESOURCE ASSESSMENT

Eagle Creek
National Wild and Scenic River

USDA - Forest Service
Wallowa-Whitman National Forest

Prepared by: /s/ Robin G. Rose
Robin Rose, W&SR Team Member

Date: 9/13/90

Approved by: /s/ Susan Skalski, acting for
H. Woody Fine, W&SR Team Leader

Date: 9/13/90

Table of Contents

			Page
I.	Executive Summary		1
II.	Introduction		1
III.	Resource Assessment Process		1
IV.	River Description		3
V.	Discussion of Values:		3
		Scenic	3
		Recreational	5
		Geologic/Paleontological	6
		Vegetation/Ecological	7
		Fisheries	9
		Wildlife	11
		Historic	12
		Prehistoric	13
		Traditional Use, Cultural Values	14
Appendix A	Scorp Planning Map - NE Region		15
Appendix B	Eagle Creek Corridor Location Map		16

EAGLE CREEK
NATIONAL WILD AND SCENIC RIVER

I. EXECUTIVE SUMMARY

As a result of the Omnibus Oregon Wild and Scenic Rivers Act of 1988, a segment of Eagle Creek, tributary of the Powder River in Northeast Oregon, was designated as a Wild and Scenic River (W&SR). Under this Act the Forest Service is required to prepare a comprehensive management plan to provide protection of the river values of Eagle Creek. This resource assessment is being done to identify the river values that are outstandingly remarkable and not addressed in the legislative history, verify the Congressionally-named values, and determine significance of values not identified as outstandingly remarkable. The resource assessment will also serve as the basis for interim management until the completion of the Eagle Creek Wild and Scenic River Management Plan.

On August 1, 1990, a draft resource assessment was sent to the public, including other agencies and subject area experts, for review and comment. The preliminary findings of the Forest Service interdisciplinary team determined the following resources of Eagle Creek to be outstandingly remarkable values: scenery, recreation, geology, fisheries (habitat), and cultural resources (historic). As a result of our review of public and other agency comments, several changes were made in the resource assessment document. A section was added to discuss vegetation/ecology as a separate resource value, and minor changes and additions have been made in the discussion of fisheries and wildlife values. The following resources of Eagle Creek are considered to be outstandingly remarkable values: Scenery, Recreation, Geology, Fisheries (Habitat), and Cultural Resources (Historic).

II. INTRODUCTION

In 1968, Congress enacted the National Wild and Scenic Rivers Act, and for the first time, established a system for preserving outstanding free-flowing rivers. Eagle Creek was added to this system in 1988 when it was designated as a National Wild and Scenic River by the Omnibus Oregon Wild and Scenic Rivers Act of 1988. As defined by the Act, a National Wild and Scenic River must be free-flowing and have at least one outstandingly remarkable value. The "outstandingly remarkable values" of Eagle Creek identified in the Congressional Record include: scenery, recreation, and geology.

Under the Wild and Scenic Rivers Act, the Forest Service is required to prepare a comprehensive river plan to provide for the protection and/or enhancement of the river values. This river planning process, of which the resource assessment is one step, will comply with the National Environmental Policy Act (NEPA) planning regulations. Through each phase of the planning process, public involvement will be invited, and will be essential for the success of a sound management plan.

III. INTRODUCTION TO THE RESOURCE ASSESSMENT PROCESS

This resource assessment serves as the foundation of the river management planning process. The assessment documents the determination of which river related values or features are outstandingly remarkable or contribute substantially to the river setting or to the functioning of the river ecosystem.

The resource assessment process provides a standardized approach to evaluation of resource values of designated Wild and Scenic Rivers. This assessment will guide interim management, development of the management plan, and determination of boundaries.[1]

Although the determination of value significance is a matter of informed professional judgment and interpretation, this process includes the following steps or verification techniques:

- The use of an interdisciplinary team approach
- Consideration of uniqueness and rarity at a regional and national level[2]
- Values must be river related in that they owe their existence or contribute to the functioning of the river system and its environs.
- The use of qualitative guidelines to help determine significance
- Verification by other experts in the subject area.

The resource value categories that have been considered include:

Scenic

Recreational

Geologic/Paleontologic

Vegetation/Ecological

Fisheries

Wildlife

Historic

Prehistoric

Traditional Use, Cultural Values

Other River-Related Resource Values

[1]The Rationale and full methodology for determining ōutstandingly remarkable values is found in a letter from Regional Forester John F. Butruille to Forest Supervisors, dated March 9, 1990.

[2]Based primarily upon the eight geographic regions in the 1989 Statewide Comprehensive Outdoor Recreation Plan for Oregon. See NE Region Scorp Planning Map, Appendix A.

IV. RIVER DESCRIPTION

The Omnibus Oregon Wild and Scenic Rivers Act of 1988 designated 27 miles of Eagle Creek from its headwaters below Eagle Lake in the Eagle Cap Wilderness to the National Forest boundary near Skull Creek approximately 8 miles north of the town of Richland, Oregon. It was classified into the following four segments:

Segment A — WILD RIVER: The 4.0-mile segment from its headwaters below Eagle Lake in the Eagle Cap Wilderness to the Wilderness boundary approximately 1.5 miles north of Main Eagle trailhead.

Segment B — RECREATIONAL RIVER: The 15.5-mile segment from the Eagle Cap Wilderness boundary to Paddy Creek.

Segment C — SCENIC RIVER: The 6.0-mile segment from Paddy Creek to Little Eagle Creek.

Segment D — RECREATIONAL RIVER: The 1.5-mile segment from Little Eagle Creek to the Wallowa-Whitman National Forest boundary near Skull Creek.

For the purposes of interim management, the Forest Service, as the lead agency, established a corridor width of 1/4-mile on either side of the river. The interim boundary map included in Appendix B, shows private and federal landownership. The final corridor boundary will be determined during the Wild and Scenic Rivers management plan development.

V. SPECIFIC DESCRIPTION OF VALUES

SCENIC

Criteria for Outstandingly Remarkable Rating

The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions within the geographic region. When analyzing scenic values, additional factors such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment length and not common to other rivers in the geographic region.

Evaluation of the Present Situation

The diversity of landforms, water, color, and vegetation present throughout the designated portion of Eagle Creek is one of the most attractive attributes of the river corridor. The headwaters originate high in a glacial cirque in the Eagle Cap Wilderness. From its beginning at the outlet of Eagle Lake, the creek follows a steep gradient over small waterfalls and bouldery white water rapids as it descends from the mountains. Vegetation in the classic u-shaped glacial valley alternates between high mountain meadows and stands of sub-alpine fir and whitebark pine. Expansive views of the surrounding Wallowa mountains are afforded from every meadow opening. Numerous avalanche chutes, landslides, waterfalls, and scoured rock outcrops create a highly diverse and dynamic landscape that vies for attention with the crystal clear creek.

The valley floor becomes relatively flat and wide at Main Eagle trailhead, and for the next five miles Eagle Creek temporarily slows in its rapid descent from the high mountains. Clear blue-green pools alternate with rapids as the creek winds its way through lush green, boulder-strewn meadows and park-like forests. Vegetation and canyon walls generally limit views to the immediate foreground except for the breathtaking views of the mountains seen from the northern end of the road.

Eagle Creek leaves a landscape dominated by glacial features below its confluence with West Eagle Creek. For approximately the next 10 miles, the valley closes in and canyon walls become abruptly steep, towering 500-1000' above the valley floor in places. Eagle Creek resumes its fast-moving, bouldery descent through the narrow canyon, bordered by lush riparian vegetation and picturesque meadows. Dramatic rock formations extending from rim to canyon floor punctuate otherwise forested hillsides. The road paralleling Eagle Creek offers unrestricted views of the creek in the immediate foreground and surrounding hillsides.

The lower seven miles of the designated portion of Eagle Creek takes on a character more typical of eastern Oregon rivers as it enters the lower elevation basalt-dominated plateaus surrounding the Wallowa Mountains. Mixed conifer forests are replaced on drier slopes by grassy openings and park-like stands of ponderosa pine. Unusual rock formations provide visual contrast. By this time Eagle Creek has become substantial in size from the contributions of several major tributaries, and alternates between bouldery rapids, short waterfalls, smooth swift stretches, and deep blue pools. Visitors can enjoy views of the creek and canyon from the Martin Bridge trail which parallels the six-mile scenic segment of Eagle Creek, and from road #7735 which parallels the lower 1-1/2 mile recreational segment.

Throughout the corridor, seasonally abundant wildflowers color the streambanks, cliffs, and forest floor with splashes of red, purple, yellow, white and blue in the spring and summer. Deciduous vegetation including cottonwood, aspen, ninebark, and bracken fern provide attractive contrasting fall colors. Western larch provide a dramatic color contrast in the forest in the late fall as they turn golden, and in the springtime as the new green needles emerge. Picturesque stands of ponderosa pines and other large diameter trees can be seen in places throughout the corridor, including several designated old growth stands.

Human impacts in the Eagle Creek corridor are fairly limited and generally remain subordinate in the landscape. They include several dozen rustic-appearing cabins and mine structures on private land, the road and a few road and trail bridges, a historic guard station/work center, and several small campgrounds and trailheads. Numerous dispersed campsites are visible along the banks of the creek. Some incidental, light timber harvest has occurred on the private lands in the past, and several National Forest timber sales have been conducted partially within or adjacent to the corridor; however, these activities are virtually imperceptible from the river. Probably the most noticeable human impact along Eagle Creek are the road cuts and fill slopes which are occasionally visible from the river. In spite of the continuing interest Eagle Creek has received since before the turn of the century, the river corridor still presents an overall natural and pleasing landscape to viewers. In fact, the outstanding and unaltered scenery of Eagle Creek attracted the attention of movie producers, who used the area as a filming location for "Paint Your Wagon."

Finding

The designated portion of Eagle Creek possesses a great deal of diversity in landform, water, color, and vegetation, notable in the geographic region. Some of the attractions that combine to create Eagle Creek's scenic beauty are the glaciated landscape of the upper portion, the steep forested canyon with numerous rock pinnacles in the middle

portion, and the terraced basalt canyon of the lower portion. In addition, there is the diversity of vegetation, including lush meadows, mixed-conifer and ponderosa pine forests, and grassy openings; and the variety of the stream's rapids, waterfalls, and deep pools. Even though the Eagle Creek drainage has been a focus of human interest since the turn of the century, visual impacts due to human modifications are relatively minor, and the drainage still presents an overall natural landscape pleasing to forest visitors. The preliminary finding agrees with Congress that scenery in the Eagle Creek corridor is an outstandingly remarkable river value.

RECREATIONAL

Criteria for Outstandingly Remarkable Rating

Recreational opportunities are, or have the potential to be, unique enough to attract visitors from outside of the geographic region. Visitors would be willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but not be limited to, sightseeing, wildlife observation, photography, hiking, fishing, hunting, and boating.

Interpretive opportunities may be exceptional and attract or have the potential to attract visitors from outside the geographic region.

The river may provide or have the potential to provide settings for national or regional usage or competitive events.

Evaluation of the Present Situation

The Eagle Creek corridor provides a wide variety of recreational opportunities. Based on field observations and use records, Eagle Creek receives a considerable amount of use beginning as soon as the snow melts in the spring and continues into the late fall hunting season(s). A large portion of the visitors are from the local area, although some visitors come great distances to recreate in the Eagle Creek drainage, drawn by the exceptional scenery, excellent fishing, clean water, and the broad range of recreational opportunities available.

Visitors travel to the area primarily to fish, hunt, camp, sightsee, hike, picnic, or try their hand at panning for gold. Dispersed camping associated with fishing, hunting, and prospecting is by far the heaviest use, evidenced by the numerous dispersed campsites within the corridor. Other recreation opportunities in the drainage include horseback riding, photography, nature study, swimming, wildlife viewing, berry and mushroom picking, and various winter sports such as cross country skiing and snowmobiling. Hazardous whitewater, waterfalls, and low seasonal flows preclude floating or kayaking opportunities. The Main Eagle Trailhead serves as the major south side access route into the Eagle Cap Wilderness for visitors pursuing solitude and wilderness recreation opportunities.

The entire designated portion of river is accessible by either gravel road or trail. Good quality gravel roads parallel the recreational segments of the river. Main Eagle Trail #1922, a wilderness trail that parallels the wild river segment for four miles, provides access to the headwaters at Eagle Lake and connects with several other trails in the Wilderness. The unroaded six-mile segment of Eagle Creek is paralleled by the Martin Bridge trail #1878, providing anglers, hikers, and hunters access from early spring to late fall. Several other trails which begin in the vicinity of Two Color Guard Station provide access to the surrounding foothills that are adjacent to the W&SR corridor. A portion of the river road is part of a popular maintained snowmobile route during the winter months.

Recreation developments in the corridor are fairly limited and generally primitive in design. Eagle Forks, Tamarack, and Two Color Campgrounds provide a developed camping experience in a primitive setting. Dozens of dispersed camping areas in the river corridor receive heavy use, providing a base for summer and fall recreational pursuits. Additional dispersed campsites are available nearby in the West Eagle and East Eagle drainages. The Main Eagle Trailhead (formerly called Boulder Park) has recently been reconstructed to add limited campsites, and to improve the toilets, stock facilities, vehicle turnaround, viewpoint access, and long-term parking. Other trailheads in the corridor, Martin Bridge, Fake Creek, and Two Color, are minimally developed and generally have only signs and parking.

A variety of recreational improvements have been suggested for the designated corridor. One project under consideration involves installing improved facilities at Tamarack Campground to provide fishing access and camping opportunities for physically-challenged visitors and their families. Future improvements of Main Eagle Trailhead are being considered to provide adequate stock loading and camping facilities, and to install interpretive signing at the viewpoint overlooking the natural landslide which occurred on the east side of Eagle Creek in 1983 (see Geologic section, page 10). There are outstanding opportunities to interpret the area's rich natural and cultural history that could potentially attract visitors from outside the geographic region and enhance their recreational experiences.

Finding

The quality and diversity of recreational opportunities available along the Eagle Creek corridor makes it a popular area almost year-round. There are exceptional opportunities to develop interpretive sites or tours to explain the area's unique natural and cultural history. Interpretation of the area's gold mining history could be developed to compliment the other nearby historic sites such as the Oregon Trail Interpretive Center, potentially attracting visitors from outside the geographic region. The preliminary finding agrees with the outstandingly remarkable value determination made by Congress of the recreational resource.

GEOLOGIC/PALEONTOLOGICAL

Criteria for Outstandingly Remarkable Rating

The river or the area within the river corridor contains an example(s) of a geologic feature, process, or phenomena that is rare, unusual, one-of-a-kind, or unique to the geographic region. The feature(s) may be in an unusually active stage of development, represent a "textbook" example and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, and other geologic structures.)

Evaluation of the Present Situation

Eagle Creek begins high in the southern Wallowa Mountains, an area with a complex geologic record. The granitic Wallowa batholith dominates in the upper Eagle Creek drainage. The Wallowa Mountains were glaciated at least three times and perhaps as many as seven times between 11,000 and 500,000 years ago. The numerous cirque lakes, steep ridges, and craggy peaks in the upper Eagle Creek drainage were created by the sculpting of valley glaciers flowing out from a central point near Eagle Cap Mountain. Visible in the upper and middle reaches of the Eagle Creek drainage are metamorphosed greenstones and tuffs, sedimentary rocks of the Clover Creek formation, fossiliferous limestones of the Martin Bridge formation (known locally as black marble), and slates, shales, and sandstones of the Hurwal Formation. The three formations represent ancient sea floor sediments formed

about 100 million years ago. The rock pinnacles just south of Paddy Creek are limestone spires of the Martin Bridge formation. Widespread volcanism occurred 15-30 million years ago, which resulted in the formation of basalt plateaus surrounding the Wallowa Mountains uplift. The lower end of the scenic and the recreational portion of Eagle Creek is dominated by columnar-jointed olivine basalts of the Columbia River Basalt Group. Feeder dikes from some of the local eruptions can be seen exposed in the older rocks and in the glacially carved granites in the upper glaciated reaches of Eagle Creek.

As is typical throughout the Wallowa Mountains, the river valley is geologically unstable. Freezing and thawing contribute to periodic rockslides along cliffs in the drainage, with a recent occurrence evident the northeast of the Main Eagle trailhead. Occurring in 1983, this substantial slide brought down large amounts of rock and soil from a height of about 1,000 feet, crossing and temporarily blocking the stream, and ultimately coming to rest on the opposite side of the valley in the immediate vicinity of the old trailhead. The trailhead has since been relocated downriver approximately 1/4 of a mile to a more stable area. The new turnaround at the trailhead offers an excellent vantage point to view this impressive natural landslide.

The ancient sea floor sediment formations found in the Eagle Creek drainage contain the silicified shells of oyster-like bivalves, and fragments of corals and sponges. At least one significant paleontological discovery has been made in the corridor in the recent past. The oldest vertebrate fossil to be discovered in Oregon was found in the Eagle Creek corridor, which pushed back the known geologic record of vertebrate animals in the state by 50 million years. The corridor continues to be a focus of interest for paleontology field classes and scientific research.

Eagle Creek flows through the border zone of the Wallowa batholith, which in places has been mineralized and contains deposits of gold, silver, and copper. The erosion of these mineral-bearing rocks has resulted in the deposition of placer gold in the alluvial benches and stream gravels of Eagle Creek and its tributaries. Much of the early interest in Eagle Creek was related to gold. Since the discovery of gold in the region around 1860, at least 10 properties have been worked in the Eagle Creek mining district, a large area encompassing the Eagle Creek drainage and its tributaries. Production from other lode deposits in the mining district has been small. Today, gold mining is a well-established activity in the Eagle Creek corridor, and a majority of the drainage is currently under claim. Other minerals such as silver, copper, lead, and zinc have also been produced in small quantities.

Finding

The variety of rare and exemplary geologic features in the corridor, particularly in the upper reaches of Eagle Creek, and the opportunities for paleontological research and interpretation merit the recognition of geology as an outstandingly remarkable value. This preliminary finding agrees with the determination made by Congress for Eagle Creek.

VEGETATION/ECOLOGICAL

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains nationally or regionally important populations of indigenous plant species. Of particular significance are species considered to be unique or populations of federally listed or candidate threatened and endangered species.

When analyzing vegetation, additional factors such as diversity of species, number of plant communities, and cultural importance of plants may be considered.

Evaluation of the Present Situation

There is a wide variety of vegetation and plant communities found in the Eagle Creek corridor. This is due to the large elevational gradient between the headwaters and the lower boundary of the designated corridor, an elevation change of nearly 4600 feet. A significant representation of the plant communities of the Wallowa-Snake Province may be found in the corridor.

Eagle Creek begins at the outlet of Eagle Lake high in the Wallowa Mountains, and for the first four miles travels through the Eagle Cap Wilderness. Ecosystems are relatively undisturbed and natural processes dominate within this undeveloped river reach. At 7600 feet, the lake is nearly at timberline, and is dominated by wet and dry meadows of sedge, rush, alpine grass, and heather. Stringers of whitebark pine and subalpine fir reach these elevations. As the stream progresses down the valley from the headwaters to the Wilderness boundary, the true subalpine forests of whitebark pine, subalpine fir, and heathers gradually change to high elevation forests of Englemann spruce, subalpine fir, and grouse huckleberry. Forests are interspersed with shrubs and brushfields in the unstable snow chutes, mountain mahogany and sagebrush communities on the drier south and east facing slopes of the drainage, and wet meadows in the valley bottom. Further downstream, mixed conifer forests of grand fir, Douglas-fir, and ponderosa pine become more dominant, and cottonwood, aspen, and alder grow in the riparian areas fringing the riparian meadow openings.

The next seven miles, from the Wilderness boundary to the confluence of West Eagle Creek, is also a relatively undeveloped river reach. Grand fir, Douglas-fir, ponderosa pine, Englemann spruce, and western larch are the major tree species adjacent to Eagle Creek and on the moister, more favorable sites. The canyon slopes are typified by stringers of trees adjacent to rock outcrops and grassy openings on the drier sites. Ponderosa pine and Douglas-fir are the predominate tree species on southerly aspects. Moist and wet meadows fringed by deciduous trees are found adjacent to the creek. Disturbances to the riparian area are limited to dispersed campsites and spur roads along this stretch, and the road is located several hundred yards upslope and away from the river.

As the river continues to lose elevation as it progresses down the canyon, the mixed conifer forests become drier, and the open grassy slopes become more prevalent. Ponderosa pine, Douglas-fir, and western larch are the major tree species. Deciduous trees and riparian meadows are found along the creek bottom. The extent and condition of the riparian communities has been affected somewhat by the road that parallels the east bank of Eagle Creek. Continuing recreational use of the streamside meadows for camping, fishing, and picnicking also has some affect on the riparian communities.

There are ten stands of designated old growth forest that occur partially or wholly within the portion of the Eagle Creek corridor outside of the Eagle Cap Wilderness. Predominantly ponderosa pine stands, the overstory is often scattered and trees average over 40" in diameter. The open areas have a grass stand of predominantly bluebunch wheatgrass and pine grass. Associated tree species often include aspen and poplar along the Creek.

The corridor has not been extensively surveyed for the presence of unique plants. Of the surveys completed, no plants have been found within the Wild and Scenic River corridor which are classified as threatened, endangered, or sensitive by the U.S. Fish and Wildlife Service. Several populations of Bridge's cliffbrake (Pallaea bridgesii), on the U.S. Forest Service Region 6 Regional Forester's Sensitive Plant List, have been documented in the

upper portion of the corridor. Threats to this species, which is found on granitic, talus slopes in this and several other drainages, are thought to be minimal. Prior to any potential ground disturbing activities within the Wild and Scenic River corridor, surveys for threatened, endangered, or sensitive plant species will be conducted (FSM 2670.31).

Finding

While the diversity of plant species and the number of plant communities found in the Eagle Creek corridor is notable, due primarily to the elevational change from the headwaters to the end of the W&SR corridor, it is fairly typical of other rivers in the region (Scorp Region 12). Therefore, vegetation and ecologic values were not found to be outstandingly remarkable within the Eagle Creek corridor. Some of the important values identified include:

* **reported sightings within the corridor of Bridge's cliffbrake (Pallaea bridgesii), a plant listed as sensitive on the Regional Forester's Sensitive Plant List.**
* **the ten designated old growth stands that occur partially or wholly within the W&SR corridor.**

FISHERIES

Criteria for Outstandingly Remarkable Rating

Fish values may be judged on the relative merits of either fish populations or habitat - or a combination of these river-related conditions:

Populations. *The river is nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or threatened and endangered species.*

Habitat. *The river provides exceptionally high quality habitat for fish species indigenous to the region. Of particular significance is habitat for wild stocks and/or federally listed or candidate threatened and endangered species.*

Evaluation of the Present Situation

Populations

Eagle Creek supports populations of native and stocked rainbow trout, eastern brook trout, bull trout, and non-game species including mountain whitefish, and sculpin. Fishing for both native and stocked trout is a popular recreational activity in Eagle Creek. The Oregon Department of Fish and Wildlife (ODFW) currently stocks the creek with approximately 9,000 rainbow trout annually from mid-June through mid-August. Bull trout (*Salvelinus confluentus*) is listed on the Regional Forester's Sensitive Species List, and is listed as a candidate threatened and endangered species (Category 2) species by the U.S. Fish and Wildlife Service (USFWS). Historically, bull trout populations had a wide distribution in Oregon, but many populations are extinct or near extinction. The existence of bull trout in Eagle Creek has been documented; however, the extent and viability of bull trout population in Eagle Creek is unknown at this time. Eagle Creek provides the specific habitat requirements for bull trout, which are dependent on cold, high quality water.

