United States Department of Agriculture

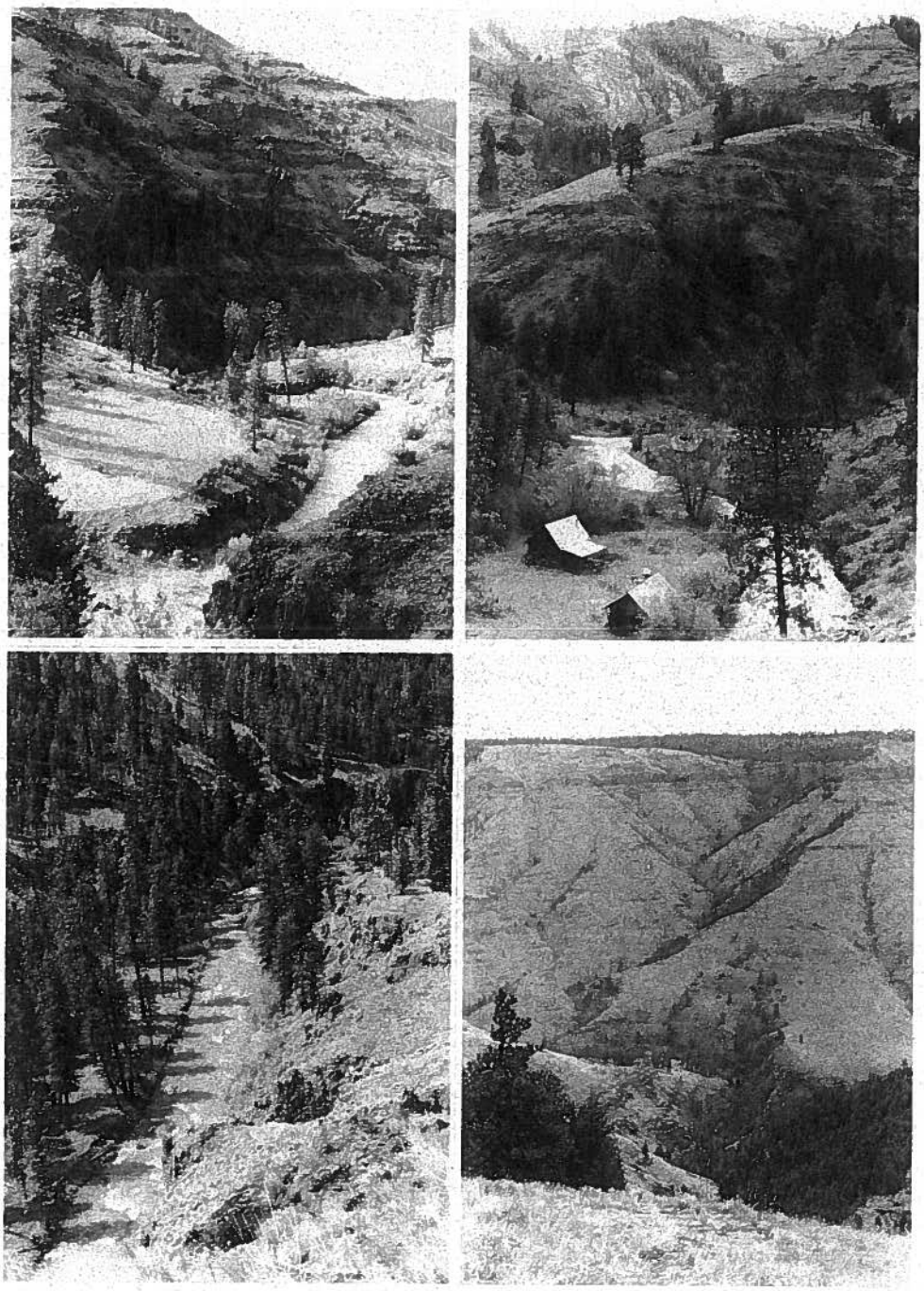
Forest Service

Wallowa-Whitman National Forest

September 1993

Joseph Creek

Wild and Scenic River Management Plan



MANAGEMENT PLAN

JOSEPH CREEK WILD AND SCENIC RIVER

Wallowa-Whitman National Forest
U.S.D.A. Forest Service
Wallowa County, Oregon

MANAGEMENT PLAN

Joseph Creek Wild and Scenic River

Table of Contents

I. INTRODUCTION

A. Introduction

The Omnibus Oregon Wild and Scenic Rivers Act of 1988 amended the Wild and Scenic Rivers Act of 1968 to add Joseph 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 Joseph 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). **For the Joseph Creek Wild and Scenic River, this River Management Plan replaces Management Area 7 direction specified in Section 4, pages 71-75, of the Forest Plan.** This river Management Plan does not however, replace the Forest Plan's Planning Assumptions for Management Area 7 as specified in Chapter 4, page 75. All other Forest Plan direction (unless noted otherwise) still applies. Any changes to this river plan will be through the Forest planning process or through environmental analyses and amendments to the Forest Plan.