Prior to the construction of Hells Canyon Dam on the Snake River, Eagle Creek had abundant populations of a variety of anadromous and resident game fish. Eagle Creek was regularly

visited and fished by members of several Native American tribes historically, and although anadromous fish are now extinct in Eagle Creek, Native Americans still travel to the area to fish and camp. Long-time local residents still can recall the excellent fishing Eagle Creek once provided. Construction of three hydroelectric dams on the Snake River eliminated the anadromous fish runs in Eagle Creek; however, ODFW has considered establishing a downstream hatchery at some time in the future with the purpose of reintroducing chinook salmon to the drainage.

Habitat

Habitat for fish is of generally good to high quality despite a variety of factors which have locally affected habitat conditions. Starting as early as the 1860's, a variety of activities have occurred within the corridor which have generally decreased the quality of habitat and affected populations, including road construction, mining, timber harvest, and grazing of sheep and cattle.

The natural flow regime of the designated section has been slightly altered by minor diversions and small irrigation dams on several high mountain lakes at the headwaters of Eagle Creek and tributaries. This near natural flow regime is notable for a watershed of this size in the western states (195 square miles). The stream follows a steep gradient in the upper five miles, losing an average of 432 feet per mile, and an average of 113 feet per mile over the rest of the W&SR corridor. The waters of Eagle Creek are highly-oxygenated, cold and clear, and water quality is excellent, due in part to the undeveloped upper 11 miles, and to undeveloped tributary reaches, which begin mostly within the Eagle Cap Wilderness.

Habitat conditions in the upper reaches of Eagle Creek within the Wilderness are excellent, and have been minimally impacted by the low dam at the outlet of Eagle Lake (headwaters of Eagle Creek), minor trail building, wood removal, and vegetation disturbance due to the development of campsites along the stream banks. This undeveloped river reach is important for providing the high quality, cold water downstream.

The remainder of the river corridor, with the exception of a six-mile unroaded portion, has been altered somewhat by road construction. This has diminished the quality of habitat due to encroachment of road fill, rip-rapping, channel straightening, sediment delivery to the stream, removal of streamside shading vegetation, and removal of in-stream woody debris. Mining activities have a short seasonal impact on water quality by temporarily increasing sediments in the stream. Additionally, portions of this lower reach fall within three active grazing allotments. The riparian zone is considered to be of fair to good quality within allotment boundaries.

Overall, there is good variety of deep pools, glides, and riffles which provide ample spawning, rearing, and holding habitat for native and stocked trout species, and potentially for reintroduced anadromous fish. Relatively moderate disturbance to Eagle Creek's stream bed and banks has occurred; however, good-to-high quality habitat for native and hatchery trout is still present. In additional, Eagle Creek meets the specific habitat requirements for bull trout, a species that is dependent on cold, high quality water.

There is some potential for restoration or improvement of habitat conditions through improved control of activities within the floodplain and riparian area, as well as some potential for improvement of water quality from major tributaries entering the mainstem which would benefit the designated portion of the river.

Finding

Eagle Creek is known for its excellent trout fishing and supports a significant amount of fishing activity throughout the season. Although the diversity of resident and non-game species is typical of other rivers in the region, the importance of the existing good to high quality habitat which supports native trout, including the sensitive bull trout, and potential for supporting reintroduced anadromous fish in the future, qualifies fisheries habitat in Eagle Creek as an outstandingly remarkable value. The excellent water quality and near natural hydrologic regime are important factors contributing to the outstanding fisheries habitat values.

Eagle Creek does not presently contain anadromous fish; however, ODFW has considered establishing a downstream hatchery at some time in the future with the purpose of reintroducing chinook salmon to the drainage. Re-establishing anadromous fish in the future would likely qualify fish populations as a potential outstandingly remarkable value.

WILDLIFE

Criteria for Outstandingly Remarkable Rating

Wildlife values may be judged on the relative merits of either wildlife populations or habitat - or a combination of these conditions.

Populations. *The river or area within the river corridor contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique or populations of federally listed or candidate threatened and endangered species.*

Habitat. *The river or area within the river corridor provides exceptionally high quality habitat for wildlife of national or regional significance, or may provide unique habitat or a critical link in habitat conditions for federally listed or candidate threatened and endangered species. Contiguous habitat conditions are such that the biological needs of the species are met.*

Evaluation of the Present Situation

Populations

Many species of wildlife typical to the region inhabit the area including elk, deer, black bear, cougar, bobcat, beaver, other fur-bearers and small mammals, reptiles, and amphibians. A large variety of birds can be found along Eagle Creek, including goshawks, golden eagles, osprey, pileated woodpeckers, great horned owls, blue and ruffed grouse, and many species of song birds. Although suitable habitat exists for the federally-listed endangered American peregrine falcon (Falco peregrinus anatum) and threatened northern bald eagle (Haliaeetus leucocephalus), and for candidate threatened and endangered species (Category 2) including the Preble's shrew (Sorex preblei) and Blue Mountain cryptochian (Cryptochia neosa), no threatened or endangered animal species are known to inhabit the Eagle Creek drainage. Peregrine falcon sightings have been reported in the drainage, and bald eagles have been sighted below the designated portion of Eagle Creek; however, no nests have been reported in the designated portion of Eagle Creek.

Habitat

Wildlife habitat within the Eagle Creek drainage is varied, ranging from high elevation sub-alpine meadows and forests to low elevation ponderosa pine forests and grasslands. Except for small campsites and light grazing by recreational livestock, wildlife habitat is near pristine in the Wilderness portion of Eagle Creek. Suitable habitat exists for the endangered American peregrine falcon, threatened northern bald eagle, and candidate threatened and endangered Preble's shrew and Blue Mountain cryptochian; however, none of these species are known to inhabit the Eagle Creek drainage. The corridor provides high value elk summer range, and falls within the ODFW Keating elk management unit which supports approximately 500 head of Rocky Mountain elk. Portions of ten designated old-growth stands occur within the 1/4 mile interim boundary below the Wilderness boundary, providing suitable habitat for old-growth dependent species and cavity nesters. While riparian habitat is near pristine in the Wilderness portion of the drainage, the lower Eagle Creek corridor has been somewhat altered by the construction of a gravel road, which reduced the extent of the riparian floodplain and narrowed and straightened the river course. The lower corridor includes portions of three livestock allotments, and the riparian conditions within the allotments are estimated to be fair to good.

Finding

Wildlife was found to be important in the Eagle Creek corridor; however, it was not found to be an outstandingly remarkable value as it is typical of wildlife on other rivers in the region. Some of the important values identified include:

* **reported sightings within the corridor of threatened, endangered, and sensitive species such as the peregrine falcon and bald eagle.**
* **habitat diversity; high quality elk summer habitat; suitable habitat for the bald eagle and peregrine falcon, and candidate threatened and endangered species Preble's shrew and Blue Mountain cryptochian.**
* **potential for interpretation tied to wildlife.**

HISTORIC

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual or one-of-a-kind in the region. A historic site(s) and/or feature(s) in most cases is 50 years old or older. Of particular significance are sites or features listed in, or are eligible for inclusion in, the National Register of Historic Places.

Evaluation of the Present Situation

Many cultural resource sites exist throughout the Eagle Creek corridor, including evidence of Native American use, old mining activity, ranching, and early Forest Service structures.

A number of Native American cultural groups utilized the Eagle Creek drainage during historic times, following the traditional patterns of use that were established prior to the coming of the white man. Members of the Nez Perce, Umatilla, and Cayuse tribes regularly travelled to the area to camp, fish, hunt and gather. Other cultural groups were reported to periodically travel to the area, including the Shoshone Bannock and the Northern Paiute. Little physical evidence of this historic Native American use remains today.

The activity that attracted the greatest number of people into the Eagle Creek corridor historically and in turn had the most significant impact on the land, was the mining of gold and copper ores, beginning in the early 1860's. Every gulch in the Eagle Creek area seemed to hold the gold dream and the creek's water was a much-needed tool. Mining activities modified the landscape that today can be interpreted as historic features. They include mining test holes, adits, tunnels and tailing from hard rock mines; and gravel windrows, backdirt piles and ditches from placer mining activities.

The Eagle Creek corridor and the surrounding area was tied together by a web of wagon roads, stage routes and horse trails. Traversing through a portion of the Eagle Creek corridor, the "Union-Cornucopia Wagon Road" connected the Eagle Creek and Cornucopia mining districts with the county seat in Union, Oregon. Most of the gold from the lode mines in these districts was transported out of the mountains over this route. Among the various stops along the route was the Martin Bridge stage station and toll bridge. Situated on Eagle Creek approximately 1/4 mile northwest of Paddy Creek, Martin Bridge was a welcome stop for early travelers, and included a two story hotel, outbuildings, corrals, and garden plots.

According to a 1913 USFS map, other activities recorded in the area included roads and houses along Eagle Creek, a Ranger cabin, and the "Eagle Creek Electric Power Company" at the mouth of Dixie Creek. This was one of the earliest hydroelectric power plants in the state, with transmission lines extending from the power station south to the Sanger Mine and on to Baker City. Although nothing remains of the old plant, the site is considered a potentially valuable historic resource.

One of the most outstanding historic sites originating within the Eagle Creek corridor is the old Sparta mining ditch. The ditch, hand-dug by Chinese work crews in the early 1870's, transmitted water from Upper Eagle Creek to mines near the town of Sparta 32 miles away. The 300-person crew of excavators dug the ditch in 5 months and 3 days. The Sparta Mining Ditch is an excellent example of civil engineering practices during the 1860's and 1870's, and is eligible for the National Register of Historic Places.

Finding

The settlement of Northeast Oregon is tied to the discovery of gold, and Eagle Creek has much evidence of this history. The Sparta Ditch, eligible for the National Register of Historic Places, is a significant historical feature. Outstanding opportunities exist to interpret a number of features located in fairly close proximity within the corridor. These features qualify historic cultural resources as an outstandingly remarkable value.

PREHISTORIC

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must be rare, one-of-a-kind, have unusual characteristics or exceptional human interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes. Of particular value will be pristine sites that have not been disturbed.

Evaluation of the Present Situation

Written and oral history sources report the use of the Eagle Creek drainage by Native Americans primarily for fishing and hunting purposes. The corridor was periodically and seasonally visited by small groups from several cultural groups, including the Umatilla, Cayuse, Nez Perce, and to a lesser extent by the Northern Paiute and Shoshone Bannock. The Eagle Creek drainage is the boundary between lands ceded by the Confederated Tribes of the Umatilla Indian Reservation (Cayuse, Walla Walla, and Umatilla Tribes) on the west and the Nez Perce Tribe on the east. Surveys on federal land completed to date in the river corridor have identified only a few prehistoric sites.

Finding

Since extensive cultural resource inventories have not been completed in the Eagle Creek corridor, it is undetermined what level of significance prehistoric use had in the corridor. In the meantime, known and discovered sites are protected under existing statutes, regulations and policy. The historic importance in the corridor will maintain the outstandingly remarkable value for cultural resources.

TRADITIONAL USE, CULTURAL VALUES

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains regionally unique location(s) of importance to Indian tribes (religious activities, fishing, hunting, and gathering). Locations may have unusual characteristics or exceptional cultural value being integral to continued pursuit of such activities. Locations may have been associated with treaty rights on ceded lands or activities unprotected by treaty on ceded lands or in traditional territories outside ceded lands.

Evaluation of the Present Situation

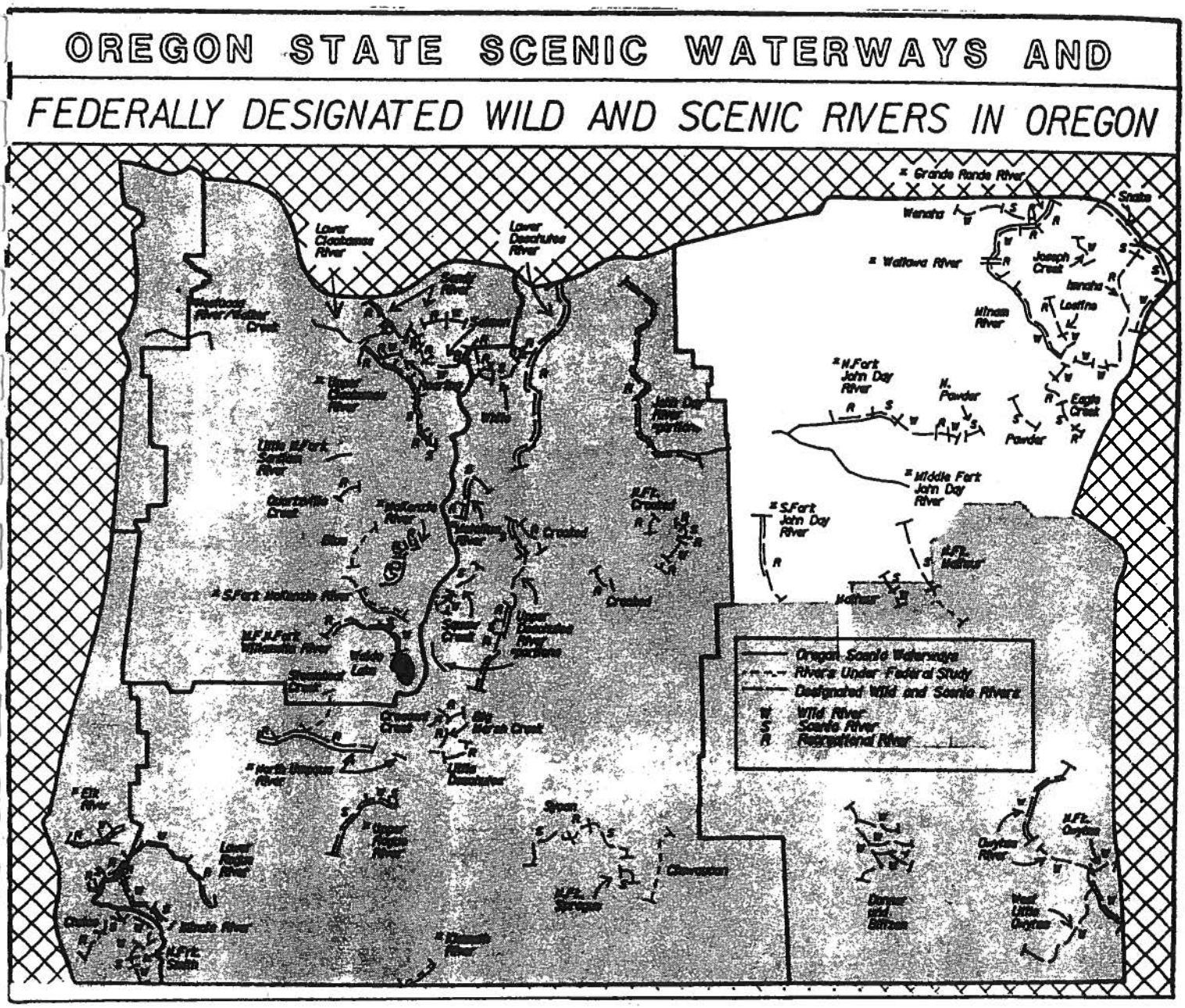
Eagle Creek is the boundary between lands ceded by the Confederated Tribes of the Umatilla Indian Reservation (Cayuse, Walla Walla, and Umatilla Tribes) on the west and the Nez Perce Tribe on the east. As described in historic and prehistoric discussions above, the corridor was regularly visited by small groups from several tribes such as the Umatilla, Cayuse, Nez Perce, Northern Paiute and Shoshone Bannock in historic and prehistoric times. Native Americans from these tribes still travel to the area to hunt, fish, camp, and gather, continuing the traditions taught to them by their elders.

Finding

The Eagle Creek drainage is the dividing line between ceded lands of the Confederated Tribes of the Umatilla Indians (CTUIR) and the Nez Perce Indians and is regularly visited by members of these tribes. Although no regionally unique locations of importance have been reported by the tribes that would qualify this value as outstandingly remarkable, it is recognized that all significant drainages in northeastern Oregon have special cultural value to the CTUIR and Nez Perce tribes. Traditional use and cultural values are found to be important in the Eagle Creek corridor; however, these values were not found to be outstandingly remarkable as they are fairly typical of other rivers in the region.

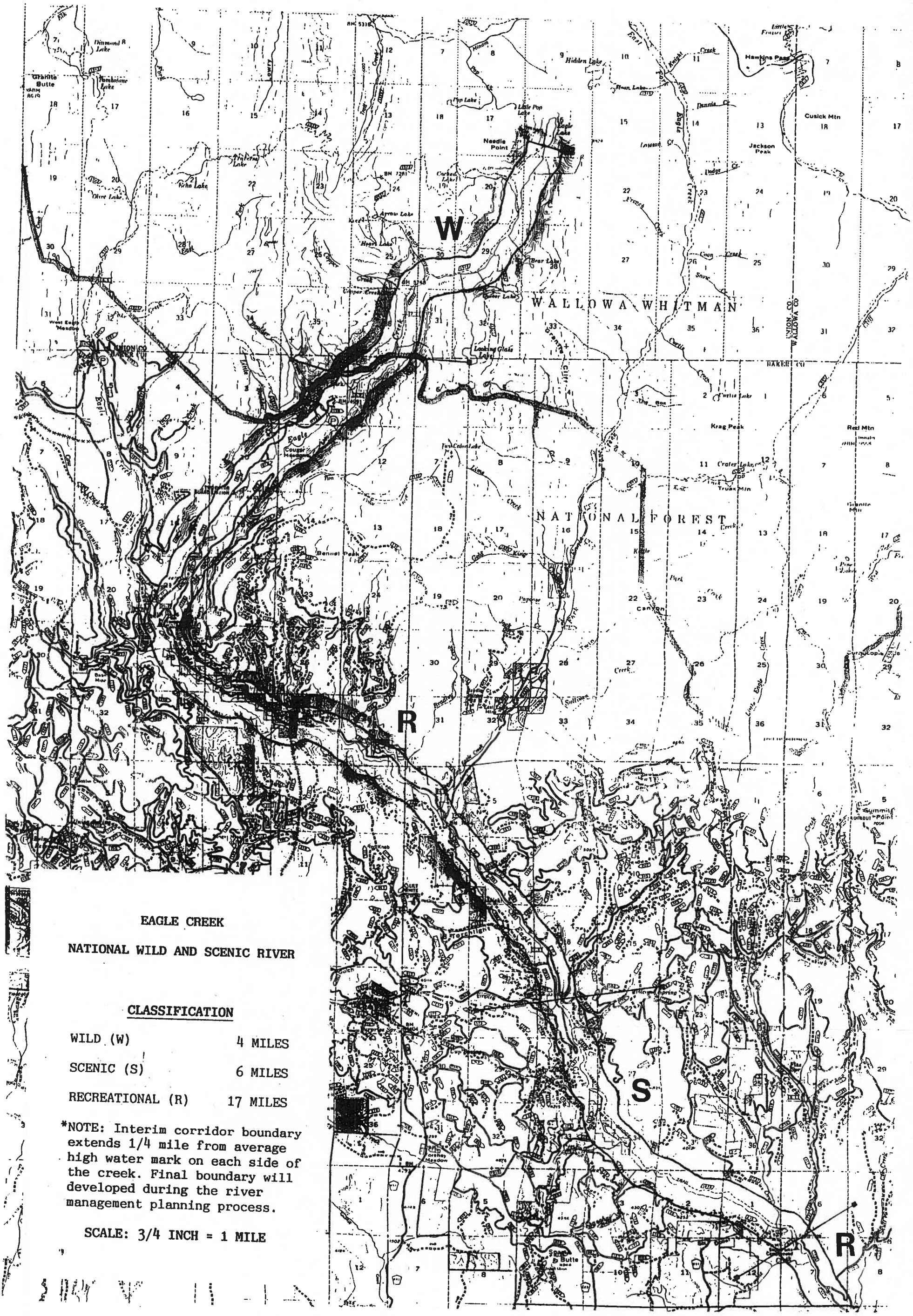
APPENDIX A

OREGON SCORP PLANNING REGION
NUMBER 12
NORTHEAST OREGON



APPENDIX B

EAGLE CREEK WILD AND SCENIC RIVER CORRIDOR MAP



EAGLE CREEK

NATIONAL WILD AND SCENIC RIVER

CLASSIFICATION

WILD (W)	4 MILES
SCENIC (S)	6 MILES
RECREATIONAL (R)	17 MILES

*NOTE: Interim corridor boundary extends 1/4 mile from average high water mark on each side of the creek. Final boundary will developed during the river management planning process.

SCALE: 3/4 INCH = 1 MILE

Appendix C

United States Department of Agriculture | Forest Service | Washington Office | 14th & Independence SW
P.O. Box 96090
Washington, DC 20090-6090

Reply to: 2350

Date: October 20, 1992

Subject: Wild and Scenic Rivers: Evaluation of Proposed Activities

To: Regional Foresters

Enclosed for your information are two documents that provide the basis for an interim directive (ID) that will be issued to FSM 2354.7 within the next few weeks. The ID will clarify the agency's policy relative to requirements of the Wild and Scenic Rivers Act and implementing regulations (36 CFR Part 297) and provide a procedure to be used by all Regions in evaluating proposed activities which may affect wild and scenic rivers. We are providing the base documents now to give you advance opportunity to acquaint yourselves with the new procedures.

The enclosed documents include:

"Procedure to Evaluate Water Resources Projects." This document is based on a procedure developed and currently being tested in Region 6.

"Abstract of Relevant Legislation, Regulations, Manual and Handbook Direction, Legal Opinion, and Congressional Direction Related to Water Resources Projects." Included in this abstract are comments to guide consistent interpretation and application of agency policy.

The Wild and Scenic Rivers Act directs the Forest Service to protect and enhance the "outstandingly remarkable" scenic, recreational, geologic, fish and wildlife, historic, cultural, and other values for which each river was added to the National Wild and Scenic Rivers System. To help achieve this goal, the Act prohibits, or imposes restrictions on developments and activities which would directly and adversely affect those values.

In administration of existing or potential wild and scenic rivers, the use of instream structures for fish habitat or water quality improvement, recreation facilities, road and trail bridges, and other uses are an important management consideration. Questions and conflicting opinions as to legal limitations have arisen, primarily due to varying interpretations of the Act and related agency direction. The ID will serve to clarify the direction and provide a process for consistent application throughout the Forest Service.

The evaluation of project proposals must consider the purpose and effects of a project relative to the free-flowing nature of the river, the resource values of the river and river corridor, and the management objectives for the river. The basic standard of review is whether the project will affect conditions of free-flow and have a direct and adverse effect on the values for which the river was designated. This standard is documented in both the Act and the implementing regulations for Section 7 of the Act (36 CFR Part 297).

Because of the specific responsibility spelled out in the Act for State fisheries agencies, and the heightened concern regarding the relationship between water resource projects, such as those designed to protect or improve fish habitat or watershed conditions, and the Wild and Scenic Rivers Act, it is particularly important that you coordinate your evaluations closely with these agencies. Coordination should also be carried out with other tribal, Federal, State, and local governmental agencies and private organizations that have a direct responsibility for, or interest in, management of the river and river corridor resources.

We are currently working closely with our Office of General Counsel to review our Section 7 implementing regulations (36 CFR Part 297) to determine what revisions are needed to improve the consistency with which the provisions of the Act are being implemented. If the regulations are eventually revised, our procedures will be changed as appropriate.

Deen Lundeen of our Recreation, Cultural Resources and Wilderness Management Staff and Harv Forsgren of our Wildlife and Fisheries Staff are available to assist you and answer questions regarding these procedures.

/s/George M. Leonard

GEORGE M. LEONARD
Associate Chief

Enclosures (2)

United States Forest Washington 14th & Independence SW
Department of Service Office P.O. Box 96090
Agriculture Washington, DC 20090-6090

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/s/George M. Leonard

GEORGE M. LEONARD
Associate Chief

Enclosures (2)

PROCEDURE TO EVALUATE WATER RESOURCES PROJECTS

INTRODUCTION

This paper documents a procedure which can be uniformly and consistently applied by the Forest Service to determine whether proposed water resources projects present a direct and adverse affect to designated wild and scenic river values, and thus would be prohibited under Section 7 of the Wild and Scenic Rivers Act (the "Act"), or whether the projects should be allowed to proceed because they do not meet that threshold.

The procedure also applies to congressionally identified study rivers (Section "5a" rivers), which are afforded interim protection from projects which would affect "free-flow" characteristics in Section 7(b) of the Act. Although not protected from such projects in the Act, rivers identified for study through the land management planning process (Section "5d" rivers) are also afforded protection via agency policy (Forest Service Planning Handbook (1909.12, Chapter 8.12).

The procedure may also be applied to evaluate activities proposed outside a designated or study river corridor to determine if they result in indirect effects that "invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation," as referenced in Section 7 (a).

This procedure paper presumes a strict interpretation of what activities would qualify as water resources projects. Water resources projects have been defined in 36 CFR Part 297 as:

> "...any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, or other construction of developments which would affect the free-flowing characteristics of a Wild and Scenic River or study river."

Section 16 (b) of the Act provides a definition of "free-flow" that assists in identification of water resources projects. It states:

> "Free-flowing, as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, riprapping, or other modification of the waterway."

Therefore, if a proposed activity would affect a river's free-flow, or meet other criteria outlined in 36 CFR 297, it qualifies as a water resources project and the Section 7 procedure defined in this paper can be applied.

ISSUE

The key issue, assuming that the proposed activity is identified as a water resources project, is whether the project presents a direct and adverse affect on the values for which the river was designated or is being studied (or if a proposed activity is above or below the area, does it unreasonably diminish the scenic, recreational, or fish and wildlife values)?

Lack of a standardized procedure to analyze effects has contributed to the difficulty of making an adequate analysis of water resource projects as required by Section 7, manual direction (FSM 2354), and the Forest Service Handbook (FSH 1909.12, Chapter 8). The balance of this paper describes a standardized analysis procedure that incorporates the following principles:

a. Effects will be judged in the context of the legislation designating the affected wild and scenic river and the management objectives for the river as defined in the comprehensive river management plan. (In the case of study rivers, effects are judged in the context of relevant Forest Plan standards and guidelines and the potential affect of the activity on the river's eligibility.)

b. Water resource projects are permissible if the net effect protects or enhances values for which the river was designated or is being studied. Water resource projects are not permitted if they have a direct and adverse effect on such river values. (In the case of study rivers management activities may be carried out provided they would not result in a reduced classification recommendation, and are consistent with other relevant Forest Plan standards and guidelines.)

c. Permissible water resources projects will, to the extent practicable, maintain or enhance the free flowing characteristics of the river.

d. Water resources projects may be permitted even though they may have an effect on free flowing characteristics if:

   (1) the specific purpose of the project is to protect or enhance the values for which the river was designated, restore the natural characteristics of the river, and/or improve the water quality of the river;

   (2) associated impacts on free flowing characteristics of the river are minimized to the extent practicable; and,

   (3) the proponent and manager of the project is a federal, state, or local governmental entity.

PROCEDURE

Background: In developing this procedure we recognize that:

- It is necessary to provide a temporal and spatial context for evaluating river related proposals. The wild and scenic river management planning process should result in a clear statement of long term management goals and objectives for free-flow, water quality, riparian areas and floodplains, and the outstandingly remarkable and other significant resource values designated by statute.

- Section 7 and promulgating rules (36 CFR 297) require an analysis of effects associated with a proposed water resources project. The analysis of activities deemed acceptable must clearly demonstrate consistency with management goals and objectives.

- Management of river ecosystems should be designed to achieve management goals and objectives through natural processes and use of techniques that mimic those processes. To insure that long term goals and objectives are met, careful analysis and evaluation of these processes, time scales, and public perceptions is necessary.

- State fish and wildlife agencies share responsibility with the Forest Service for fish and wildlife resources on wild and scenic river's. Identification and evaluation of water resource projects should be coordinated with the States, recognizing and supporting attainment of state fish and wildlife management objectives to the extent they are consistent with the outstanding values for which the river was designated or is being studied.

Step-by-Step Procedure: The following procedure is designed to evaluate proposed activities within a wild and scenic river ecosystem. This procedure is not simply one of disclosure. Rather, it is a framework to identify changes in free-flow conditions and evaluate the effects associated with project proposals.

1) Establish Need and Evaluate Consistency with Management Goals and Objectives. The first step is to define the need for the proposed activity and make a *preliminary* determination whether the proposed activity is consistent with the management goals and objectives for the river. Management goals provide the standard for evaluation of effects 1/. If the activity does not evidence a compelling need or is inconsistent with the management goals and objectives or other applicable laws (e.g. Wilderness Act, Endangered Species Act, etc.), the project may not be considered further.

1/ If management goals and objectives have not been formalized through a river planning process, utilize Forest Plan standards and guidelines and any applicable state fish and wildlife, water quality, or other state agency management plans or policies consistent with identified values, to develop objectives for each of the outstanding river values.

For projects that appear needed to help attain the management goals and objectives, proceed with the following steps. The scope of analysis should be commensurate with the magnitude and complexity of the project proposal. The procedure should be accomplished via an interdisciplinary team with adequate skills for the analysis. Note that each step requires some professional judgement.

2) Define the Proposed Activity. Provide an objective description of the proposed activity. The level of detail should be proportional to the scope of the proposed project and should indicate whether the project is isolated or part of a more complex or comprehensive proposal.

a. project proponent(s)
b. purpose (clearly describe the need for the project)
c. location
d. duration of proposed activities
e. magnitude/extent of proposed activities
f. relationship to past and future management

3) Describe How the Proposed Activity Will Directly Alter Within-Channel Conditions. Address the magnitude and spatial extent of the effects the proposed activity will have on in-channel attributes. Special attention should be given to changes in features which would affect the outstandingly remarkable and other significant resource values.

a. What is the position of the proposed activity relative to the stream bed and banks?
b. Does the proposed activity result in changes in:
    1. active channel location?
    2. channel geometry (i.e. cross-sectional shape or width/depth characteristics)?
    3. channel slope (rate or nature of vertical drop)?
    4. channel form (e.g. straight, meandering, or braided)?
    5. relevant water quality parameters (e.g. turbidity, temperature, nutrient availability)?

4) Describe How the Proposed Activity Will Directly Alter Riparian and/or Floodplain Conditions. Address the magnitude and spatial extent of the effects the proposed activity will have on riparian/floodplain attributes. Special attention should be given to changes in features that would affect the outstandingly remarkable and other significant resource values.

a. What is the position of the proposed activity relative to the riparian area and floodplain?

b. Does the proposed activity result in changes in:
    1. vegetation composition, age structure, quantity, vigor, etc.?
    2. relevant soil properties such as compaction, percent bare ground, etc.?
    3. relevant floodplain properties such as width, roughness, bank stability or susceptibility to erosion, etc.?

5) Describe How the Proposed Activity Will Directly Alter Upland Conditions. Address the magnitude and spatial extent of the effects the proposed activity will have on associated upland attributes. Special attention should be given to changes in features that would affect the outstandingly remarkable and other significant resource values.

a. What is the position of the proposed activity relative to the uplands?
b. Does the proposed activity result in changes in:
    1. vegetation composition, age structure, quantity, vigor, etc.?
    2. relevant soil properties such as compaction, percent bare ground, etc.?
    3. relevant hydrologic properties such as drainage patterns, the character of surface and subsurface flows, etc.?
c. Will changes in upland conditions influence archeological, cultural, or other identified significant resource values.

6) Evaluate and Describe How Changes in On-Site Conditions Can/Will Alter Existing Hydrologic or Biologic Processes. Evaluate potential changes in river and biological processes by quantifying, qualifying and modeling as appropriate.

a. Does the proposed activity affect:
    1. ability of the channel to change course, re-occupy former segments, or inundate its floodplain?
    2. streambank erosion potential, sediment routing and deposition, or debris loading?
    3. the amount or timing of flow in the channel?
    4. existing flow patterns?
    5. surface and subsurface flows?
    6. flood storage (detention storage)?
    7. aggradation/degradation of the channel?
b. Does the proposed activity affect biological processes such as:
    1. reproduction, vigor, growth and/or succession of streamside vegetation?

2. nutrient cycling?
3. fish spawning and/or rearing success?
4. riparian dependent avian species needs?
5. amphibian/mollusk needs?

7) Estimate the Magnitude and Spatial Extent of Potential Off-Site Changes. Address potential off-site, or indirect effects of the proposed activity, acknowledging any uncertainties (i.e., a risk analysis).

a. Consider and document:
1. changes that influence other parts of the river system.
2. the range of circumstances under which off-site changes might occur (e.g., as may be related to flow frequency).
3. the probability or likelihood that predicted changes will be realized.
b. Specify processes involved, such as water, sediment, movement of nutrients, etc.

8) Define the Time Scale Over Which Steps 3 - 7 are Likely to Occur.

a. Review steps 3 - 7 looking independently at the element of time.
b. Consider whether conditions, processes and effects are temporary or persistent. That is, attempt to define and document the time scale over which effects will occur.

9) Compare Project Analyses to Management Goals and Objectives. Based on the analysis of steps 3-8, identify project effects on achievement, or timing of achievement, of management goals and objectives relative to free-flow, water quality, riparian area and floodplain conditions, and the outstandingly remarkable and other significant resource values.

10) Section 7 Determination. Based on the analysis of steps 3-9 document:

a. effects of the proposed activity on conditions of free-flow, including identification of the measures taken to minimize those effects.
b. any direct and adverse effects on the outstandingly remarkable and other significant resource values for which the river was designated or is being studied.
c. any unreasonable diminishing of scenic, recreational, or fish and wildlife values associated with projects above or below the area.

The determination should permit those water resource projects that are consistent with the legislation designating the affected wild and scenic river and the management objectives for the river as defined in the comprehensive river management plan, *or* in the case of study rivers, the proposed activities would not result in a reduced classification recommendation and is consistent with Forest Plan standards and guidelines. Permissible water resources projects will, to the extent practicable, maintain or en-

hance the free flowing characteristics of the river. Water resource projects that have a direct and adverse effect on designated river values or management objectives are not to be permitted.

It is important to note that water resources projects may be permitted even though they may have an effect on free flowing characteristics if:

a. the specific purpose of the project is to protect or enhance the values for which the river was designated, restore the natural characteristics of the river, and/or improve the water quality of the river;

b. the associated impacts on free flowing characteristics of the river are minimized to the extent practicable; and,

c. the proponent and manager of the project is a federal, state, or local governmental entity.

Include the Section 7 determination as part of the broader NEPA analysis of the proposed activity. See the following section for additional information on the relationship of Section 7 determinations and the NEPA process.

INCORPORATION OF SECTION 7 DETERMINATIONS IN THE NEPA PROCESS

The Code of Federal Regulations states:

"The determination of the effects of a proposed water resources project shall be made in compliance with NEPA."

The following discussion offers more specific information regarding incorporation of the Section 7 procedure into the NEPA process. It also includes information relating to the decision document and the responsible official.

A proposed water resources project may be an independent project such as watershed or fish habitat restoration or construction of a boat ramp or fishing pier, or part of a larger program that serves a variety of purposes. In either situation, the Section 7 procedure is to be completed as a separate analysis by an interdisciplinary team. For designated rivers (Section 3a) and congressionally identified study rivers (Section 5a), the Section 7 procedure would be explicitly documented in, or appended to the NEPA document with appropriate reference in the NEPA analysis. Similarly, for rivers identified for study via the land management planning process (Section 5d), an analysis as to the potential effect of a proposed project on free-flow and the outstandingly remarkable values should be incorporated, appended, or available in the analysis file.

The decision document will describe the Section 7 determination for the preferred alternative for a designated or congressionally identified study river. This determination should state whether the proposed project will affect free-flow characteristics, whether it will or will not have a "direct and adverse effect on the values for which the river was designated" (or might be added to the System), or whether proposed projects above or below the area will "unreasonably diminish" those resource values. The Section 7 evaluation may result in identification of water-resources projects which protect, restore or enhance the values for which the river was designated or identified for study. In approval of such projects, the decision notice should clearly indicate that determination.

For study rivers identified via the land management planning process (i.e. Section 5d rivers), utilize the Section 7 procedure with the decision document referencing that an analysis was conducted to evaluate the potential effect of the proposed project on free-flow and the outstandingly remarkable values. Note, that Section 7 is not required for 5d rivers, but agency policy (FSH 1909.12 8.12) provides direction to protect the free-flowing condition and outstandingly remarkable values.

The responsible official differs with the status of the river and whether or not another federal agency is involved. For proposed water resources projects on a 3a or 5a river, in which there is another federal agency "assisting by loan, grant, license or otherwise...," the Regional Forester is the responsible official (reference FSM 2354.04e). If there is no other federal agency "assistance" for a project on a 3a or 5a river, the appropriate line officer signs the decision document. Decision documents for water resources projects on a 5d river are signed by the appropriate line officer.

REGIONAL OVERSIGHT

The Regional Offices are to provide for review of the Section 7 analysis completed for proposed water resources projects. This review process should be coordinated by the Recreation staff group and involve other appropriate staff areas such as fisheries, watershed, engineering, etc. The intent of this oversight is to ensure a consistent approach to the evaluation of proposed water resources projects in wild and scenic rivers. The review is not intended to make the final decision.

SUMMARY

These procedures were developed to analyze projects that have the potential to affect the free-flowing condition and/or outstandingly remarkable values of designated and study wild and scenic river's and determine which projects are consistent with the Act by protecting, restoring, and enhancing those river values. The scope of the analysis will vary with the magnitude and complexity of the proposed activity. The procedure requires interdisciplinary analysis and application of professional judgement within the requirements of the Act.

Examples of projects that would likely be subject to Section 7 analysis include, but are not limited to:

1. Log removal for recreation user safety;
2. Fisheries habitat and watershed restoration and enhancement projects;
3. Bridge and other roadway construction/reconstruction projects;
4. Bank stabilization projects;
5. Recreation facilities such as boat ramps and fishing piers;
6. Activities that require 404 permits from the Corps of Engineers.

ABSTRACT OF RELEVANT LEGISLATION, REGULATIONS, MANUAL AND HANDBOOK DIRECTION, LEGAL OPINION AND CONGRESSIONAL DIRECTION RELATED TO WATER RESOURCES PROJECTS

WILD AND SCENIC RIVERS ACT

P.L. 90-542, Section 1(b):

"It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, 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. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes."

P.L. 90-542, Section 7(a):

Section 7 provides specific protection of designated and congressionally identified study rivers by prohibiting the licensing "...of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act." Additionally this section states:

"...no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration."

The section also addresses federal agency limitations on licensing or assisting in developments below or above designated or proposed W&SR's that "invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area..."

P.L. 90-542, Section 10(a):

Section 10(a) states Congressional intent for management to protect and enhance those values for which a river was designated (or is being studied). The section calls

for development of management plans with specific objectives that are based on the special values of the particular river. Specifically:

"Each component of the national Wild and Scenic Rivers System shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public uses and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on special attributes of the area."

P.L. 90-542, Section 12(a):

Section 12 sets forth broad authority for management policies on federal lands "which include, border upon, or are adjacent to, any river included in the National Wild and Scenic Rivers System or under consideration for such inclusion, in accordance with section 2(a)(ii), 3(a), or 5(a)..." directing them to "take such action respecting management policies, regulations, contracts, plans...as may be necessary to protect such rivers in accordance with the purposes of this Act."

P.L. 90-542, Section 16(b):

"Free-flowing, as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion shall not automatically bar its consideration for such inclusion: *Provided*, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national Wild and Scenic Rivers System."

CODE OF FEDERAL REGULATIONS

36 CFR 297 - Regulations for Implementing Section 7 of the Wild and Scenic Rivers Act:

"Water resources projects" have been defined in 36 CFR 297 as:

"...any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, or other construction of developments which would affect the free-flowing characteristics of a Wild and Scenic River or study river."

"These regulations require that a determination of the direct and adverse effects of a proposed project be completed through the NEPA process."

INTERAGENCY GUIDELINES FOR ELIGIBILITY, CLASSIFICATION AND MANAGEMENT OF RIVER AREAS - September 7, 1982

Section III - Management:

"Other Resource Management Practices. Resource management practices will be limited to those which are necessary for protection, conservation, rehabilitation or enhancement of the river area resources. Such features as trail bridges, fences, water bars and drainage ditches, flow measurement devices and other minor structures or management practices are permitted when compatible with the classification of the river area and provided that the area remains natural in appearance and the practices or structures harmonize with the surrounding environment."

This section establishes a nondegradation and enhancement policy for all designated river areas. Each component of the W&SR's system is to be managed to protect and enhance the values for which the river was designated, while providing for public recreation and resource uses which do not adversely impact or degrade those values. This guideline specifically identifies three criteria for evaluation of proposed activities that are consistent with the analysis called for in Section 7 of the Act, namely: 1) compatibility with the values for which the river was designated; 2) no impact on natural appearance; and, 3) harmonize with the surrounding environment.

FOREST SERVICE MANUAL

FSM 2354.04e

"Regional Foresters shall: Determine the direct and adverse effects of water resource projects upon designated or study wild and scenic rivers, and determine, pursuant to section 7 of the Wild and Scenic Rivers Act, whether the Department of Agriculture will consent to a proposed action (36 CFR 297). This authority shall not be redelegated..."

FSM 2354.42b

"Manage wildlife and fish habitats in a manner consistent with the other recognized river attributes."

"Recommendations to State agencies concerning the management of fisheries must be consistent and in harmony with established river objectives.

"The construction of minor structures for such purposes as improvement of fish and game habitat are acceptable in wild river areas provided they do not affect the free-flowing characteristics of the river and harmonize with the surrounding environment."

The last portion of this manual direction suggests that any fish and wildlife habitat improvement project which would affect conditions of free-flow are not acceptable in wild rivers. However, the primary factor in determining the acceptability of proposed fish and wildlife habitat management projects within Wild and Scenic River corridors is whether or not they have a direct and adverse affect on the values for which the river was designated (or is being studied). Water resources projects which do not directly and adversely affect the values for which the river was designated, or is being studied, are acceptable. Those projects that are incompatible with the outstanding values of the river corridor are not acceptable.

FOREST SERVICE HANDBOOK

FSH 1909.12, Chapter 8.12

"1. To the extent the Forest Service is authorized under law to control stream impoundments and diversions, the free-flowing characteristics of the identified river cannot be modified."

"3. Management and development of the identified river and its corridor cannot be modified to the degree that eligibility or classification would be affected..."

FSH 1909.12, Chapter 8.2

"1. Standards for Wild Rivers...

d. Flood Control: No flood control dams, levees, or other works are allowed in the channel or river corridor. The natural appearance and essentially primitive character of the river areas must be maintained...

i. Structures: ...New structures would not be allowed except in rare instances to achieve management objectives (i.e. structures and activities associated with fisheries enhancement programs could be allowed.)"

"2. Standards for Scenic Rivers...

i. Structures: ...New structures that would have a direct and adverse effect on river values would not be allowed."

"3. Standards for Recreational Rivers...

i. Structures: ...New structures are allowed for both habitation and for intensive recreation use."

LEGAL OPINION

A May 1979 memorandum to the Chief from Clarence W. Brizee (Deputy Director, Forestry Natural Resources Division; USDA, OGC) provides the following interpretation, which is consistent with our current understanding:

> "With regard to water resources projects, the Wild and Scenic Rivers Act is not a blanket ban or absolute prohibition... The only activity absolutely prohibited by Section 7 is the licensing of dams and other project works by the Federal Energy Regulatory Commission under the Federal Power Act within the boundaries of a designated or study river. Other federally assisted water resources projects may be permitted. Thus, rather than being characterized by absolute prohibitions, the Act embodies a flexible approach. Section 7 establishes a procedure for making a specific determination with respect to each proposed water resources project."
>
> Mr. Brizee continues: "The evolution of Section 7 demonstrates that Congress did not intend that the Act automatically ban all developments and uses on or near a (study or designated) river. To the contrary, the legislation was specifically amended in order to provide a procedure via Section 7 for review of proposed water resources projects on a case-by-case basis."
>
> Deputy Director Brizee further states, "even though water resources projects will be reviewed on a case-by-case basis, the Act is strict as to what is allowable. This Department and the Department of the Interior have defined "water resources project" in a broad context. That is, a water resources project is any type of construction which would result in any change in the free-flowing characteristics of a particular river... This concept of water resources projects has been applied to dredge and fill permits under Section 404 of the Clean Water Act, construction of levees, removal of navigational hazards, construction of nuclear power plants, and other such diverse projects."

This memorandum also offers an interpretation of the "direct and adverse effect standard":

> "The Department of Agriculture interpreted the "direct and adverse effect" standard, and the "unreasonably diminish" standard in the context of a Section 7 determination for a nuclear power project on the banks of the Skagit W&SR. The discussion in that determination indicates that a flexible approach is possible.
>
> With regard to projects inside the designated boundary, there is no definition provided by the Act or legislative history as to what constitutes such a "direct and adverse" effect. We do not construe this section as a ban on all projects which might be built on a river proposed or designated as a component of the System. Rather, the Act contemplates that each proposed project be considered on its own merits. In making this determination, we consider the values of the river as they now exist; a "direct and adverse" effect is one which will result in marked dimunitions of the values enumerated in Section 1(b) of the Act. Also relevant to the consideration of the project's impacts is the degree to

which it blends in or is otherwise compatible with the natural qualities of the river, whether there may be a dimunition in the air and water quality, and the effects on animals and vegetation. The duration of the impact is another important consideration; long lasting or permanent impacts must be viewed more strictly than temporary or short term impacts."

CONGRESSIONAL DIRECTION

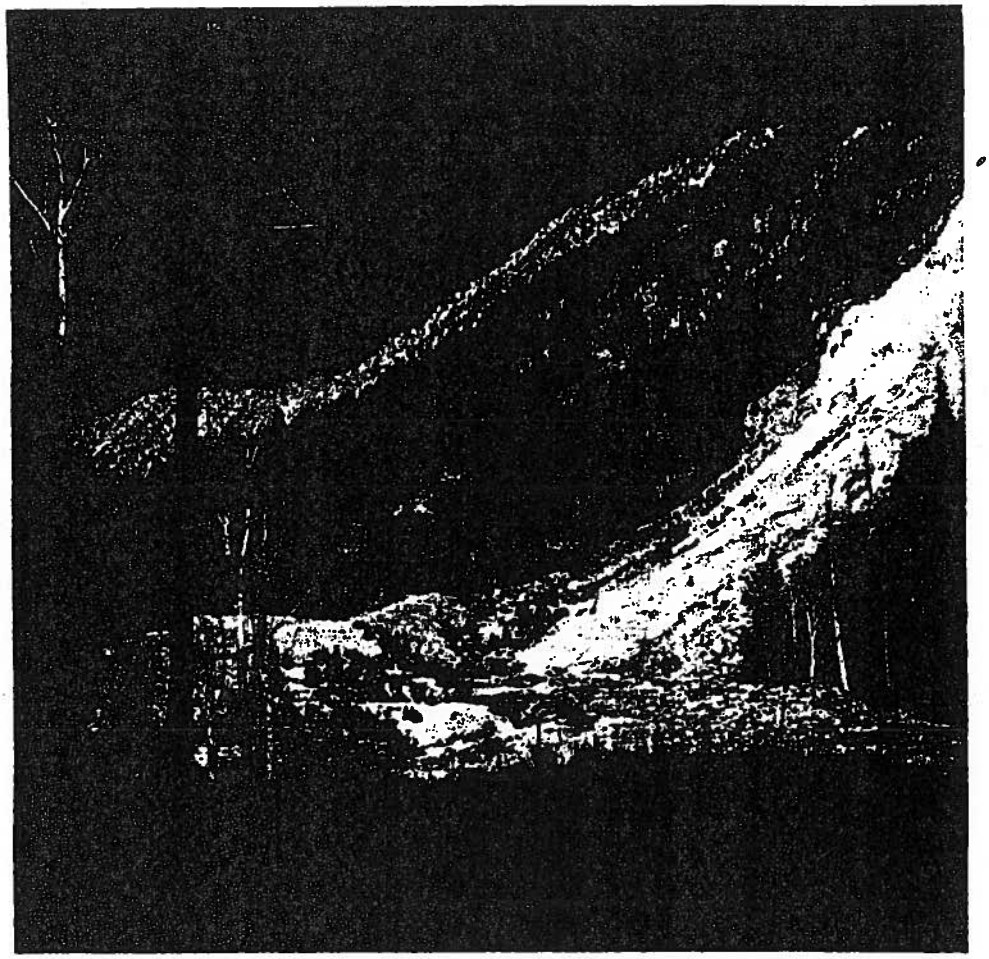
The most recent Congressional direction on management of wild and scenic rivers is associated with the Michigan Scenic Rivers Act of 1991 (H.R. 476) dated November 23, 1991. The Senate Committee on Energy and Natural Resources report on the Michigan Scenic Rivers Act states:

> "The Committee is aware of the concern expressed by some parties of the potential effect that designation of certain rivers as components of the Wild and Scenic Rivers System may have on ongoing stream restoration and improvement projects in the State of Michigan. The Committee notes the importance of these projects in restoring damaged riparian areas and improving water quality and aquatic habitat. In the Committee's view, such projects are not inconsistent with Wild and Scenic River designation, and in fact similar projects have been successfully completed on Wild and Scenic River segments throughout the nation. The Committee directs the Forest Service to develop a consistent and coordinated policy permitting the implementation of such projects within Wild and Scenic River segments in order to avoid unnecessary concern and confusion."

In similar fashion, the House Committee on Interior and Insular Affairs report on the Michigan Scenic Rivers Act states:

> "The committee has provided flexibility with regards to sea lamprey control in order that appropriate management actions can be taken consistent with the requirements of law. In keeping with sound management practices for wild and scenic rivers, the Committee believes there is appropriate flexibility in law to provide for fish and wildlife habitat and water quality improvement in a manner that will protect the values for which a river segment was designated. Some of the finest fisheries in the country are found on rivers designated as part of the National Wild and Scenic Rivers System. The Committee recognizes the importance of the fisheries on the Michigan rivers designated by this Act and is supportive of efforts to correct significant water quality, aquatic habitat or other ecological degradation caused by past human activity. The Wild and Scenic Rivers Act permits structural and non-structural techniques of fish restoration to be used as long as such activities do not have an adverse impact on the values for which such rivers are designated. Such activities consistent with this standard are occurring on wild and scenic rivers across the country. As provided for by law, the Secretary will cooperate with the state on these matters."

Appendix D



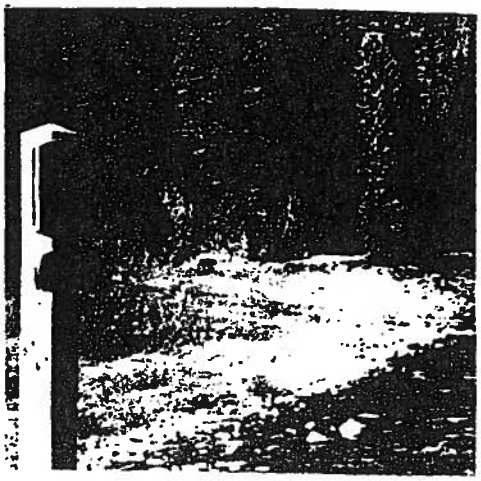
VIEWSHED CORRIDOR

EAGLE CREEK

PINE RANGER DISTRICT

WALLOWA - WHITMAN
NATIONAL FOREST
USDA FOREST SERVICE

Walker & Macy
April 1992



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INDEX TO CONTENTS

Introduction
- Purpose 1
- Limitations 1
- Assumptions 1
- Corridor Location 2

Viewshed Analysis
- Characteristic Landscape 3
- Existing Visual Condition 3
- Land Allocations/Forest Plan Direction 3
- Seen Area Map 4

Viewshed Analysis Process
- Process 5
- Computer Models 5
- Process Diagram 6
- Visual Magnitude 7
- Visual Magnitude Diagram 8

Management Recommendations
- Visual Quality Objective 8
- Desired Future Condition 8
- Recommendations for Specific Activities 9
  - Vegetation Management 9
  - Recreation: Developed Sites 10
  - Recreation: Dispersed 10
  - Transportation Facilities 10
  - Administration 11
  - Private Land 11
  - Other 11
  - Map Use 12

Maps
- Visual Quality Objectives 13
- Visual Magnitude 14

Appendix
- Forest Plan (Excerpt) 15
- Desired Visual Model (Excerpt) 16
- Viewpoint Weighting 17

INTRODUCTION

PURPOSE

The Wallowa-Whitman Forest Plan requires that viewshed corridor plans are to be prepared for each Sensitivity Level 1 corridor on the Forest. Eagle Creek is designated as a level 1 corridor. The viewshed corridor plan identifies opportunities for scenic enhancement, establishes entry priorities and timing for vegetation management, and provides direction to protect, maintain, and enhance the scenery within the Wild and Scenic corridor as one of the outstandingly remarkable values.

The plan includes mapping of visually sensitive areas within the viewshed or "seen area". The database, the analysis, and the plans and recommendations for management were developed for input in the planning effort of the interdisciplinary team (I.D.T.) of the Wallowa-Whitman National Forest. The information will be incorporated into the Eagle Creek Wild and Scenic River Plan.

LIMITATIONS

Vegetative mapping was not available to incorporate in this Plan; therefore priorities and timing of vegetation management are not addressed in this plan.

Because the Eagle Creek Valley is so narrow within the viewshed corridor, background is virtually unseen; and therefore, brief views of distant valleys seen at the ends of the viewshed were not modeled beyond 3 miles.

The corridor, as it enters into the wilderness to the north, was not analyzed in depth because the Eagle Cap Wilderness is more restrictive in its management due to its VQO designation of preservation. Viewpoints from within the wilderness were analyzed only if they had some influence upon the seen area that falls outside the Eagle Cap Wilderness area.

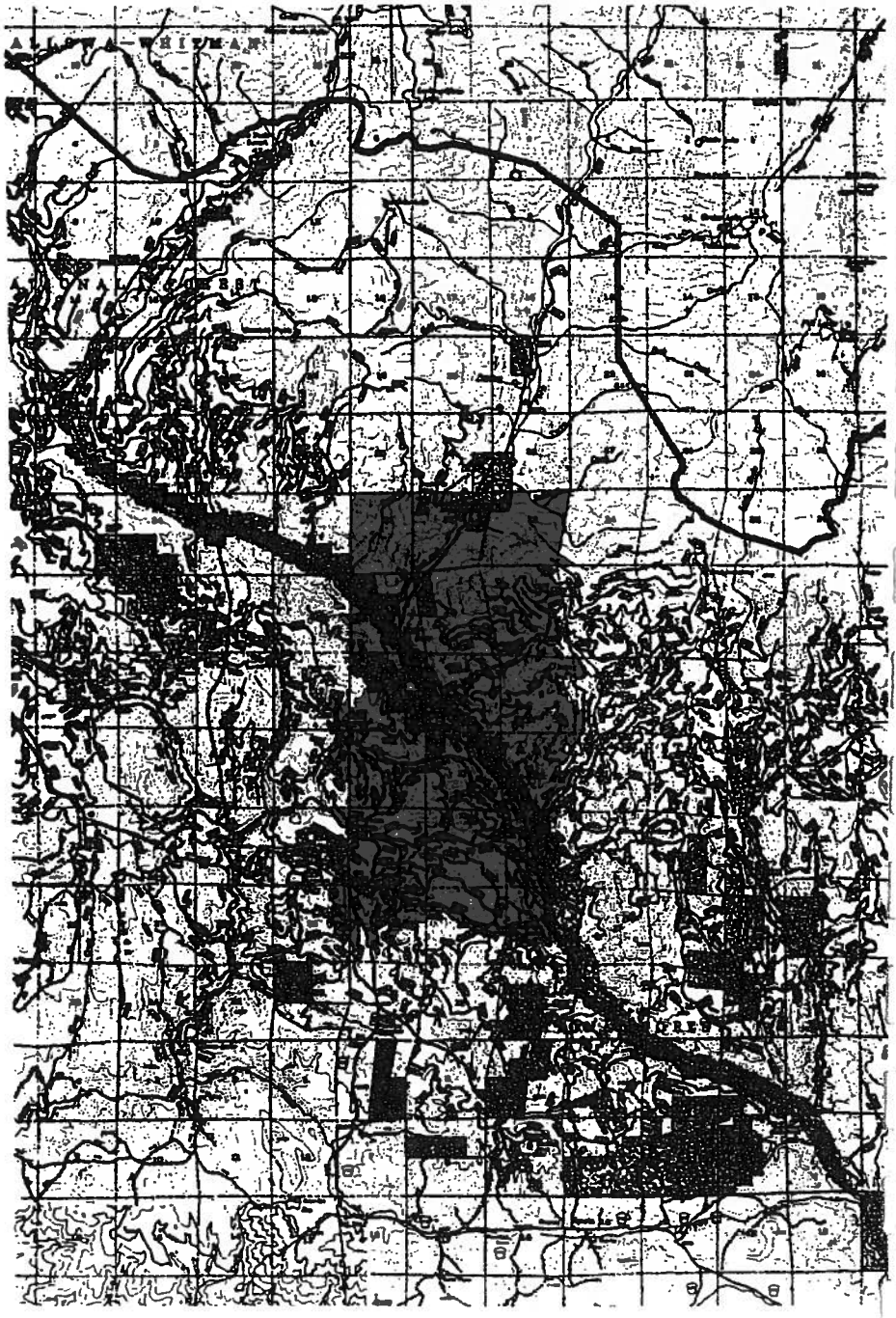
ASSUMPTIONS

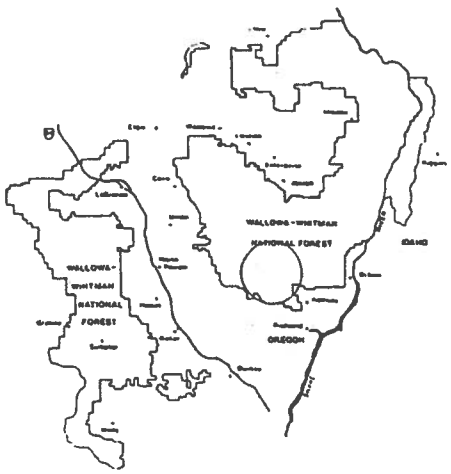
The vegetation management plan will follow the River Management Plan and will identify project entry priorities and treatments.

CORRIDOR LOCATION

The headwaters of Eagle Creek begin within the Eagle Cap Wilderness area at Eagle Lake and flow generally southward, meandering at times, within a relatively flat valley floor and steep hillsides. Eagle Creek intercepts West Eagle Creek and then turns eastward following a very narrow canyon that twists and turns for approximately 14 miles to the Wallowa-Whitman National Forest Boundary.

Since the Eagle Cap Wilderness is under more restrictive management policies, viewpoints from within the wilderness were analyzed only if they had any influence upon the seen area that falls outside the Eagle Cap Wilderness area.





CHARACTERISTIC LANDSCAPE

The landscape is a true representation of the Wallowa Mountains as described in the Landscape Character Types of the National Forests in Oregon and Washington, USDA Forest Service, publication from high elevations to low elevations in the foothills.

The generalized land form of the Eagle Creek Valley is a very long narrow twisting valley running generally north-south contained by very steep hillsides on either side.

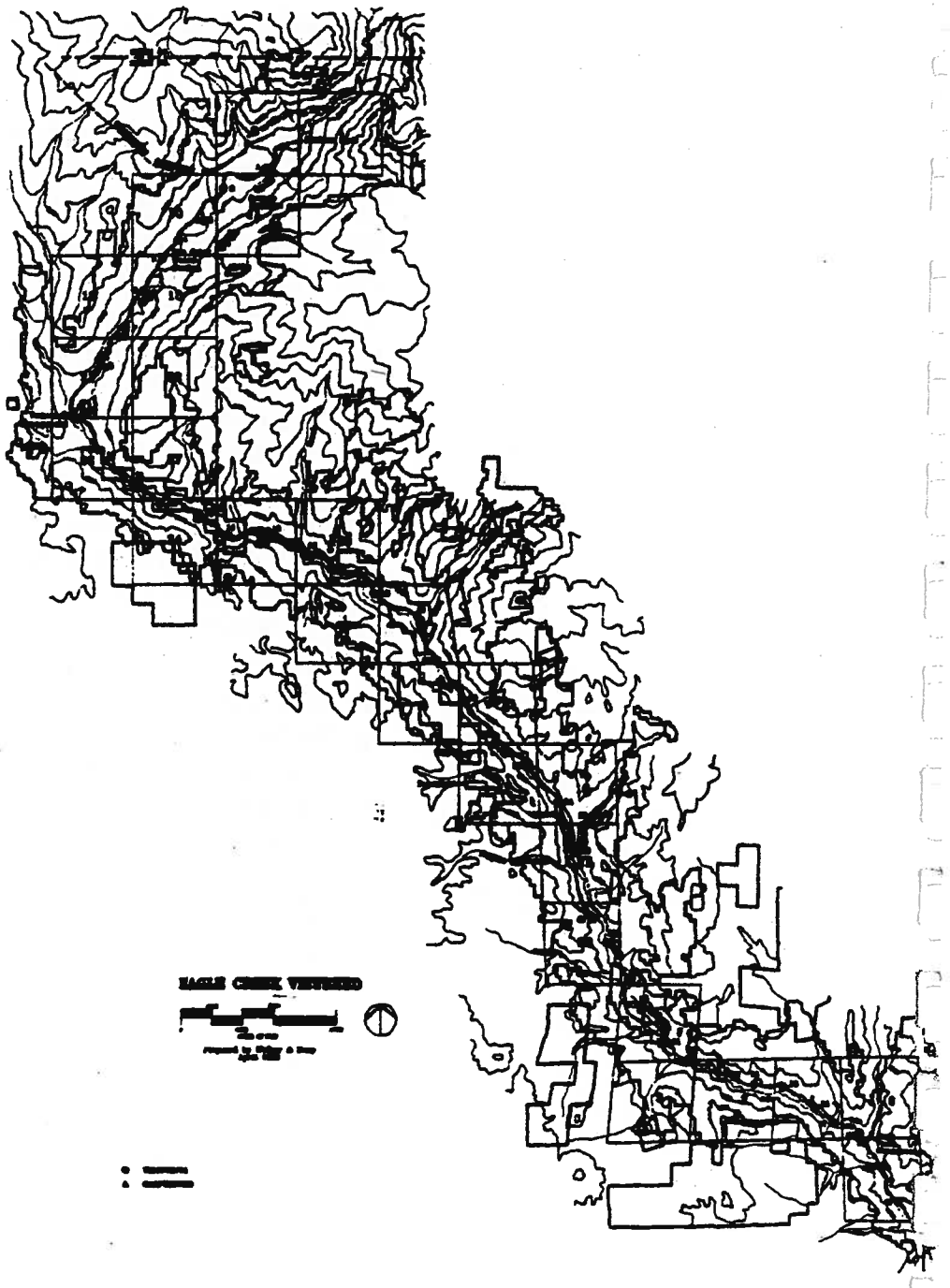
EXISTING VISUAL CONDITION

The degree of alteration by man is relatively minor. Beginning at the northern end the previous constructions at Boulder Park Resort have been removed and repairs have been made to allow its return to a natural state. Discreetly located camp sites and toilets are available; and are used primarily by those hiking in the Eagle Cap Wilderness. The gravel road #7755, generally follows Eagle Creek southward to a variety of dispersed camping, and the Two Color Guard Station and Two Color Campground. After Road #7755 meets Road #77, the corridor turns south-eastward just before the fully developed and monitored Tamarack Campground. As one continues eastward on Road #77, the canyon generally becomes very narrow and the road is often 30 to 50 feet above the river. Many parcels of private land exist within this area of the canyon. Glimpses of private vacation homes are seen along the river's edge. Road #77 follows the river until it intersects with Road #7015. It then leaves the river by climbing up the steep hillside, turning northward to connect with Road #7735 which returns to the river at Eagle Creek Campground approximately 5 miles downstream. The river is accessible upstream of Eagle Creek Campground by the Martin Bridge Trail. Private lands occur along the trail, one of which was once a sawmill site. Ponds are still in evidence of that prior use. Road #7735 continues through a very narrow, rocky, gorge to the National Forest boundary to the south.

LAND ALLOCATIONS / FOREST PLAN DIRECTION

Forest Plan Landscape Management Goals, Standards, and Guides provide general direction for the Eagle Creek Valley under its classification of Sensitivity Level 1. The Wallowa-Whitman Desired Visual Model provides general desired visual conditions for coniferous forests in foreground and midground areas of retention VQO's.

The segment of Eagle Creek within the Eagle Cap Wilderness is identified as a Wild River. From the Wilderness boundary south to Paddy Creek, approximately 15.5 miles, it is designated as a Recreation River. From Paddy Creek to Little Eagle Creek it is designated as a Scenic River. Then, from Little Eagle Creek to the Forest boundary it returns to a Recreation River again. Specific direction of the management of Eagle Creek will be addressed in the River Management Plan as a supplement to the Wallowa-Whitman Forest Plan. The River Management Plan will be adopted into subsequent management plans developed for the Eagle Cap Wilderness.



VIEWSHED ANALYSIS PROCESS

The River Management Plan provides standards and guides for the protection and enhancement of the outstandingly remarkable values of the Lostine River which includes scenery, recreation, botanical, wildlife, and fisheries, and for the protection of water quality and free-flowing characteristics of the river. This Viewshed Corridor Plan will be appended to the River Management Plan.

PROCESS

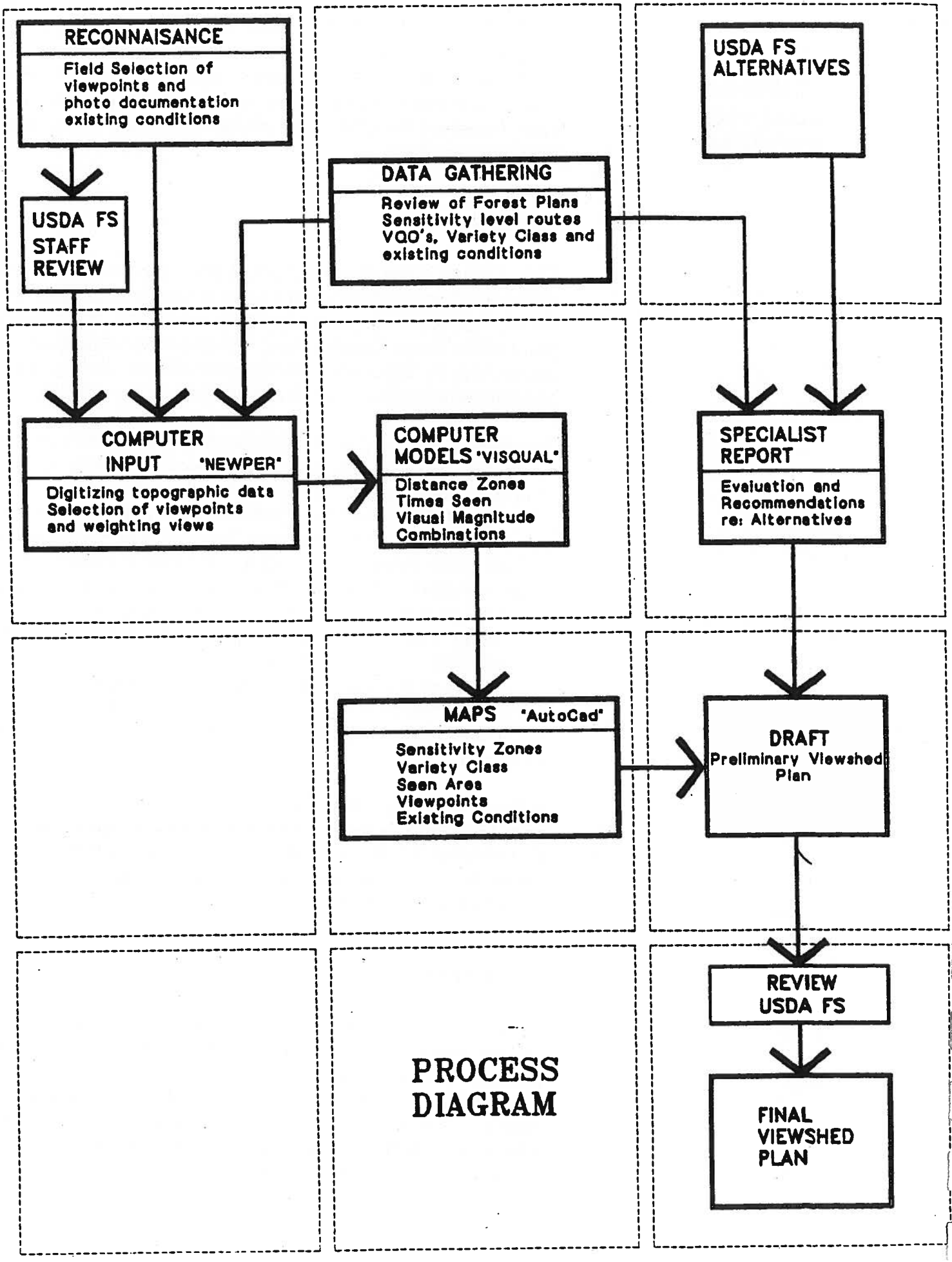
The process in the development of this viewshed plan began with gathering pertinent data including review of USDA Forest Service determinations and policies related to the management of the Eagle Creek Valley. On-site reconnaissance was performed to document existing conditions and to select specific viewpoints for computer analysis and modeling.

The viewpoints selected are approximately at 1/2 mile intervals along the river corridor; and include vantage points at which important views exist. Since the foreground selected is at a 1/4 mile distance, the foreground is modeled by the computer continuously between viewpoints. Upon USDA Forest Service review, each viewpoint was given a value in relationship to other viewpoints. To account for the amount of time or duration that any particular view might provide, additional values or "weighting" was given to each viewpoint. Heavily used defined campgrounds and some dispersed camp sites were weighted by a factor of 10. Other focussed or picturesque viewpoints were weighted by a factor of 5. All others were assigned a value of 1. See Appendix for assigned weights for each viewpoint.

Utilizing computer software, contour information was digitized from USGS quad maps and Forest maps to begin a process of modeling of the viewshed. After preselecting distance zones, the computer assisted process developed several terrain models for analysis.

COMPUTER MODELS

Based on all viewpoints, the computer analysis developed several models. The models included distance zones, times seen and visual magnitude. One additional model was developed as a combination of times seen and visual magnitude. The models presumed no vegetation, so as not to affect the analysis of the potentially seen terrain, since trees are a transitory element in the landscape.


RECONNAISANCE
Field Selection of viewpoints and photo documentation existing conditions
USDA FS STAFF REVIEW
DATA GATHERING
Review of Forest Plans Sensitivity level routes VQO's, Variety Class and existing conditions
USDA FS ALTERNATIVES
COMPUTER INPUT "NEWPER"
Digitizing topographic data Selection of viewpoints and weighting views
COMPUTER MODELS "VISQUAL"
Distance Zones Times Seen Visual Magnitude Combinations
SPECIALIST REPORT
Evaluation and Recommendations re: Alternatives
MAPS "AutoCad"
Sensitivity Zones Variety Class Seen Area Viewpoints Existing Conditions
DRAFT
Preliminary Viewshed Plan
REVIEW USDA FS
FINAL VIEWSHED PLAN
PROCESS DIAGRAM

The distance zone model examined all areas of the viewshed that can be seen within the foreground limit of 1/4 mile radius and the midground from 1/4 mile to a limit of 3 miles. All areas falling with the distance zones, limited by topography, are defined as the "seen area".

The times seen model examined the terrain areas that can be seen the least to the most times from all of the viewpoints. This particular model is directly influenced by the "weighting" given to each viewpoint.

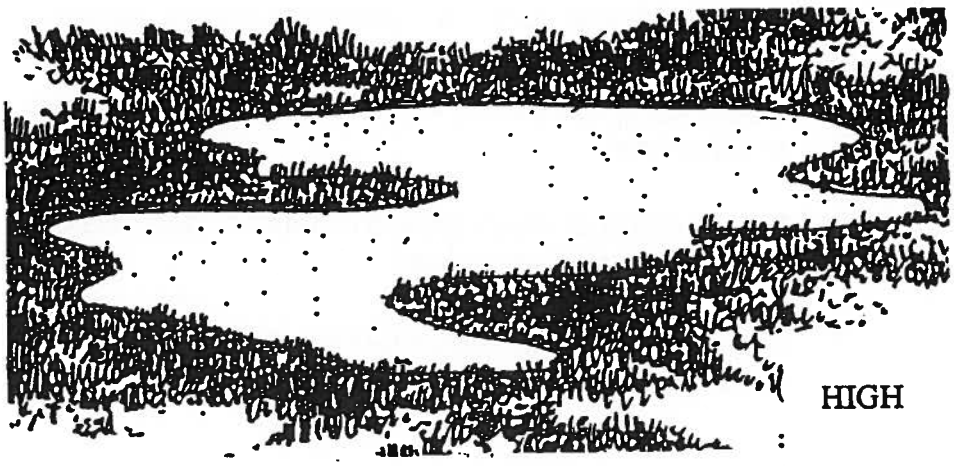
The visual magnitude model examined those terrain areas within the seen area that are of a particular size relative to a particular view direction.

VISUAL MAGNITUDE

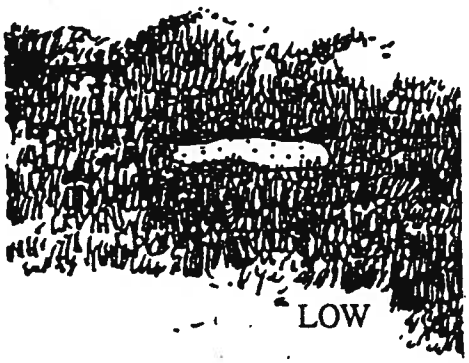
Visual magnitude is a measure of the relative degree of visibility (size) of an area of terrain as seen from a particular viewpoint. The amount of visual magnitude is effected by slope and distance. As terrain steepens (increasing its exposure to the viewer) visual magnitude increases. As the distance between viewer and the area of terrain increases, the visual magnitude decreases. Technically, visual magnitude is measured in square minutes of arc.

Combining the times seen model with the visual magnitude model another model was developed that indicates relative sensitivity. For example, those areas which are seen the greatest number of times combined with the highest visual magnitude, are the most sensitive to change. Similarly, areas seen the least number of times combined with the lowest visual magnitude, are the least sensitive to change.

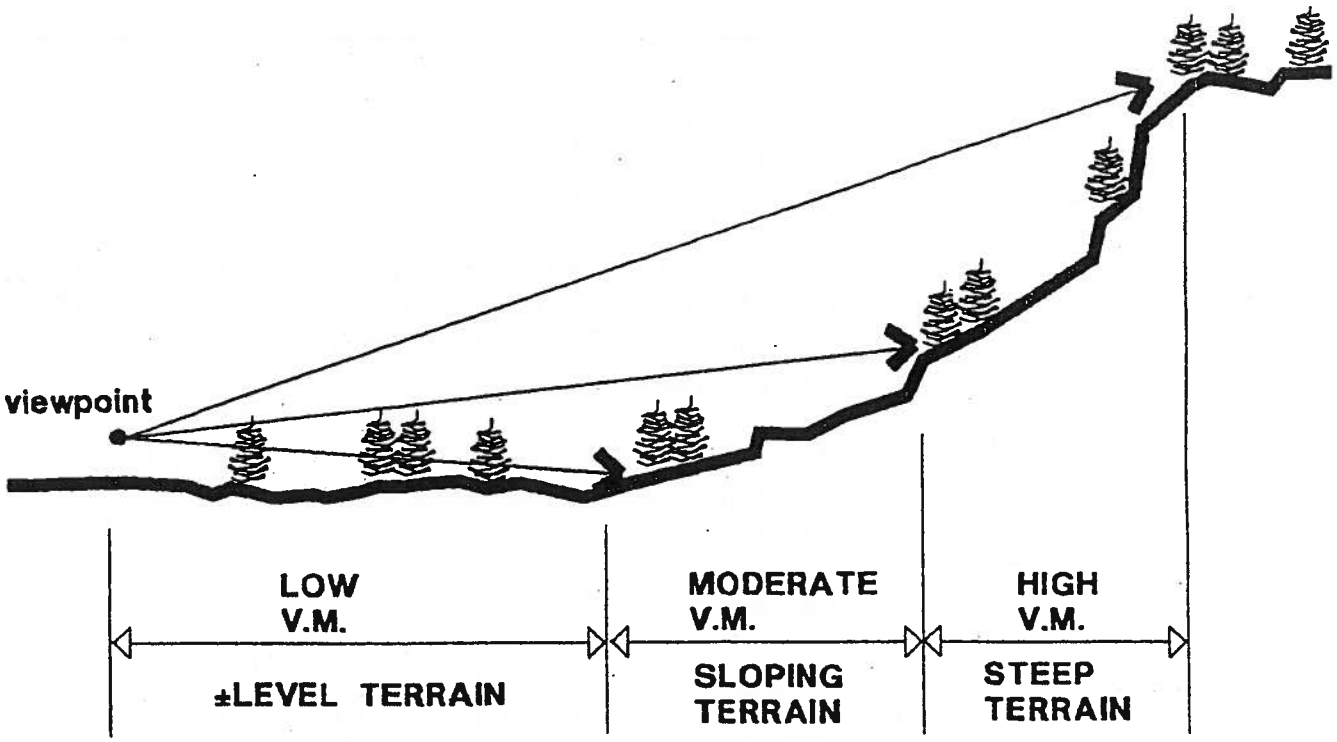
Given a view distance of 3 miles, the following sketches, when held at arms-length, illustrate the approximate range of visual magnitude of openings in the forest cover from low to high used to develop the map.



HIGH



LOW



VISUAL MAGNITUDE DIAGRAM

MANAGEMENT RECOMMENDATIONS

VISUAL QUALITY OBJECTIVE

The visual quality objective of the corridor is retention except within the Eagle Cap Wilderness. The sensitivity level for the corridor is designed as level 1. The variety class for the valley is Class A by virtue of the predominance of extremely steep slopes, of outstanding rock outcroppings and rock slides, of a variety in plant species, and the changing characteristics of Eagle Creek. The distance zones are primarily foreground with very little midground and virtually no background.

DESIRED FUTURE CONDITION

The optimum future condition relative to scenic values would be evidenced by:

1. A balance in the variety and amount of open and closed forest spaces.

2. Accentuation of views toward mountain tops, hillsides, and meadows in the valley floor.

3. A variety of tree species, including deciduous, with mixed ages.

4. A predominance of open-type character and larch / pine species in campgrounds.

5. Campgrounds screened from view from both road and river.

The Wallowa-Whitman National Forest Visual Management Plan - Desired Visual Model is included in the appendix as reference. In both foreground and middle ground Retention for conifer associations, the following recommendations related to the Desired Visual Model should supersede the applicable objectives because they are more restrictive:

1. Maintain stump profiles at ground level up to a maximum height of native grasses and groundcovers within 200 feet of the main roadway.

2. Cover all stumps with forest soil and duff.

3. Remove by raking up and hauling or chip slash (branches 1 inch in diameter or greater) in all seen areas.

4. Seed with native valley grasses and wildflowers in seen activity areas.

RECOMMENDATIONS FOR SPECIFIC ACTIVITIES

Vegetation Management: The following are recommendations for those areas of the corridor that fall outside the Eagle Cap Wilderness and within the seen area:

1. Uprooted stumps from blowdown should be removed by endhauling unless the stand is heavily infected with root rot disease.

2. Burned and blackened standing dead timber should be removed immediately after events occur.

3. Thinning in lodgepole pine / larch stands for reasons of forest health is visually appropriate as well.

4. Long-term visual quality will be enhanced by management activities which result in a mix of species and uneven age stands.

5. Lodgepole pine / Larch or Ponderosa stands should be maintained for established campgrounds and dispersed camping areas that are heavily used.

6. Firewood program activities should occur only in unseen areas and those screened by vegetation.

7. Wherever possible, long-term silvicultural treatments and management activities should occur behind a screen of established trees after which, and much later, the screening stand can be removed.

Recreation: Developed Sites: Sites such as established campgrounds, trailheads, and staging areas for groups on horseback require built structures such as gates, fences, bridges, outhouses, signs, picnic tables, etc.:

1. Signage should be standardized for the Eagle Creek Valley as to color, size, and style. It should be made of wood or stone, be restrained, be complementary, and be relative to the character of the valley.

2. All built structures should be made of wood or stone. Those structures that require added strength or durability from other materials should be clad in wood or stone whenever possible.

Recreation: dispersed Camp Sites: Although allowed, dispersed camping should not be encouraged, especially in those areas that have not been previously used for camp sites.

1. Repair damage to the natural landscape caused by camping activities.

2. Provide vegetation and/or stone boulders as natural barriers to mitigate damage from vehicles entering off-road into forest areas.

3. Provide vegetation to screen the obvious dispersed camping sites from the road and/or the river.

Transportation Facilities:

1. The narrow roadway in the valley should be continuously maintained at a safe width and additions of base rock should be added to mitigate the amount of dust that carries on the roadside foliage, into the air, and into the river. The dusty conditions substantially impacts the appreciation of the scenery, if only momentarily.

Administrative Sites:

1. Additions to the existing Guard Station or the development of new sites should be designed to retain an intimate scale, to use natural materials, and to avoid "high tech refinements" unless hidden from view. The existing Two Color Guard Station should be used as an example of appropriate appearance. Utilities and free-standing structures on a site should be screened from view by vegetation, made of or clad with wood or stone whenever possible to complement the natural surroundings. Paint colors should be discreet and harmonious with natural surroundings to avoid undue attention and distraction.

Private Land Development: Private land interrupts the National Forest as one travels the road through the valley. The structures and site development are currently visually compatible with the natural forest environment.

1. Since either the public lands and the private lands are potentially impacted in a negative way from changes, or expansion of facilities, management activity, and natural catastrophic events, the USDA Forest Service and the private landowners should mutually develop specific standards for new development, expansion or modifications. Once the standards are agreed upon, agreements of compliance should be drafted and signed to guarantee adherence. Agreement should address issues of alterations of natural landform, maintaining privacy, providing communications, timing and extent of necessary timber harvests, and provision of landscape restorations and/or screening to mitigate impacts.

Other Uses: Future development will inevitably continue in the valley. Power, telephone, TV, sewers, and other utilities can potentially impact the visual environment in a negative way.

1. Visual mitigation of new buildings, or large free standing and/or linked structures such as power lines may prove extremely difficult in the valley. Placement, scale, color, and screening are important issues to resolve to mitigate potentially intrusive structures. Underground placement should be a standard policy for location of all utility lines.

MAP USE

Recommendations

It is recommended that the visual magnitude map be used as an overlay to the VQO map. Those areas of highest sensitivity that coincide with foreground retention should be the most carefully considered to minimize potential effects on visual quality related to management activities and to develop public/private agreements. Virtually all of the defined area of the Wild and Scenic Lostine River falls within that category.

Appendix E

GLOSSARY OF ACRONYMS AND TERMS

Alternative - A Comprehensive management strategy; when a federal agency is considering an action, NEPA requires the agency to develop and analyze a range of reasonable alternatives, including a "no action" or "no change" alternative. The alternatives must respond to the issues, and must show a reasonable range of actions.

Anadromous Fish - Those species of fish that mature in the sea and migrate into streams to spawn. Salmon and steelhead are examples.

Biodiversity - The relative abundance and variety of species, both plant and animal, in a given area.

Biological evaluation - A specific process required as part of an environmental assessment that evaluates the potential effects of a proposed project on Proposed, Endangered, Threatened, and Sensitive species and their habitats.

Clearcutting - The cutting method that describes the silviculture system in which the old crop is cleared over a considerable area at one time. Regeneration then occurs from (a) natural seeding from adjacent stands, (b) seed contained in the slash or logging debris, (c) advance growth, or (d) planting or direct seeding. An even-aged forest usually results.

Code of Federal Regulations (CFR) - A codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government.

Council on Environmental Quality (CEQ) - An advisory council to the President established by the National Environmental Policy Act of 1969. It reviews federal programs for their effect on the environment, conducts environmental studies, and advises the President on environmental matters. (Abstracted from the National Environmental Policy Act of 1969, as Amended.)

Cultural resource - The remains of sites, structures, or objects used by humans in the past-historic or prehistoric.

Cumulative effects or impacts - Cumulative effect or impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal (or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7 - these regulations use effects and impacts synonymously.)

Decision notice - The written record of the decision made after a federal agency completes an environmental assessment. The decision notice chooses one of the alternatives, or a blend of the alternatives, and may be appealed by the public. The Forest Service combines the decision notice with the FONSI (Finding of No Significant Impact) required by NEPA.

Designated corridor - Both the wild and scenic corridor and the scenic waterway, including all areas that are part of either designation.

Developed recreation - Recreation that requires facilities that, in turn, result in concentrated use of an area. Examples of developed recreation areas are campgrounds and ski areas; facilities in these areas might include roads, parking lots, picnic tables, toilets, drinking water, ski lifts, and buildings.

Dispersed recreation - A general term referring to recreation use outside developed recreation sites; this includes activities such as scenic driving, hiking, backpacking, hunting, fishing, snowmobiling, horseback riding, cross-country skiing, and recreation in primitive environments.

Diversity - The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan.

Easements - An interest in real property that conveys use, but not ownership, of a portion of an owner's property.

Endangered species - Any species of animal or plant that is in danger of extinction throughout all or a significant portion of its range. Plant or animal species identified by the Secretary of the Interior as endangered in accordance with the 1973 Endangered Species Act.

Environmental Analysis - A comprehensive evaluation of alternative actions and their predictable short- and long-term environmental effects, which include physical, biological, economic, social, and environmental design factors and their interactions.

Environmental Assessment - The concise public document required by the regulations for implementing the procedural requirements of the National Environmental Policy Act. (40 CFR 1508.9,2)

Floodplain - Relatively flat surfaces adjacent to active stream or river channels, formed by deposition of sediments during major floods; may be covered by water during floods:

100-year floodplain - That area that would be covered by water during the 100-year flood event.

Historic floodplain - The relatively flat area adjacent to an active stream that has been formed by depositions of river sediment, an area larger than the 100-year floodplain.

Forest Programmic Memorandum of Agreement (PMOA - An agreement between the Forest Service and State Historic Preservation Office defining management guidelines for cultural resources.

Foreground - A term used in visual management to describe the portions of a view between the observer and up to 1/4 to 1/2 mile distant.

Forest Plan - See Wallowa-Whitman National Forest Land and Resource Management Plan.

Forest Service Handbook (FSH) - For Forest Service use, directives that provide detailed instructions on how to proceed with a specialized phase of a program or activity.

Forest Service Manual (FSM) - A system of manuals which provides direction for Forest Service activities.

Habitat - The area where a plant or animal lives and grows under natural conditions. Habitat consists of living and non-living attributes, and provides all requirements for food and shelter.

Hells Canyon Comprehensive Management Plan (CMP) - The management plan that guides the management of the Hells Canyon National Recreation Area. This plan was a requirement of the Act creating the Hells Canyon National Recreation Area.

Historic sites - Site associated with the history, tradition, or cultural heritage of national, state, or local interest, and of enough significance to merit preservation or restoration.

Interdisciplinary Team (ID Team) - A group of individuals with different training assembled to solve a problem or perform a task. The team is assembled out of recognition that no one scientific discipline is sufficiently broad to adequately solve the problem.

Irretrievable - Applies to losses of production, harvest, or commitment of renewable natural resources. For example, some or all of the timber production from an area is irretrievably lost during the time an area is used as a winter sports site. If the use is changed, timber production can be resumed. The production lost is irretrievable, but the action is not irreversible.

Irreversible - Applies primarily to the use of non-renewable resources, such as minerals or cultural resources, or to those factors that are renewable only over long time spans, such as soil productivity. Irreversible also includes loss of future options.

Key Issues - The ID Team identifies and eliminates from detailed study the issues which are not significant or which have been covered by prior environmental review. The remaining issues are covered through the analysis. These issues are the key issues.

Management plan - A plan guiding overall management of an area administered by a federal or state agency; plan usually includes objectives, goals, standards and guidelines, management actions, and monitoring plans.

Middleground - A term used in visual management to describe the portions of a view extending from the foreground zone out to 3 to 5 miles from the observer.

Mitigation - Mitigation includes: (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (d) reducing or elimination the impact over time by preservation and maintenance operations during the life of the action; and, (e) compensating for the impact by replacing or providing substitute resources or environments. (40 CFR Part 1508.20)

National Environmental Policy Act (NEPA) of 1969) - An act to declare a National policy which will encourage productive and enjoyable harmony between humankind and the environment, to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, to enrich the understanding of the ecological systems and natural resources important to the Nation, and to establish a Council on Environmental Quality. (The Principal Laws Relating to Forest Service Activities, Agriculture Handbook No. 453, USDA, Forest Service 359 pp.)

National Forest Management Act (NFMA) - A law passed in 1976 as an amendment to the Forest and Rangeland Renewable Resources Planning Act, requiring the preparation of Regional Guides and Forest Plans and the preparation of regulations to guide that development.

Outstandingly remarkable values (OR values) - Term used in the National Wild and Scenic Rivers Act of 1968; to qualify as outstandingly remarkable, a resource value must be a unique, rare, or exemplary feature that is significant at a regional or national level.

PETS - Proposed, endangered, threatened, or sensitive species.

Prehistoric site - An area which contains important evidence and remains of the life and activities of early societies which did not record their history.

Private land use regulations (PLUR's) - The Act that created the Hells Canyon National Recreation Area (NRA) required the Secretary of Agriculture to promulgate regulations for private lands within the NRA. These regulations are referred to as the Private Land Use Regulations.

Public involvement - A Forest Service process designed to broaden the information base upon which agency decisions are made by (1) informing the public about Forest Service activities, plan, and decisions, and (2) encouraging public understanding about and participation in the planning processes which lead to final decision making.

Recreation Opportunity Spectrum (ROS) - A framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences have been arranged along a continuum of spectrum divided into seven classes: Primitive, Semiprimitive Nonmotorized, Semiprimitive Motorized, Roaded Modified, Roaded Natural, Rural Urban.

1. **Primitive** - Area is characterized by an essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.

2. **Semiprimitive Nonmotorized** - Area is characterized by a predominately natural or natural appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but would be subtle. Motorized recreation use is not permitted, but local roads used for other resource management activities may be present on a limited basis. Use of such roads is restricted to minimize impacts on recreation experience opportunities.

3. **Semiprimitive Motorized** - Area is characterized by a predominately natural or natural-appearing environment of moderate to large size. Concentration of users is low but there is often evidence of other users. The area is managed in such a way with minimum on-site controls and restrictions. Use of local primitive or collector roads with predominately natural surfaces and trails suitable for motor bikes is permitted.

4. **Roaded Natural** - Area is characterized by predominately natural-appearing environments with moderate evidence of the sights and sounds of man. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmo-

nize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities.

5. **Roaded Modified** - Area is characterized by substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident. Substantially modified natural environment where roads, landings, slash, and debris may be strongly dominate from within, yet remain subordinate from distant sensitive roads and highways.

Rehabilitation - Action taken to restore, protect, or enhance site productivity, water quality, or other resource values over a period of time.

Resident fish - Fish species that complete their entire life cycle in freshwater; non-anadromous fish; an example is rainbow trout.

Resource assessment - An evaluation of the resources and values associated with a wild and scenic river and the river corridor; the evaluation determined the level of significance of river-related values.

Retention - See Visual quality objective.

Riparian - Pertaining to areas of land directly influenced by water or influencing water. Riparian areas usually have visible vegetative or physical characteristics reflecting this water influence. Stream sides, lake borders, or marshes are typical riparian areas.

River Corridor - Land adjacent to the Wild and Scenic River, managed along with the river to maintain and/or enhance the ORVs of the river. Corridor boundaries are delineated by the geography and the ORVs encompassing not more than 320 acres per river mile.

Roadless area - Acres studied during the Roadless Area Review and Evaluation process (RARE II) which are roadless and at least 5,000 acres in size.

Salvage cuttings - Intermediate cuttings made to remove trees that are dead or in imminent danger of being killed by injurious agents.

Scenic easements - Scenic easement means the right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the wild and scenic river system, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area, but such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement. For any designated wild and scenic river, the appropriate Secretary shall treat the acquisition of fee title with the reservation of regular existing uses to the owner as a scenic easement for the purposes of this Act. Such an acquisition shall not constitute fee title ownership for purposes of section 6 (b).

Scoping process - A part of the National Environmental Policy Act (NEPA process; early and open activities used to determine the scope and significance of the issues, and the range of actions, alternatives, and impacts to be considered in an Environmental Impact Statement. (40 CFR 1501.7)

Sedimentation - A process where material carried in suspension by water flows into streams and rivers, increasing turbidity and eventually settling to the bottom.

Sensitive species - Plant or animal species which are susceptible or vulnerable to activity impacts or habitat alternations. Those species that have appeared in the Federal Register as proposed for classification or are under consideration for official listing as endangered or threatened species, that are on an official State list, or that are recognized by the Regional Forester as needing special management to prevent placement on Federal or State lists.

Sensitivity level - A measure of people's concern for the scenic quality of the National Forests. Three sensitivity levels are employed, each identifying a different level of user concern for the visual environment.

Level 1 - Highest sensitivity
Level 2 - Average sensitivity
Level 3 - Lowest sensitivity

Snag - A standing dead tree.

Special attributes - Term used in planning for State Scenic Waterways; to qualify as a special attribute, a resource value must be a unique, rare, or exemplary feature that is significant at a regional or national level.

Standards and guidelines - Bounds or constraints within which all practices in a given area will be carried out, in achieving the goals and objectives for that area. Standards and guidelines provide environmental safeguards and also state constraints prescribed by law.

Stream class - Classification of streams based on the present and foreseeable uses made of the water, and the potential effects of on-site changes on downstream uses. Four classes are defined:

Class I - Perennial or intermittent streams that: provide a source of water for domestic use; are used by large numbers of anadromous fish or significant sports fish for spawning, rearing, or migration; and/or are major tributaries to other Class I streams.

Class II - Perennial or intermittent streams that: are used by fish for spawning, rearing, or migration; and/or may be tributaries to Class I streams or other Class II streams.

Class III - All other perennial streams not meeting higher class criteria.

Class IV - All other intermittent streams not meeting higher class criteria.

Terminus - The beginning or ending point; in this case, the beginning or ending point of a legally designated corridor, such as the Wild and Scenic.

Threatened species - Those plant or animal species likely to become endangered species throughout all or a significant portion of their range within the foreseeable future. (See also Endangered species.)

Traditional Values/Lifestyle Adaptation - See Appendix C - Resource Assessment.

Unregulated Harvest - Harvest on lands in LRMP management areas which do not schedule timber

harvest on a regular sustainable basis.

Viewshed - Portion of the Forest that is seen from a major travel route, or high use location.

Visual Quality Objective (VQO) - Categories of acceptable landscape alteration measured in degrees of deviation from the natural-appearing landscape.

Preservation (P) - Ecological changes only.

Retention (R) - Management activities should not be evident to the casual Forest Visitor.

Partial Retention (PR) - Management activities remain visually subordinate to the characteristic landscape.

Modification (M) - Management activities may dominate the characteristic landscape but must, at the same time, follow naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middleground.

Maximum Modification (MM) - Human activity may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.

Enhancement - A short-term management alternative which is done with the express purpose of increasing positive visual variety where little variety now exists.

Visual resource - The composite of basic terrain, geologic features, water features, vegetative patterns, and land use effects that typify a land unit and influence the visual appeal the unit may have for visitors.

Watershed - The entire land area that contributes water to a drainage system or stream. Also used to describe 33 watersheds used for Forest level planning and analysis, averaging 55,000 acres.

Wetlands - Areas that are inundated by surface or ground water often enough to support, and usually do support, primarily plants and animals that require saturated or seasonally saturated soil conditions for growth and reproduction.

Wild and Scenic River - Those rivers or sections of rivers designated as such by Congressional action under the 1968 Wild and Scenic Rivers Act, as supplemented and amended, or those sections of rivers designated as wild, scenic, or recreational by an act of the legislature of the state or states through which they flow. Wild and scenic rivers may be classified and administered under one or more of the following categories:

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.

2. **Scenic River Areas** - Those rivers or sections of rivers that are free of impoundments, with 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.

Appendix F

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Appendix G

EAGLE CREEK WILD & SCENIC RIVER CORRIDOR

LEGEND

- Wild & Scenic River Corridor Boundary
- Boundary Description Change
- Classification Change
- Eagle Cap Wilderness Boundary
- Forest Boundary
- Private Property

Boundary Description

A - Outlet of Eagle Lake
B - 660 ft. from the river
C - Point to point - section line, section corner, 1/4 corner or 1/16 corner
D - Ridge line
E - Forest boundary
F - 100 ft. down slope from centerline of forest rd. #'s 200, 215, 250, 125, 150, 153, 7015, 150 & 175
G - 50 ft. up slope from Sparta Ditch
H - 25 ft. down slope from centerline of forest rd. #77
I - 500 ft. up slope from centerline of forest rd. #7755
J - Up Boulder Creek to Wilderness boundary
K - Wilderness boundary.

N
W — USFS — E
S

1 0 1 2 Miles

MAP SEGMENT #1

SEE MAP SEGMENT #2

EAGLE CREEK WILD & SCENIC RIVER CORRIDOR

LEGEND

- Wild & Scenic River Corridor Boundary
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K - Wilderness boundary

N
W — E
S

1 0 1 2 Miles

MAP SEGMENT #2

Appendix H

AFFECTED ENVIRONMENT

PURPOSE OF THIS CHAPTER

To describe the character and resources of the Wild and Scenic River corridor at the time of designation. The current conditions, as well as existing trends, are described to acquaint people with the corridor and provide a basis from which to assess the consequences of the various management alternatives.

REGIONAL SETTING

Eagle Creek, is located in Baker and Union Counties in northeast Oregon, northwest of the town of Richland. The river flows from a glacial cirque at 7,448 feet, through the intensely glaciated, steep, rugged Wallowa Mountains, and then through a basalt canyon to its confluence with the Powder River at 2,100 feet. The Powder is a tributary of the Snake River, which in turn flows into the Columbia River, and then to the Pacific Ocean. The Eagle Creek watershed contains 156 square miles upstream from the lower boundary of the designated Wild and Scenic River corridor.

The creek begins at Eagle Lake, high on the slopes of the Wallowa Mountains in the Eagle Cap Wilderness on the Wallowa-Whitman National Forest. Eagle Creek is approximately 40 miles long. The upper 28.9 mile segment of Eagle Creek was designated as a Wild and Scenic River by the Omnibus Oregon Wild and Scenic Rivers Act of 1988. The designated segment begins below the earthen dam at Eagle Lake and ends 28.9 miles downstream at the Wallowa-Whitman National Forest boundary, 4 miles east of Sparta at the north side of Section 18, T.8S., R.45E., W.M. The upper 4.5 miles lie within the Eagle Cap Wilderness and has been designated a "Wild River" under the Wild and Scenic Rivers Act. From the Eagle Cap Wilderness boundary to Paddy Creek (16.9 miles) the river has been designated a "Recreational River", from Paddy Creek to Little Eagle Creek (6.0 miles) the river has been designated a "Scenic River", and from Little Eagle Creek to the National Forest boundary (1.5 miles), the river has been designated a "Recreational River". Within the Wild and Scenic River corridor, Eagle Creek ranges from 7,448 feet to 2,800 feet elevation.

The Eagle Creek drainage is bordered by drainages of the Powder River on the west, the Imnaha River and Minam River on the north, and the Pine Creek drainage on the east. The Imnaha and Minam Rivers and a portion of the Powder River are also National Wild and Scenic Rivers.

Major tributaries of Eagle Creek include West Eagle, East Eagle, and Little Eagle Creeks.

CLIMATE

The climate in the general area is characterized by a short growing season and little or no summer precipitation. Annual precipitation within the river corridor varies significantly with elevation. Lower elevations receive approximately 20 inches of precipitation per year, while upper elevations exceed 60 inches of precipitation per year, much of it falling as winter snow.

Persistence of the snow pack varies primarily with elevation, generally melting within a few days of falling in lower areas and rarely maintaining a winter-long snow pack. At higher elevations, snow persists in patches through June and early July. A snowmelt hydrography typifies the streamflow with peak flows occurring in late May.

The summer months are typically dry with less than 15 percent of the of the annual precipitation falling during July, August, and September. The rain that usually occurs during the summer is the result of local thunderstorms. On any given day, air temperature variation is primarily a function of elevation. Summer temperatures near 90° F are not unusual in the lower reaches, while winter lows may reach well below zero. At higher elevations, summer temperatures fluctuate widely with hot days and cold nights. Summer highs reach the mid-70s at 5,000 feet and the mid-60s at 7,000 feet. At higher elevations, frost can occur almost any night of the year. Winter temperatures remain low for long periods and considerable snow accumulates.

HISTORY

Written and oral history sources report the use of the Eagle Creek drainage by Native Americans pri-

pose to address the issue of navigability. Rather, this river plan is intended to provide a management philosophy for the above segment of the river, as well as the remainder of the river.

Under state law, the Division of State Lands (DSL) is responsible for the management of the beds and banks of navigable waterbodies (ORS 274.005 - 274.590). DSL is the administrative arm of the State Land Board (the Board), composed of the Governor, Secretary of State, and State Treasurer. Under constitutional and statutory guidelines, the Board is responsible for managing the assets of the Common School Fund. These assets include the beds and banks of Oregon's navigable waterways and are to be managed for the greatest benefit of the people of this state, consistent with the conservation of this resource under sound techniques of land management. Protection of public trust values of navigation, fisheries, and public recreation are of paramount importance, too.

The original Federal test for determining navigability was established in The Daniel Ball case over 100 years ago. This U.S. Supreme Court admiralty case clarified that rivers "are navigable in fact when they are used, or susceptible of being used, in their ordinary condition, as highways of commerce . . ." Interpreting this requirement, subsequent court decisions have adopted this test for title purposes and have ruled that a waterbody is navigable if it was capable of use, at the time of statehood, as a public highway for transporting goods or for travel in the customary modes of trade and travel on water.

The DSL has not made a determination concerning the navigability and state ownership for the beds and banks of Eagle Creek and the Federal test for navigability and court determination has also not been made. The position of the Forest Service is that navigability is a judicial finding and must be made by a Federal Court. Therefore, the Forest Service considers rivers non-navigable until proven otherwise. For purposes of managing the above portion of this river (where navigability has not been established), no special requirements will be pursued.

The DSL also administers the State's Removal-Fill Law which protects Oregon's waterways from uncontrolled alteration. The law requires a permit for fill or removal of more than 50 cubic yards of material within the State's waterways. The permit-review process involves coordination with the natural resource and land use agencies from the local through the Federal levels.

As with any jointly managed resource, jurisdiction is not as important as care for the resource. The DSL and the Forest Service will continue to work together to assure that the public trust interest and the purpose of the Wild and Scenic Rivers Act are met.

Nothing set forth herein shall limit the ability of the Forest Service to administer this segment of river.

AMERICAN INDIAN TREATIES

Eagle Creek is the boundary between lands ceded by the Confederated Tribes of the Umatilla Indian Reservation (Cayuse, Walla Walla, and Umatilla Tribes) on the west and the Nez Perce Tribe on the east.

The entire river corridor is within the lands that were ceded to the United States Government, through a ratified treaty, by the Confederated Tribes of the Umatilla Indians and the Nez Perce Tribe. The river corridor does not include any reservation lands. Under the provisions of the 1855 Treaty, members of the tribes retain specific rights and privileges on lands ceded by past treaties. These treaties entitle them to hunt, gather roots and berries, and pasture stock on nonclaimed (Federal) lands within the river corridor. In addition, these treaties entitle members of the tribes to fish at all usual and accustomed fishing sites. These tribes still continue to use the area for hunting, fishing, and other traditional practices at usual and accustomed places. The tribes also actively pursues protection of cultural and sacred sites, which include burials, and other treaty rights. Their rights to believe, express, and exercise their traditional religions (including having access to sites, use, and possession of sacred objects, and the freedom to worship through ceremonial and traditional rites) are also protected by law.

GRAZING

Domestic livestock grazing begin in the late 1800s when settlers grazed large sheep herds in portions of the watershed. The higher elevations were used for summer range while the lower portions, where mild winter conditions prevailed, were used for domestic livestock winter feeding grounds.

The Wilderness portion of the corridor and all National Forest lands north and/or east of Forest Road #77 upstream from the East Eagle/Eagle Creek confluence is part of the Sheep Rock Allotment and the Minam River Allotment. These are sheep allotments and have been vacant for over 15 years. There are no plans to open them up for grazing at this time.

Historically, sheep grazing was an important early industry in this region. Some excessive sheep grazing did occur in some area such as Bennett Peak in the early 1900s. Here, sheep grazing has resulted in some plant community alterations in the watershed. Sheep grazing continued into the 1960s but was characterized by much smaller bands used over a larger growing area. Many areas of past over-use, such as Bennett Peak, healed from improved allotment management. Market conditions, difficulty of getting sheep herders and loss of effective predator control methods led to the demise of the sheep industry in the Wallowa Mountains in the late 1960's. These conditions prevail today and there are further complications such as even more restrictive or no predator control options as well as complications and controversy over Bighorn Sheep reintroductions. It is unlikely that these two sheep allotments will ever be re-stocked by domestic sheep.

There are three active cattle allotments within the middle and lower portions of the river corridor the Eagle Valley Allotment, the Goose Creek Allotment,and the Trouble Gulch Allotment.

The Eagle Valley Allotment includes the east side of Eagle Creek downstream from East Eagle Creek and contains 33,670 acres.

The allotment has 586 head of permitted cattle for a four and one half month grazing season from June 1 through October 15 for a total of 2640 animal months of grazing. The allotment is managed under a deferred system. Livestock grazing occurs in the tributaries of Eagle Creek but livestock rarely venture to Eagle Creek itself. Livestock from the Eagle Valley Allotment getting into the main stream corridor of Eagle Creek has not been a problem in the past.

The Goose Creek Allotment is located on the west side of Eagle Creek downstream of the Eagle Creek bridge on Forest Road #77 and contains 30,175 acres. A total of 487 cattle are permitted on the allotment for a 5 month season, from June 1 through October 30, for a total of 2435 animal months. Goose Creek cattle rarely get on the main stem of Eagle Creek. The topography adjacent to Eagle Creek and it's immediate tributaries is very steep with little livestock use. The steep slopes serve as natural barriers which prevent cattle from getting down to Eagle Creek. This allotment currently has a four pasture rest-rotation system in effect.

The Trouble Gulch Allotment is a very small 1,115 acre allotment located adjacent to the National Forest Boundary and on the west side of Eagle Creek downstream from Shanghi Creek. A total of 16 head of cattle are permitted on this allotment for a four month grazing season of June 1 through September 30 for a total of 64 Animal months. This allotment is used in conjunction with adjacent private lands and effects of this grazing have been negligible to recreation activities along Eagle Creek.

Other grazing in the river corridor is associated with horses used by recreationists, hunters, outfitters and guides, and by elk.

RESIDENCES, CABINS, AND RECREATIONAL SERVICES

On the National Forest there are several structures within the river corridor. These include the Two Color Guard Station Rental Facility (with several outbuildings), just upstream from the Two Color Creek-Eagle Creek confluence, four Forest Service campgrounds (with picnic tables, fire rings, bulletin boards, and outhouses), several Forest Service Trailheads, seven recreational residences on special-use permit, and a stream monitoring gauge. On private land, there are approximately 20 summer homes along with outbuildings.

TIMBER

Forests cover most of the National Forest System lands and most of the private lands in the river corridor. The upper 4.5 miles of the river corridor lies within the Eagle Cap Wilderness and all National Forest System lands within the area are withdrawn from timber harvest.

The current river corridor (1/4 mile each side of the mean high water line) lies in Management Area 7, Wild and Scenic Rivers, as specified in the Wallowa-

Whitman National Forest Land and Resource Management Plan (Forest Plan). Areas of Management Area 15, Old Growth, are scattered throughout the river corridor, with the highest concentration of these located in the Scenic River Section (between Paddy Creek and Little Eagle Creek). The river corridor within the Eagle Cap Wilderness also lies within Management Area 4, Wilderness. The four Forest service campgrounds and Two Color Guardstation Rental Recreation facility are in Management Area 16, Administrative and recreation Site Retention, and are also withdrawn from timber harvest. If conflicts arise between any of the provisions of these management areas within the river corridor the more restrictive apply.

Adjacent to the Congressionally designated 1/2 mile-wide river corridor area are several other Management Areas. Below the wilderness boundary, the river corridor is in Management Areas 6, 1, 3, and 3a. Management Area 6 includes the area just outside the river corridor between the Main Eagle Trailhead and the Wilderness boundary. This area is managed as backcountry and no regulated timber harvest is allowed. On the eastside of Eagle Creek, just outside the river corridor, from the Main Eagle Trailhead to Two Color Guard Station, the river corridor is in Management Area 3a. This area is managed for timber and wildlife winter range. Adjacent to the both sides of the river corridor below Shanghai Creek, and the eastside of the river corridor between Shanghai Creek and Paddy Creek is in Management Area 3, Wildlife Summer Range. The remainder of the area adjacent to the river corridor is in Management Area 1, Timber Production. Regulated timber harvest is allowed in Management Areas 1, 3, and 3a subject to the provisions in the Forest Plan. This includes converting unmanaged natural stands to vigorous managed stands. In Management 3 and 3a this constrained to meet wildlife objectives.

Commercial timber stands long the river corridor are primarily composed of grand fir and Douglas-fir, but Engelmann spruce, lodgepole pine, subalpine fir, cottonwood, and ponderosa pine contribute to the variety. On the mid and upper slopes western larch, aspen, and maple are included.

In general, the plant communities are in the mature to overmature successional stage. The major disturbance that formed the present stand structure were fires around the turn of the century. There are two distinct size and age classes present across much of the area; one age group is 80-90 years old and is over-topped by an older overstory that survived the fires and ranges from 150-300 years old. Stands in many of the mixed conifer plant communities are converting to more the tolerant true fir species as a result of fire suppression. There are not many young stands present that have originated from recent disturbances, and the immature seral species are generally declining in number.

Stand productivity within the corridor varies considerably. The most productive types are the grand fir types. The productivity is directly related to the soil depth, moisture availability and plant community type. Generally the river bottom is the most productive. There are benches and sites on the mid and upper slopes that would rate high to moderate in productivity across all community types. The ponderosa pine and Douglas-fir sites are the least productive because they exist on drier soils and aspects. Management options will be limited on drier, shallow soil within the corridor.

In the absence of disturbance on mixed conifer sites, natural succession will result in the replacement of seral communities by the more shade tolerant climax species. Much of the area is tending toward its' climax condition. This will continue until severe disturbance, such as fire, windthrow, insects and diseases or silvicultural treatment create conditions favorable for establishment of shade intolerant species. Successional trends are important management considerations when trying to favor seral species. Observations suggest the following order of shade tolerance species, from most to least: subalpine fir, Engelmann spruce, grand fir, Douglas-fir, ponderosa pine, and western larch.

The stands within the corridor are being attacked by several damaging insect pests. The Douglas-fir tussock moth is a major defoliator of mixed conifer forests, showing equal preference for Douglas-fir, grand fir and subalpine fir. The western spruce budworm is causing significant defoliation and mortality and is showing persistence with year after year defoliation. The repeated defoliation is resulting in some growth reduction, top-killing and tree death.

Bark beetles are causing damage in unmanaged and overmature stands. The Douglas-fir beetle is causing increasing mortality to the Douglas-fir. The Mountain pine beetle attacks the pines and causes

most damage to overmature and overstocked stands of ponderosa pine and lodgepole pine. The western pine beetle, pine and fir engravers, and the spruce beetles continue to kill trees through out the corridor.

The most serious disease problem appears to be Indian paint fungus. This is a particular problem because of its occurrence in the large overstory grand fir along the corridor which are adjacent to many recreation sites and retention areas. Root rots and dwarf mistletoes are present and are a management concern.

Managed stands are those undergoing manipulation to meet some goal, usually to produce a "target" number of trees of a given species of defined diameter and height by a specific time. This goal is often attained through some combination of precommercial thinning and commercial thinning and perhaps suppression of competing vegetation early in the life of the stand. The existing condition of most stands in this assessment area would be classified as unmanaged, they are mature and overstocked with suppression and suppression mortality occurring. This is evident when reviewing density guidelines for the various plant community types. Opportunities exist to utilize mortality, maintain diameter growth and tree vigor along with meeting VQO values established in the corridor.

Existing volume figures in each stand indicate an approximate volume in the corridor of 90 MMBF. An estimate of yearly mortality is .6 MMBF/year.

Several National Forest timber sales have been conducted partially within or adjacent to the corridor and some incidental, light timber harvest has occurred on the private lands; however, these activities are virtually imperceptible from the river.

Recent harvest on the private lands near the East Eagle Creek confluence has included selection harvest over most of this 286 acre tract. Other then some temporary soil disturbance on skid roads and landings, evidence of the operation is not noticeable to most Forest visitors.

Past timber management and harvest activities in the river corridor have been minor and have caused little if any impact on the resources in the area.

TRANSPORTATION

The upper 4.5 miles of the river corridor lies in the Eagle Cap Wilderness and is free of roads. Below the Wilderness boundary, there are numerous Forest Service roads in the river corridor. These include the main collector roads such as Forest Roads # 77, 7735, 7015, and 7755 which parallel Eagle Creek, and many local and spur roads. All of the corridor below the Main Eagle Trailhead is heavily roaded except for the 6 mile Scenic Section between Tamarack Campground and Little Eagle Creek. The river corridor also contains three National Forest road bridges and four private road bridges on Eagle Creek. The lower Forest Service bridge on Forest Road # 7015 is currently under reconstruction. The corridor also contains several Forest Service Road bridges on tributary streams such as East Eagle and West Eagle, and several Forest Service trail footbridges such as on Eagle Creek above Boulder Park and at Tamarack Campground, and on Little Eagle Creek at Eagle Forks Campground.

SCENERY

The diversity of landforms, water, color, and vegetation present throughout the designated portion of Eagle Creek is one of the most attractive attributes of the river corridor. The landscape character is formed by a variety of elements. Rock outcroppings are abundant and at times dramatic. Dark forested hillsides facing north are contrasted by south facing grassy slopes that are sparse of trees. The valley floor alternates between flat meadows and narrow gorges as the river changes from calm, meandering and sometimes deep, to swift and shallow.

The headwaters of Eagle Creek originate high in a glacial cirque in the Eagle Cap Wilderness. From its beginning at the outlet of Eagle Lake, the creek follows a steep gradient over small waterfalls and bouldery white water rapids as it descends from the mountains. Vegetation in the classic u-shaped glacial valley alternates between high mountain meadows and stands of sub-alpine fir and whitebark pine. Expansive views of the surrounding Wallowa mountains are afforded from every meadow opening. Numerous avalanche chutes, landslides, waterfalls, and scoured rock outcrops create a highly diverse and dynamic landscape that vies for attention with the crystal clear creek.

The valley floor becomes relatively flat and wide at the Main Eagle Trailhead, and for the next five miles Eagle Creek temporarily slows in its rapid descent from the high mountains. Clear blue-green pools alternate with rapids as the creek winds its way through lush green, boulder-strewn meadows and park-like forests. Vegetation and canyon walls generally limit views to the immediate foreground except for the breathtaking views of the mountains seen from the northern end of the road.

Eagle Creek leaves a landscape dominated by glacial features below its confluence with West Eagle Creek. For approximately the next 10 miles, the valley closes in and canyon walls become abruptly steep, towering 500-1000' above the valley floor in places. Eagle Creek resumes its fast-moving, bouldery descent through the narrow canyon, bordered by lush riparian vegetation and picturesque meadows. Dramatic rock formations extending from rim to canyon floor punctuate otherwise forested hillsides. The road paralleling Eagle Creek offers unrestricted views of the creek in the immediate foreground and surrounding hillsides.

The lower seven miles of the designated portion of Eagle Creek takes on a character more typical of eastern Oregon rivers as it enters the lower elevation basalt-dominated plateaus surrounding the Wallowa Mountains. Mixed conifer forests are replaced on drier slopes by grassy openings and park-like stands of ponderosa pine. Unusual rock formations provide visual contrast. By this time Eagle Creek has become substantial in size from the contributions of several major tributaries, and alternates between bouldery rapids, short waterfalls, smooth swift stretches, and deep blue pools. Visitors can enjoy views of the creek and canyon from the Martin Bridge Trail which parallels the six-mile scenic segment of Eagle Creek, and from Forest Road #7735 which parallels the lower 1-1/2 mile recreational segment.

Throughout the corridor, seasonally abundant wildflowers color the streambanks, cliffs, and forest floor with splashes of red, purple, yellow, white and blue in the spring and summer. Deciduous vegetation including cottonwood, aspen, ninebark, and bracken fern provide attractive contrasting fall colors. Western larch provide a dramatic color contrast in the forest in the late fall as they turn golden, and in the springtime as the new green needles emerge. Picturesque stands of ponderosa pines and other large diameter trees can be seen in places throughout the corridor, including several designated old growth stands.

Human impacts in the Eagle Creek corridor are fairly limited and generally remain subordinate in the landscape. These include several dozen rustic-appearing summer homes and mine structures on private land, six ponds and a ditch system to connect them on private land, the road and a few road and trail bridges, a historic guard station/work center, posts marking an underground telephone system, seven recreation residences on special-use permit, and several small campgrounds and trailheads. Numerous dispersed campsites are visible along the banks of the creek. Some incidental, light timber harvest has occurred on the private lands in the past, and several National Forest timber sales have been conducted partially within or adjacent to the corridor; however, these activities are virtually imperceptible from the river or the road system along the river. Probably the most noticeable human impact along Eagle Creek are the road cuts and fill slopes on the National Forest and an occasional cut for placement of summer homes, which are occasionally visible from the river. In spite of the continuing interest Eagle Creek has received since before the turn of the century, the river corridor still presents an overall natural and pleasing landscape to viewers. In fact, the outstanding and unaltered scenery of Eagle Creek attracted the attention of movie producers, who used the area as a filming location for "Paint Your Wagon".

The distance zones in the viewshed are primarily foreground with very little middleground and minimal background. The variety class is A, "Distinctive", due to the variety of the stream character, vegetation rock outcroppings and steep canyon walls. The sensitivity level is designated as Level 1, and the visual objective is Preservation in the Wilderness portion of the river corridor and Retention throughout the remainder of the area.

RECREATION

The Eagle Creek corridor provides a wide variety of recreational opportunities. Based on field observations and use records, Eagle Creek receives a considerable amount of use beginning as soon as the snow melts in the spring and continues into the late fall hunting season(s). A large portion of the visitors

are from the local area, although some visitors come great distances to recreate in the Eagle Creek drainage, drawn by the exceptional scenery, excellent fishing, clean water, and the broad range of recreational opportunities available.

Primary activities recreationists engage in are fishing, hunting, camping, sightseeing, hiking, and picnicking. Dispersed camping associated with fishing, hunting, and prospecting is very popular, evidenced by the numerous dispersed campsites within the roaded corridor. Other less pursued activities include horseback riding, photography, nature study, swimming, wildlife viewing, berry and mushroom picking, and various winter sports such as cross country skiing and snowmobiling. The Main Eagle Trailhead is a major south side access route into the Eagle Cap Wilderness, providing opportunities for solitude and primitive recreation experiences in a Wilderness setting. Hazardous whitewater, waterfalls, and low seasonal flows preclude floating or kayaking opportunities.

The entire designated portion of river is accessible by either gravel road or trail. Good quality gravel roads parallel the recreational segments of the river. The Main Eagle Trail (FS #1922), a wilderness trail that parallels the wild river segment for 3 miles from the Main Eagle Trailhead, and connects with the Eagle Lake Trail (FS #1931) which provides access to the headwaters at Eagle Lake. The other trails include the Eagle Lake Trail (FS #1931), the Lookingglass Trail (FS #1921), and the Bench Canyon Trail (FS #1937). The unroaded six-mile segment of Eagle Creek is paralleled by the Martin Bridge Trail (FS #1878), providing anglers, hikers, and hunters access from early spring to late fall. Several other trails which begin in the vicinity of Two Color Guard Station, the Fake Creek Trail (FS #1914) and the Two Color Trail (FS #1932), provide access to the surrounding foothills that are adjacent to the W&SR corridor. All the trails in the corridor are maintained at a Difficulty Class of "More Difficult" with the exception of the Main Eagle Trail which has a Difficulty Class of "Easiest". A portion of the river road is part of a popular maintained snowmobile route during the winter months.

Recreation developments in the corridor are fairly limited and generally primitive in design-consistent with the ROS settings (Development Level 3). Four small developed campgrounds, Eagle Forks, Tamarack, Two Color, and Boulder Park provide a developed camping and picnicking experience in a primitive setting. Eagle Forks has 7 tent/trailer sites and several picnic sites. Adjacent, is the trailhead and a footbridge for the Martin Bridge Trail. The Tamarack Campground has 14 tent/trailer sites, a footbridge over Eagle Creek, and provides fishing access, fishing platforms, and camping and picnicking opportunities for physically-challenged visitors and their families. The Two Color Campground has 14 tent/trailer sites, and the Boulder Park Campground has 6 tent/trailer sites.

The river corridor contains the Main Eagle, Fake Creek, and Martin Bridge Trailheads which have signs and parking. The Main Eagle Trailhead (formerly called Boulder Park) has recently been reconstructed to add the Boulder Park Campground, and to improve the toilets, stock facilities, vehicle turnaround, viewpoint access, and long-term parking. This provided unloading and camping facilities for parties with horses and minimized the potential conflicts in other developed campgrounds.

The river corridor contains the Two Color Guard Station which is available for public recreation rental. A wide variety of groups and individuals rent the site for periods from a few days to a few weeks at at time, with weekly rental being the most common.

Dozens of informally dispersed camping areas in the river corridor receive heavy use, throughout the summer and fall, in association with hunting, fishing, and mining. Additional dispersed campsites are available nearby in the West Eagle and East Eagle drainages. Some of the Eagle Creek sites and access roads are poorly located and may be incurring some resource damage. The condition of dispersed sites in the corridor needs to be inventoried and evaluated.

A variety of recreational development projects are identified in the Forest Plan for the Eagle Creek corridor. These include the reconstruction of the Boulder Park campground to add 5 more sites with corrals, the Two Color and Eagle Forks Campgrounds to improve safety, resource protection, and to better accommodate existing use. Also included is the addition of additional trailer camping sites, improvement of Two Color Guardstation, and installing interpretive signing at a viewpoint overlooking a natural landslide that occurred on the east side of Eagle Creek in 1982 (see Geology/ Paleontology section).

There are exceptional opportunities to develop interpretive sites or tours to explain the area's unique natural and cultural history. Interpretation of the area's gold mining history could be developed to compliment the other nearby historic sites such as the Oregon Trail Interpretive Center, potentially attracting visitors from outside the geographic region and enhance the their recreational experiences. Other potential projects that have been discussed for the river corridor include an interpretive trail on the historic Sparta Ditch location, an interpretive display at the Martin Bridge stage stop site, and other interpretive materials or displays covering the area's geologic features, natural history, and cultural history.

The existing Recreation Opportunity Spectrum (ROS) for the river corridor includes three ROS class settings and two Wilderness Resource Spectrum (WRS) sub-classes. The majority of the corridor classifies as Roaded Natural (RN) ROS setting. The small unroaded portions outside of Wilderness generally classify as Semi-Primitive Non-Motorized (SPNM) and Semi-Primitive Motorized (SPM). Within the Wilderness, the river corridor is classified as Semi-Primitive WRS from the trailhead to the vicinity of the Bear-Culver Lake Trail junction, and Primitive WRS class beyond that to the headwaters.

The river corridor contains seven recreational residences under special use permit near Main Eagle Trailhead. The current permits are in effect through 1999. Forest Plan direction is to not issue permits on new lots or re-issue permits on existing lots as they become vacant.

There are currently two outfitters from the Richland/Halfway area who take guide progressive pack trips (horse and llama) in the Main Eagle drainage. Outfitter permits are being held at the current level until the Wilderness Management Plan is completed in Fiscal Year 1995.

Recreational stock use in the corridor is moderate and currently unregulated. Dispersed use and recreational livestock use has grown over the past few years in the river corridor. This growth in activity and use has had only very minor impacts on riparian areas, vegetation, water quality, soils, and the quality of the wilderness experience in the area.

The quality and diversity of recreational opportunities available along the Eagle Creek corridor makes it a popular area almost year-round. Since surveys of recreational use have not been conducted specific to the river corridor, recreational use levels are estimates based on field observations and general use records. It is estimated that the corridor currently receives heavy use from early summer through fall big game hunting seasons, and light use winter through early spring. Traffic on the first few miles of the Main Eagle Trail is heavy, where day hikers and anglers are frequently encountered. Use drops off and disperses as one travels further into the Wilderness and passes several trail junctions, and the users encountered are primarily backpackers and horse parties.

The development and marketing of the tourism industry has the potential to increase demand for additional recreational facilities in the Eagle Creek corridor. New recreational developments adjacent to the corridor, such as Lily White Guard Station rental facility, could also effect the recreation use patterns in W&SR corridor.

There may be a need to implement buffers on campsites from the stream corridor within the wilderness. Outside of wilderness, there may be a need to consolidate campsites, close dispersed sites which impact the waterway, stabilize or enhance slope failures, and enhance or obliterating road systems which are depositing sediment into Eagle Creek.

GEOLOGY AND MINERALS

Eagle Creek begins high in the southern Wallowa Mountains, an area with a complex geologic record. The granitic Wallowa batholith dominates in the upper Eagle Creek drainage. The Wallowa Mountains were glaciated at least three times and perhaps as many as seven times between 11,000 and 500,000 years ago. The numerous cirque lakes, steep ridges, and craggy peaks in the upper Eagle Creek drainage were created by the sculpting of valley glaciers flowing out from a central point near Eagle Cap Mountain. Visible in the upper and middle reaches of the Eagle Creek drainage are metamorphosed greenstones and tuffs, sedimentary rocks of the Clover Creek formation, fossiliferous limestones of the Martin Bridge formation (known locally as black marble), and slates, shales, and sandstones of the Hurwal Formation. The three formations represent ancient sea floor sediments formed about 100 million years ago. The rock pinnacles just

south of Paddy Creek are limestone spires of the Martin Bridge formation. Widespread volcanism occurred 15-30 million years ago, which resulted in the formation of basalt plateaus surrounding the Wallowa Mountains uplift. The lower end of the scenic and the recreational portion of Eagle Creek is dominated by columnar-jointed olivine basalts of the Columbia River Basalt Group. Feeder dikes from some of the local eruptions can be seen exposed in the older rocks and in the glacially carved granites in the upper glaciated reaches of Eagle Creek.

As is typical throughout the Wallowa Mountains, the river valley is geologically unstable. Freezing and thawing contribute to periodic rockslides along cliffs in the drainage, with a recent occurrence evident the northeast of the Main Eagle trailhead. Occurring in 1982, this substantial slide brought down large amounts of rock and soil from a height of about 1,000 feet, crossing and temporarily blocking the stream, and ultimately coming to rest on the opposite side of the valley in the immediate vicinity of the old trailhead. The trailhead has since been relocated downriver approximately 1/4 of a mile to a more stable area. The new turnaround at the trailhead offers an excellent vantage point to view this impressive natural landslide.

The ancient sea floor sediment formations found in the Eagle Creek drainage contain the silicified shells of oyster-like bivalves, and fragments of corals and sponges. At least one significant paleontological discovery has been made in the corridor in the recent past. The oldest vertebrate fossil to be discovered in Oregon was found in the Eagle Creek corridor, which pushed back the known geologic record of vertebrate animals in the state by 50 million years. The corridor continues to be a focus of interest for paleontology field classes and scientific research.

Eagle Creek flows through the border zone of the Wallowa batholith, which in places has been mineralized and contains deposits of gold, silver, and copper. The erosion of these mineral-bearing rocks has resulted in the deposition of placer gold in the alluvial benches and stream gravels of Eagle Creek and its tributaries. Much of the early interest in Eagle Creek was related to gold. Since the discovery of gold in the region around 1860, at least 10 properties have been worked in the Eagle Creek mining district, a large area encompassing the Eagle Creek drainage and its tributaries. Production from other lode deposits in the mining district has been small.

Today, gold mining is a well-established activity in the Eagle Creek corridor, and a majority of the drainage is currently under claim. Other minerals such as silver, copper, lead, and zinc have also been produced in small quantities.

The river corridor of Eagle Creek contains 250 to 300 mining claims. One could say the entire length of the creek from the wilderness boundary to the forest boundary is claimed up. However, plans of operation have been submitted only on the portion from East Eagle confluence south to the forest boundary. Pine Ranger District receives approximately 10-12 operating plans on this segment of the creek annually. A majority of these claims fall within the "recreational mining" category in that this activity represents a broad cross section of the public who undertake this activity for the primary purpose of seeking an outdoor recreational experience and not as a means of income. It is defined as a leisure activity that involves the search for and collection of mineral specimens using gravity separation methods in a fashion that does not disturb surface resources. Recreational panning, sluicing or dredging is recognized as a legitimate recreational activity on the National Forests.

When the activity occurs on a valid mining claim it is administered under the 36 CFR 228 mining regulations and 1872 Mining Law. An operating plan is sought but not mandatory for this level of disturbance.

Since the entire corridor is virtually "claimed" the recreational miners without claims have no place to operate. Eagle Forks Campground was designated as a recreational mining site on Pine district, because it shows "color" and is withdrawn from mineral entry. This also means administration of this segment of public use does not fall under general mining law. So far no user conflicts have arisen nor resource damage to the campground occurred. Designation of the campground as a recreational mining site occurred before Wild nd Scenic River designation.

Another potential problem related to mining and the corridor is the use of the dispersed camping sites along the riparian area by the recreational miners. The segment of Eagle Creek between the East Eagle confluence and Paddy Creek is inundated by miners on their claims for most of the summer season.

FISHERIES AND WATER QUALITY

Hydrology

Eagle Creek has evolved through many natural disturbances (erosion, volcanics, glacial, etc.) to develop the geologic and hydrologic features it has today. Within the Wilderness portion of this drainage the natural hydrologic features are the least impacted and nearly pristine.

This system has a near natural flow regime which is notable for a watershed of this size in the western states (156 square miles). The quality of this waterway is primarily due to its high elevation existence which makes access difficult. This allows it to maintain a near pristine condition and minimal impacts in its upper most 11 miles of stream. The sections of river below this have been impacted but not to any significant affect. This watershed is considered to be in "Class One" condition according to Forest Service Manual 2521. This means that it is at or above its potential. It also meets the requirements to be rated a "Class One" stream. This means that it is a perennial stream utilized by salmonids.

The natural flow regime of the designated section has been slightly altered by minor diversions and small irrigation dams on several high mountain lakes at the headwaters of Eagle Creek and tributaries. For example, in the early 1900s a small foot earthen dam was constructed across Eagle Lake's outlet on the south end, to store water for release later in the season. This lake reservoir was created to provide irrigation for agricultural lands in the Powder Valley, as well as to provide some water for domestic use. There is also a small diversion on Eagle Creek for a series of 6 ponds on private property on the Hideaway Hills Tract. This diversion is small compared to the natural flow of Eagle Creek.

The river corridor also contains an old historic irrigation diversion, the Sparta Ditch, which at one time provided water to the Sparta area from Eagle Creek. The ditch has been abandoned for many years and no longer contains water, but is still visible and and contains several tunnels and flumes. The old ditch starts in the river corridor above the Two Color Campground and leaves the river corridor 1/2 mile west of the mouth of Eagle Creek.

Eagle Creek runs swift and clear during normal flows. As is typical for a snowmelt-fed stream, natural runoff patterns are seasonal. Peak runoff occurs in spring, generally March to June. Runoff recedes to low flows by late summer, and increases again in late fall in response to the fall rains. Ice damming and significant ice flows are common occurrences in late winter and spring. Evidence of flash flood events can be observed following severe summer thunderstorms.

Due to the high elevation of the upper drainage, water temperatures remain cold well into the summer months. Water quality is excellent. Dissolved oxygen levels are high and suspended sediment concentrations low during normal flows and moderate during high flows.

Water discharge for Eagle Creek has been monitored continuously by the US Geological Survey (USGS) from 1959 to present (gauging station 13288200). The station is located just upstream from the southern end of the Wild and Scenic River corridor. The average river discharge through the 1992 Water Year was 313 cfs. The lowest flow on record is 30 cfs on November 28, 1976. The maximum discharge occurred on July 12, 1975, and measured 5,310 cfs (USGS Water-Data Report OR 92-1, 1992). The average monthly mean, maximum, and minimum flows recorded for Eagle Creek for the 1992 water year and averaged from 1957 through 1992 are listed in Chart H-2.

CHART H-2

POWDER RIVER BASIN

13288200 EAGLE CREEK ABOVE SKULL CREEK, NEAR NEW BRIDGE, OR

LOCATION.--Lat 44°52'50", long 117°15'10", in SE 1/4 sec.7, T.8 S., R.45 E., Baker County, Hydrologic Unit 17050203, Wallowa-Whitman National Forest, on left bank 0.5 mi upstream from Skull Creek, 6.5 mi northwest of New Bridge, and at mile 10.5.

DRAINAGE AREA.--156 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,800 ft, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regulation. Some diversions upstream from station for irrigation and one small interbasin diversion for irrigation supply. All diversions are small compared to flow at station during irrigation season. Continuous water-quality records for the period June 1959 to September 1961 have been collected at this location.

AVERAGE DISCHARGE.--35 years, 313 ft^3/s, 226,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,310 ft^3/s July 12, 1975, gage height, 5.06 ft, from rating curve extended above 2,500 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 6.88 ft Jan. 25, 1962 (ice jam); minimum daily discharge, 30 ft^3/s Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 7	2300	*1,150	*2.98				

Minimum discharge, 58 ft^3/s Sept. 23, 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	80	112	81	93	224	312	646	537	261	103	70
2	81	76	113	84	92	225	364	616	576	224	99	69
3	81	73	96	81	90	230	422	638	530	211	98	66
4	81	86	95	90	90	242	452	686	464	192	101	68
5	81	136	94	84	91	235	405	751	422	182	100	68
6	81	175	110	88	91	227	364	825	382	182	100	66
7	81	108	108	75	91	249	334	921	367	178	99	66
8	80	105	99	107	91	238	313	928	368	164	99	66
9	79	112	95	e125	91	228	323	755	377	155	97	65
10	79	103	93	e117	92	225	323	664	380	149	94	63
11	79	98	89	e110	97	227	304	598	368	144	92	63
12	78	140	97	e115	101	239	330	536	387	138	91	63
13	78	149	87	e110	122	260	398	491	382	132	89	62
14	78	117	97	e105	117	281	388	515	319	126	85	63
15	78	104	125	e97	117	306	370	582	298	121	85	62
16	77	103	152	e86	114	310	385	613	274	118	92	61
17	74	110	164	e76	110	288	475	634	260	127	91	61
18	75	105	159	e72	107	270	446	699	257	132	88	60
19	75	101	137	e88	121	258	407	706	264	128	88	60
20	75	109	108	e100	217	251	405	720	275	129	83	60
21	75	104	144	e112	218	254	421	623	276	133	81	60
22	75	87	146	e110	210	256	398	583	272	131	82	59
23	75	90	134	e105	188	259	373	588	264	139	85	59
24	76	101	137	e92	173	262	362	634	254	130	82	67
25	80	102	149	e80	173	264	369	683	248	124	81	83
26	88	102	147	84	181	275	420	805	277	116	78	76
27	82	102	120	88	192	266	476	709	239	112	76	72
28	78	97	93	102	203	261	540	619	239	111	74	70
29	77	95	89	101	215	260	668	573	307	109	72	68
30	70	89	90	96	---	264	724	547	264	107	72	66
31	79	---	83	94	---	277	---	522	---	105	71	---
TOTAL	2428	3159	3562	2955	3888	7911	12271	20410	10127	4510	2728	1962
MEAN	78.3	105	115	95.3	134	255	409	658	338	145	88.0	65.4
MAX	88	175	164	125	218	310	724	928	576	261	103	83
MIN	70	73	83	72	90	224	304	491	239	105	71	59
AC-FT	4820	6270	7070	5860	7710	15690	24340	40480	20090	8950	5410	3890

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY)

MEAN	107	124	115	110	123	186	417	911	1003	406	145	105
MAX	323	264	211	191	230	493	658	1747	2134	1011	253	172
(WY)	1960	1974	1959	1974	1963	1986	1990	1958	1974	1975	1983	1978
MIN	56.1	67.9	72.3	58.9	72.0	64.8	191	252	276	84.0	62.8	61.4
(WY)	1989	1988	1977	1977	1966	1977	1967	1977	1977	1977	1977	1988

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1958 - 1992	
ANNUAL TOTAL	92423		75911			
ANNUAL MEAN	253		207		313	
HIGHEST ANNUAL MEAN					519	1974
LOWEST ANNUAL MEAN					118	1977
HIGHEST DAILY MEAN	1280	May 19	928	May 8	3400	Jun 16 1974
LOWEST DAILY MEAN	62	Jan 30	59	Sep 22	30	Nov 28 1976
ANNUAL SEVEN-DAY MINIMUM	69	Jan 25	60	Sep 17	48	Jan 5 1977
ANNUAL RUNOFF (AC-FT)	183300		150600		226800	
10 PERCENT EXCEEDS	728		498		839	
50 PERCENT EXCEEDS	128		113		139	
90 PERCENT EXCEEDS	80		75		80	

The major cause of sedimentation in Eagle Creek is a result of the geologic instability of the Wallowa Mountains, especially above Boulder Park. Rock formations have been tilted to angles between between 45 and 70 degrees. This geologic instability combined with heavy snows and freezing and thawing contribute to periodic rockslides and debris torrents along cliffs and streams in the drainage. The most recent of this major activity was a landslide at Boulder Park on Eagle Creek in 1982 in which a 1,000 foot strip of the hillside slid down across Eagle Creek temporarily blocking flows, and a series of debris torrent at Sullivan Creek on East Eagle in the mid-1970s which brought down large amounts of rock and soil from a height of about 2,000 feet, crossed and temporarily blocked the stream, and destroyed the river bridge. There are also numerous other examples of floods, slides, and debris torrents along East Eagle Creek and the river has numerous braided and abandoned channels, meanders, and gravel bars as a result of this action.

Since the 1860's, human-caused activities have occurred within the corridor which have impacted the watershed. These activities include road construction, mining, timber harvest, and grazing of sheep and cattle. Roads are considered the largest non-natural contributor of sediment to the stream system. Construction of roads within the Eagle Creek watershed increased sedimentation rates, which in turn increased surface fines and substrate embeddedness. Impacts from other past activities have affected the watershed and resulted in some degrading of the water quality of Eagle Creek but overall impacts are minor.

The roads along with dispersed recreation use has caused some minor disturbance to the stream bed and banks. For example there have been some minor slope failures along some of the Forest System roads paralleling the stream (ie. upstream from O'Brien Creek Forest Road #77). Several dispersed camping sites and developed sites such as Tamarack Camp Ground, Two Color Camp Ground, and Forest Road #7755(075) have been impacted by recreation use. These impacts include compacted soils and dispersed trails in the riparian area. A natural slide occurred at Boulder Park in 1982 has left some unfavorable conditions. These conditions include a lack of vegetation, no designated riparian area, increase in sediment, impassible falls for fish, and unstable stream conditions. Other impacts include some site disturbance and degraded riparian zones from dispersed use within the Eagle Cap Wilderness between the Culvert Lake tributary and Cache Lake tributary. There have also been several "full bench" cuts on private land to place summer homes next to the river which have not been stabilized and are causing erosion.

Fisheries

Populations

Eagle Creek supports populations of native and stocked rainbow trout, eastern brook trout, bull trout, and non-game species including mountain whitefish, and sculpin. Fishing for both native and stocked trout is a popular recreational activity in Eagle Creek. The Oregon Department of Fish and Wildlife (ODFW) currently stocks the creek with approximately 9,000 rainbow trout annually from mid-June through mid-August. Bull trout (*Salvelinus confluentus*) is listed on the Regional Forester's Sensitive Species List, and is listed as a candidate threatened and endangered species (Category 2) species by the U.S. Fish and Wildlife Service (USFWS). Historically, bull trout populations had a wide distribution in Oregon, but many populations are extinct or near extinction. The existence of bull trout in Eagle Creek has been documented; however, the extent and viability of bull trout population in Eagle Creek is unknown at this time. Eagle Creek provides the specific habitat requirements for bull trout, which are dependent on cold, high quality water.

Eagle Creek was thought to be the most important anadromous fish producing tributary in the Powder River basin (Thompson and Haas 1960). Spring chinook and summer steelhead were the primary anadromous fish species present until the construction of the Hell's Canyon Dam complex in the 1960's. Significant chinook spawning areas were documented in the stretch of Eagle Creek from Boulder Park to Two Color Guard Station, and from Paddy Creek to one mile below Little Eagle Creek. Peak downstream movement of chinook juveniles, based on incidental catches at irrigation screens occurred in September, October, and November. Eagle Creek was regularly visited and fished by members of several Native American tribes historically, and although anadromous fish are now extinct in Eagle Creek, Native Americans still travel to the area to fish and camp. Long-time local residents still

can recall the excellent fishing Eagle Creek once provided.

Very little was known about steelhead use, though they were thought to be widely distributed in Eagle Creek and its tributaries. Peak downstream migration occurred in August, September, October, and November.

Eagle Creek does not presently contain anadromous fish; however, presently there is some interest in reintroducing anadromous fish (i.e. spring chinook) to Eagle Creek. However, irrigation withdrawals in the lower ten miles cause extremely low flows near the mouth of Eagle Creek. The lack of adequate flow during the irrigation season is one of the major challenges to re-introducing chinook into main Eagle Creek. In addition to the low flows in lower Eagle Creek, any introduced stocks would have to be transported around the Hell's Canyon dam complex or confined to rearing to maturity in Brownlee Reservoir. Chinook stocks which remained in freshwater for their entire life cycle, would not be expected to reach the size of fish which rear in the ocean environment. The re-introduction of steelhead would require a method to pass the fish around the Hell's Canyon dam complex, so that they could travel to and from the Pacific Ocean.

Habitat

Habitat for fish is of generally good to high quality despite a variety of factors which have locally affected habitat conditions.

From its headwaters at Eagle Lake, the stream follows a steep gradient in the upper five miles, losing an average of 432 feet per mile, and an average of 113 feet per mile over the rest of the Wild and Scenic River corridor. The waters of Eagle Creek are highly-oxygenated, cold and clear, and water quality is excellent, due in part to the undeveloped upper 11 miles, and to undeveloped tributary reaches, which begin mostly within the Eagle Cap Wilderness.

Habitat conditions in the upper reaches of Eagle Creek within the Wilderness are excellent, and have been minimally impacted by the low dam at the outlet of Eagle Lake (headwaters of Eagle Creek), minor trail building, wood removal, and vegetation disturbance due to the development of campsites along the stream banks. This undeveloped river reach is important for providing the high quality, cold water downstream.

The remainder of the river corridor, with the exception of a six-mile unroaded portion, has been altered somewhat by road construction. This has diminished the quality of habitat due to encroachment of road fill, rip-rapping, channel straightening, sediment delivery to the stream, removal of streamside shading vegetation, and removal of in-stream woody debris. Mining activities have a short seasonal impact on water quality by temporarily increasing sediments in the stream. Additionally, portions of this lower reach fall within three active cattle grazing allotments. The riparian zone is considered to be of fair to good quality within allotment boundaries.

Overall, there is good variety of deep pools, glides, and riffles which provide ample spawning, rearing, and holding habitat for native and stocked trout species, and potentially for reintroduced anadromous fish. Relatively moderate disturbance to Eagle Creek's stream bed and banks has occurred; however, good-to-high quality habitat for native and hatchery trout is still present. In additional, Eagle Creek meets the specific habitat requirements for bull trout, a species that is dependent on cold, high quality water.

There is some potential for restoration or improvement of habitat conditions through improved control of activities within the floodplain and riparian area, as well as some potential for improvement of water quality from major tributaries entering the mainstem which would benefit the designated portion of the river.

Current habitat conditions are based on a Forest Service stream survey conducted on the lower portion of Eagle Creek in 1990 (Forest Service boundary to O'Brien Creek) and on the upper portion in 1991 (O'Brien Creek to Eagle Lake). The survey used Region 6 Hankin/Reeves stream inventory methodology.

The survey found the majority of stream had a moderate amount of pool habitat. The lower portion of Eagle Creek (from the Forest Service boundary to O'Brien Creek) averaged three pools per mile while the upper portion (from O'Brien Creek to Eagle Lake) averaged six pools per mile.

Average stream shade was (0-19%) which is poor, but this is a result of wide stream channels. This leaves a large section of the stream to be shaded by topography or streamside trees. The Forest Plan requires 80% stream shade for productivity which was not met. This is due to a wide stream channel which leaves a large section of the stream to be shaded by vegetation or topography. The Wallowa-Whitman National Forest Land and Resource Management Plan (LRMP, 1990) has set a standard of 60 to 100% stream shade which Eagle Creek does not meet. The Region 6 Hankin and Reeves Level II survey quantifies shade provided by vegetation and does not take into account shade provided by topography. During the 1991 Eagle Creek survey (O'Brien Creek to Eagle Lake) shade angles were taken approximately every one third mile. Shade angles are a measure of the percent of open sky which takes into account shade provided by vegetation and/or topography. Average percent open sky for the 1991 survey was 54%. Extremely high percentages of open sky (70 to 100%) relate to severe shade deficiencies. Since Eagle Creek has been determined to have low levels of shade provided by riparian vegetation, the 54% value is a measure of topographic shading. The 54% value shows that topography is a major component of shade in the Eagle Creek basin. No shade angles were taken during the 1990 survey. No historical shade data is available to determine if Eagle Creek has ever been within the LRMP standard of 60 to 100%. Riparian vegetation has been impacted in Eagle Creek basin and shading provided by vegetation reduced.

Stream temperatures met water quality standards with an average between the the two surveys of 61 degrees Fahrenheit (includes 1953-1959 data from Thompson and Haas). The stream was surveyed during the warmest part of the year so temperatures should not increase.

The stream banks of this system does not meet the Forest Plan objective of 80% stable banks yet the system averaged 50% stability which is fair.

This system had an average of 43% embeddedness which is which is slightly above the 35% embeddedness level considered as maximum for successful salmonid spawning and rearing.

The river is relatively undisturbed in recent times and is in fairly healthy overall condition. It is lacking in woody debris, which may be due to high flows during spring run-off which would transport debris downstream. It also has poor shading and cover both of which are typical for a larger river.

The establishment of numeric desired future conditions ("DFC's") for riparian and instream habitat parameters is necessary for providing guidance for future rehabilitation or enhancement of the stream environment. The establishment of DFC's for all Columbia River Basin anadromous fishery streams is required as part of the Tri-Regional Anadromous Fisheries Habitat Management Policy (1991). Streams such as Eagle Creek, where the anadromous runs are considered extinct, are not currently required to have established DFC's. However, the DFC's chosen for other anadromous fishery streams on the Wallowa-Whitman National Forest could be applied to Eagle Creek. Those DFC's may need minor changes to take into account the presence of resident trout species, i.e. those values must be specific to the desired fish species and life stage. It is likely that a range of desired values will be provided for pool frequency and quality; the amount of large woody debris (LWD); percent surface fines; bank stabilty; and riparian vegetative potential or condition. Survey information can then be used to compare the current condition of Eagle Creek to the desired future condition, thus helping to guide future management activities which will protect or enhance the outstandingly remarkable values identified for fisheries.

Those outstandingly remarkable values which have been identified for Eagle Creek include excellent resident and stocked trout angling opportunities, the possibility of re-introduction of anadromous fishes, relatively stable flow regime, optimal temperatures for salmonids, significant amount of glide habitat, and near optimal habitat values for bank stability, pools, and hiding cover in some reaches of Eagle Creek.

Roads and dispersed sites are two of the primary impacts to the riparian area on Eagle Creek, which may be causing impacts to the instream fisheries habitat. The 1991 stream survey located several dispersed sites in sensitive riparian habitat, including impacts in the "Wild" segment from stock and people use of the riparian area. Much of the road mileage in the Wild and Scenic corridor is adjacent to the stream. Impacts from the roads, previous timber harvesting, mining, and grazing have contributed to the loss of instream woody material and to in-

creased bank instability. Poor drainage and maintenance of side roads and roads created by accessing dispersed sites are causing some localized impacts to the riparian zone and stream. Management impacts to the quantity and quality of water in streams tributary to Eagle Creek are largely undocumented, but they might be significant in a few areas (i.e. nutrient loading and sedimentation from poor bank conditions due to grazing).

Recent fish species observations on Eagle Creek have been spot checks conducted by the Forest Service and ODFW in portions of the mainstem and on various tributaries. Results indicate that planted and native rainbow are the primary species encountered. Brook trout, whitefish, and sculpins have also been observed in main Eagle. No bull trout have been observed recently, although none of the fish sampling to date has been adequate to state whether or not bull trout are still an important component of the Eagle Creek fish assemblage. Bull trout have been documented from recreational angling catches, although not in any significant numbers. Bulltrout populations are thought to have successfully coexisted with chinook and steelhead, utilizing the eggs and young as a food source (Meehan and Bjornn 1991). Streams, such as Eagle Creek, which no longer support anadromous fish and which have introduced brook trout populations, may no longer by able to support a healthy viable bulltrout population. Brook trout are a non-native species that interbreed with and may often displace native bulltrout, leading to the extirpation of the bulltrout (Leary 1991).

WILDLIFE

Populations

Many species of wildlife typical to the region inhabit the area including elk, mule deer, black bear, cougar, bobcat, beaver, coyote, fisher, marten. mink, muskrat, otter, raccoon, red fox, and other small mammals, reptiles, and amphibians. A large variety of birds can be found along Eagle Creek, including goshawks, golden eagles, osprey, pileated woodpeckers, great horned owls, blue and ruffed grouse, and many species of song birds.

Although suitable habitat exists for the federally-listed endangered American peregrine falcon (*Falco peregrinus anatum*) and threatened northern bald eagle (*Haliaeetus leucocephalus*), and for candidate threatened and endangered species (Category 2) including the Preble's shrew (*Sorex preblei*) and Blue Mountain cryptochian (*Cryptochia neosa*), no threatened or endangered animal species are known to inhabit the Eagle Creek drainage. Peregrine falcon sightings have been reported in the drainage, and bald eagles have been sighted below the designated portion of Eagle Creek; however, no nests have been reported in the designated portion of Eagle Creek.

Habitat

Wildlife habitat within the Eagle Creek drainage is varied, ranging from high elevation sub-alpine meadows and forests to low elevation ponderosa pine forests and grasslands. Except for small campsites and light grazing by recreational livestock, wildlife habitat is near pristine in the Wilderness portion of Eagle Creek. Suitable habitat exists for the endangered American peregrine falcon, threatened northern bald eagle, and candidate threatened and endangered Preble's shrew and Blue Mountain cryptochian; however, none of these species are known to inhabit the Eagle Creek drainage. The corridor provides high value elk summer range, and falls within the ODFW Keating elk management unit which supports approximately 500 head of Rocky Mountain elk. Portions of ten designated old-growth stands occur within the 1/4 mile interim boundary below the Wilderness boundary, providing suitable habitat for old growth dependent species and cavity nesters. While riparian habitat is near pristine in the Wilderness portion of the drainage, the lower Eagle Creek corridor has been somewhat altered by the construction of a gravel road, which reduced the extent of the riparian flood plain and narrowed and straightened the river course. The lower corridor includes portions of three livestock allotments, and the riparian conditions within the allotments are estimated to be fair to good.

VEGETATION (NATURAL ECOSYSTEMS)

There is a wide variety of vegetation and plant communities found in the Eagle Creek corridor. This is due to the large elevational gradient between the headwaters and the lower boundary of the designated corridor, an elevation change of nearly 5,900 feet. A significant representation of the plant com-

munities of the Wallowa-Snake Province may be found in the corridor.

Eagle Creek begins at the outlet of Eagle Lake high in the Wallowa Mountains, and for the first 4.5 miles travels through the Eagle Cap Wilderness. Ecosystems are relatively undisturbed and natural processes dominate within this undeveloped river reach. At 7,448 feet, the lake is nearly at timberline, and is dominated by wet and dry meadows of sedge, rush, alpine grass, and heather. Stringers of whitebark pine and subalpine fir reach these elevations. As the stream progresses down the valley from the headwaters to the Wilderness boundary, the true subalpine forests of whitebark pine, subalpine fir, and heathers gradually change to high elevation forests of Englemann spruce, subalpine fir, and grouse huckleberry. Forests are interspersed with shrubs and brushfields in the unstable snow chutes, mountain mahogany and sagebrush communities on the drier south and east facing slopes of the drainage, and wet meadows in the valley bottom. Further downstream, mixed conifer forests of grand fir, Douglas-fir, and ponderosa pine become more dominant, and black cottonwood, quaking aspen, and alder grow in the riparian areas fringing the riparian meadow openings.

From the Wilderness boundary to the confluence of West Eagle Creek, is also a relatively undeveloped river reach. Grand fir, Douglas-fir, ponderosa pine, Englemann spruce, and western larch are the major tree species adjacent to Eagle Creek and on the moister, more favorable sites. The canyon slopes are typified by stringers of trees adjacent to rock outcrops and grassy openings on the drier sites. Ponderosa pine and Douglas-fir are the predominate tree species on southerly aspects. Moist and wet meadows fringed by deciduous trees are found adjacent to the creek. Disturbances to the riparian area are limited to dispersed campsites and spur roads along this stretch, and the road is located several hundred yards upslope and away from the river.

As the river continues to lose elevation as it progresses down the canyon, the mixed conifer forests become drier, and the open grassy slopes become more prevalent. Ponderosa pine, Douglas-fir, and western larch are the major tree species. Deciduous trees and riparian meadows are found along the creek bottom. The extent and condition of the riparian communities has been affected somewhat by the road that parallels the east bank of Eagle Creek. Continuing recreational use of the streamside meadows for camping, fishing, and picnicking also has some affect on the riparian communities.

There are ten stands of designated old growth forest that occur partially or wholly within the portion of the Eagle Creek corridor outside of the Eagle Cap Wilderness. Predominantly ponderosa pine stands, the overstory is often scattered and trees average over 40" in diameter. The open areas have a grass stand of predominantly bluebunch wheatgrass and pine grass. Associated tree species often include quaking aspen and black cottenwood along the creek.

A review of existing PETS plant records from Wallowa-Whitman National Forest files revealed four PETS plant sites within the Eagle Creek corridor. No official plant surveys have been done in the Eagle Creek Wild and Scenic River Corridor. The known sites were found by private individuals or Forest Service employees on their time off. The species with known sites are:

Mimulus clivicola (Bank monkey-flower). A population of this plant exists along the Martin-Bridge trail near Eagle Forks campground (Pine Ranger District). There were 36 plants observed at the site in 1992. The habitat for this species is open, dry slopes in the ponderosa pine forest type. There is a high probability that there are other populations of this species in the southern portion of the Eagle Creek corridor. This tiny annual plant with pink flowers is identifiable in June to July, depending on rain and the progression of the flowering season.

Bank monkey-flower is a Federal Candidate for listing, Category 2. This indicates that not enough information exists to decide one way or the other if it truly deserves federal listing. It is also on the Region Six sensitive plant list. This population represents the most southwesterly known location for the species. There are two other known small populations on Pine district, and about a dozen more in the Hell's Canyon National Recreation Area. It does not occur anywhere else in Oregon. The species is also found in central and northern Idaho.

Pellaea bridgesii (Bridge's cliff-brake). Three small populations of this species occur in the upper portion of the Eagle Creek corridor. There are 230 plants known there, and possibly more in the vicinity. They are all in the Eagle Cap wilderness and some plants are right near the main Eagle Creek Trail. This hardy fern is identifiable anytime the snow does not cover the waxy, blue-greeen leaves. It grows in boulder fields, and dry, rocky soils and slopes. There is a high probability that more populations of this species occur in rocky areas of the Eagle Creek corridor.

Bridge's cliff-brake is on the Region 6 Sensitive list. It has no federal status. There are two other known populations of this species in the Eagle Cap wilderness. It also occurs in the Fish Lake area of Pine District and at three sites on Baker District and one on Unity District. It is not found anywhere else in Oregon, but it is found in central Idaho and the Sierra Mountains of California.

Although no sensitive plant surveys have been conducted specific to the river corridor, there have been several surveys conducted in nearby areas. The Sensitive species found in these surveys are: *Allium brandegei*, *Botrychium lanceolatum*, *Botrychium pinnatum*, and *Ranunculus oresterus*. There is also a historical record for *Cryptogramma stelleri* somewhere around the Cornucopia area. All of these sites are outside the Eagle Creek Corridor or sphere of influence. However, it indicates that the probability for these species would be moderate to high for the Eagle Creek area.

The following PETS species habitats and their associated species from the 1992 Wallowa-Whitman sensitive plant species list may possibly occur in the project area. Aerial photos, topographic maps, Wallowa-Whitman Sensitive Plant Guide, and existing records were consulted to assess potential habitat in the project area. A species may be listed more than once if it is found in more than one habitat type.

Forested Areas:
Allium campanulatum (Sierra onion)
Botrychium spp. (several grape fern species)
Carex concinna (low northern sedge)
Cypripedium fasiculatum (clustered lady slipper)
Halimilobos perplexa var. perplexa (puzzling halimolobos)
Lycopodium complanatum (ground cedar)

Rocky openings, scabs, cliffs (moderate elevations):
Allium brandegei (Brandegee's onion)
Allium campanulatum (Sierra onion)
Bolandra oregana (Oregon bolandra)
Mimulus clivicola (bank monkey-flower)
Oryzopsis hendersonii (Henderson's rice grass)
Pellaea bridgesii (Bridge's cliff-brake)
Phlox multiflora (many-flowered phlox)
Primula cusickiana (Cusick's primrose)
Ranunculus oresterus (Blue Mountain buttercup)

Rocky openings, cliffs (High Elevations):
Bupleurum americanum (American thorough-wax)
Campanula scabrella (rough harebell)
Cymopterus nivalis (Hayden's cymopteris)
Geum rossi var. turbinatum (Ross' avens)
Pellaea bridgesii (Bridge's cliff-brake)
Saxifraga adscendens var. oregonensis (wedge-leaf saxifrage)
Senecio dimorphophyllus var. paysonii (Payson's groundsel)
Senecio porteri (Porter's butterweed)

Limstone Rock and Cliffs:
Asplenium viride (green spleenwort)
Castilleja fraterna (fraternal paintbrush)
Castilleja rubida (purple alpine paintbrush)
Cheilanthes feei (Fee's lip fern)
Cryptogramma stelleri (steller's rock-brake)

Sagebrush Steppe:
Allium brandegei (Brandegee's onion)
Astragalus atratus var. owyheensis (Owyhee milk vetch)

High Elevation Riparian Areas:
Botrychium spp. (several grape fern species)
Carex concinna (low northern sedge)
Carex nova (new sedge)
Kobresia myosuroides (Bellard's kobresia)
Kobresia simpliciuscula (simple kobresia)
Platanthera obtusata (small northern bog orchid)

Salix farriae (Farr's willow)
Saxifraga adscendens var. oregonensis (wedge-leaf saxifrage)
Senecio dimorphophyllus var. paysonii (Payson's groundsel)
Thalictrum alpinum var. hebetum (alpine meadowrue)
Trollius laxus var. albiflorus (globeflower)

Moderate Elevation Riparian Areas:
Betula papyrifera var. commutata (Western paper birch)
Botrychium spp. (several grape fern species)
Calochortus longebarbatus (long-bearded sego lily)
Carex concinna (low northern sedge)
Dryopteris filix-mas (male fern)
Phacelia minutissima (least phacelia)
Trollius laxus var. albiflorus (globeflower)

Prior to any potential ground disturbing activities within the Wild and Scenic River corridor, surveys for threatened, endangered, or sensitive plant species will be conducted (FSM 2670.31).

SOCIO-ECONOMICS

The Wild and Scenic River corridor flows through Baker and and Union Counties and is about an hour drive from the county seats. The combined populations of the counties is approximately 39,000 people. Because the area has had only limited success in attracting diversified employment opportunities, the population has shown very little change for the last five decades.

The two counties are sparsely populated and rural in character encompassing 3,322,000 acres (7.6 people per square mile). Automobile travel times from the nearest metropolitan areas, Boise, Idaho, is approximately 3 hours by Interstate Highway. Mass transit includes bus and Amtrack rail service. In Union county, La Grande has a population of 11,766 and is the largest city. Baker City has a population of 9,140 people and is Baker County's largest city. Major employment comes from Federal, State, and local government, trade, tourism, lumber and wood products manufacturing, agriculture, and recreation service industries. Servicing the needs of the growing population of retirees is an emerging sector of the local economies. Per capita income is below the State average and unemployment rates are typically above the State average. There is a marked ambivalence toward growth in the area. People want gainful employment for themselves and for their families, but are uncertain of the benefits of an increasing population.

Many people in the two-county area rely upon the wood products and agricultural industries for their livelihood. In 1993, this included about 3,000 people in 1993, or 15 percent of the total annual employment for the two counties. The reliance upon these two sectors of the local economy has its roots in the settlement of the area by Euro-Americans. Thus, reliance upon the wood products and agricultural industries has social as well as economic significance. This is rapidly changing however, as employment from tourism is beginning to replace that of wood products in some areas of the counties.

LAND USE CONTROLS

There are a wide variety of local, State, and Federal programs that have either an indirect or direct effect upon land uses within the river corridor. The most significant programs, as well as those that have generated discussion during the scoping process, are discussed in this section.

Union and Baker County Zoning. Baker and Union Counties have a comprehensive land management plan covering all lands in the counties. The river corridor is zoned by both counties as timber/grazing. The policy of the counties is to maintain these lands for farm and forest use, and to actively discourage residential development and land partitions that result in parcels too small for economic farm and forest use. New structures on farm and forest land are allowed, as long as they are in conjunction with the existing use.

Oregon Department of Fish and Wildlife. The Oregon Department of Fish and Wildlife (ODFW) is charged with maintaining optimum numbers of indigenous fish and wildlife and to ensure that no species are threatened with extinction (They co-manage fish and coordinate wildlife management with the Nez Perce Tribe). The Department is also responsible for developing and administering fish and wildlife regulations. The ODFW has undertaken an aggressive program to restore riparian habitat on Department lands and has actively sought and encouraged other agencies and private landowners to

follow their lead. ODFW routinely monitors the Minam River angling effort and harvest, as well as hunter effort and harvest.

Advisory Committee on Historic Preservation. The Oregon Advisory Committee on Historic Preservation consists of nine members recognized professionally in the fields of history, architectural history, architecture, archaeology and/or other disciplines. One member represents the public at large and one represents Native Americans. The members are appointed by the Governor.

The Committee is charged with reviewing nominations to the National Register of Historic Places within Oregon and recommending approved nominations to the State Historic Preservation Office pursuant to the National Historic Preservation Act of 1966. The committee also reviews Statewide Plans for Historic Preservation.

Oregon Department of Forestry. The Department of Forestry, authorized by ORS 526.008 and established in 1911, is under the direction of the state forester, who is appointed by the Board of Forestry. The statutes direct the forester to act on all matters pertaining to forestry in the protection of forest lands and the conservation of forest resources.

These activities involve all phases of forestry, including responsibility for the protection from fire on private and State forests; the detection and control of harmful forest insect pests and forest tree diseases on state and private lands; the rehabilitation and management of state-owned forest lands; and operation of tree forest nurseries. The department also administers the Oregon Forest Practices Act, Log Patrol and Log Brand Acts, Small Tract Optional Tax Law, forest land classification, forestry assistance to Oregon's 25,000 non-industrial private woodland owners, and forest resource planning.

Oregon Department of Environmental Quality. Under a memorandum of understanding, the Oregon Department of Environmental Quality and Federal agencies work together to meet implementation requirements of the Clean Water Act (P.L. 92-500), as amended. The Federal Fish and Wildlife Coordination Act of 1958 requires wildlife conservation be given equal consideration and be coordinated with other features of water developments.

Oregon Department of Agriculture. The Oregon State Department of Agriculture cooperates with local soil and water conservation districts to establish mutual goals in coordinating range and watershed management practices and to gather and share natural resources information that has proven beneficial for use on public and private lands. Cooperation with appropriate weed control districts also occurs as needed to deal with infestations of noxious weeds.

Oregon State Land Board. The Division of State Lands is the administrative arm of the State Land Board (composed of the Governor, Secretary of State, and State Treasurer). Under constitutional and statutory guidelines, the Board is responsible for managing the assets of the Common School Fund as well as for administering the Oregon Removal-Fill Law. These assets include the beds and banks of Oregon's navigable waterways and are to be managed for the "greatest benefit for the people of this State, consistent with the conservation of this resource under sound techniques of land management."

The Division of State Lands also administers the State's removal-fill law, which protects Oregon's waterways from uncontrolled alteration. The law requires a permit for fill or removal of more than 50 cubic yards of material within the State's streams and rivers. The permit-review process involves coordination with the natural-resource and land-use agencies from the local through the Federal levels.

Oregon Water Resources Department. The Department administers State laws and policies relating to the diversion and appropriation of surface and ground water, establishes instream water rights for recreation, protection of fish and wildlife, to reduce pollution, and determines critical groundwater areas.

Endangered Species Act. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service administer the Endangered Species Act of 1973 (as amended). Government agencies and private landowners may find their range of management strategies limited by the Act when it is determined that a threatened or endangered species, or its critical habitat, may be affected by a proposed management action.

Pacific Northwest Electric Power Planning and Conservation Act. The Bonneville Power Administration (BPA) through authorization by the Pacific Northwest Electric Power Planning and Conservation Act (P.L. 96-501), is involved in stabilization and improvement of anadromous fish habitat, including riparian zones. The BPA accomplishes its conservation strategies through grants provided to a broad range of natural resource agencies.