B. Relationship With Other Plans

Within the river corridor, there are no other Congressionally designated management areas.

There are several species of threatened and endangered animals within or near the river corridor. These species fall under the Endangered Species Act. The intent is to manage according to both Acts, with neither one taking priority over the other. If conflicts arise that cannot be resolved, then they should be resolved by 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 Wild and Scenic Rivers Act.

Private property is contained in this river corridor. The Forest Service has no regulatory authority over private lands. Private property rights need to be addressed in any planned activity.

C. Outstandingly Remarkable Values

The Wild and Scenic Rivers Act requires that a river be free flowing and possess one or more "outstandingly remarkable values." When Joseph Creek was designated Wild and Scenic in 1988, the Congressional Records indicated that scenic, recreational, geological, fish and water quality, and cultural values qualified as outstandingly remarkable. Through the resource assessment process (a site-specific assessment of the resource values of the river and part of the Pacific Northwest Region's river planning process), one additional outstandingly remarkable (OR) value of "wildlife" was identified and the cultural OR value was better clarified as "cultural (historic)". All of the OR values are identified in detail in the Resource Assessment, completed in October of 1991 (Appendix C).

The following is a summary of the outstandingly remarkable values:

Scenic - The spectacular natural setting, ruggedness, inaccessibility, and steep topography of Joseph Creek and the surrounding environs of Joseph Canyon creates a lasting impression on those who view it.

Recreation - Provides a quality recreational solitude experience for hiking, horseback riding, birdwatching, wildlife viewing, fishing, and hunting in a spectacular setting.

Some recreational activities, although they may exist in the river corridor, were not determined to be part of the OR value. These include boating, kayaking, and recreational experiences associated with motorized or mountain bike use.

A small portion of the river is on private property including the bed and banks. In most cases, the recreational opportunities on private land are limited to sightseeing, birdwatching, and photography from the Joseph Creek and Swamp Creek Trails. The Wild and Scenic Rivers Act does not change private land rights.

Geology - Contains textbook-perfect examples of Northeast Oregon geology typified by Columbia River basalt canyons, exposed by downcutting of rivers. The 2,000 foot deep canyon is virtually unmodified and its spectacular details; steep sideslopes, basalt layers and dikes, can be easily viewed from the canyon rim.

Fish and Water Quality - Includes populations and high quality habitat of wild rainbow trout and steelhead.

Wildlife - Includes a diversity of wildlife populations and habitat which includes Rocky Mountain bighorn sheep, mule deer, Rocky Mountain elk, black bear, river otter, and cougar. Of special note is the habitat for bighorn sheep, winter habitat for elk, deer, and bald eagles, and habitat for the re-introduction of an endangered species (peregrine falcon).

Proposed, endangered, threatened, and sensitive species of animals within the river corridor are an important part of the OR value. These include, but are not limited to, the Townsends big-eared bat, peregrine falcon, and bald eagle.

Cultural Resources (Historic) - The area plays a vital role in Nez Perce tribal history. Most important is the proximity of the river corridor to the winter gathering place for Chief Joseph and his band at the mouth of Joseph Creek.

D. How To Use This Plan

This plan is divided into three sections: Standards and Guidelines, Implementation, and Appendix.

The chapter on standards and guidelines addresses the management practices that will be used on Federal lands. 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 action that the Forest Service will take as a result of this management plan, describes the monitoring process, and describes the budget process.

The Appendix contains the Glossary of Term and Acronyms, the Wild and Scenic Rivers Act, Resource Assessment, Free-Flow Analysis Format, and Boundary Maps. This information is provided to help in the management of the river corridor.

II. STANDARDS AND GUIDELINES

A. Introduction

Because this area is managed to meet the intent of the Wild and Scenic Rivers Act as well as other Forest Plan direction, the standards and guidelines developed for the river corridor must be considered in conjunction with the standards and guidelines of other Management Areas (MA) which overlap the river corridor. These standards and guidelines will be consulted before going to the general Forest Plan standards and guidelines.

The following is a guide to other Management Areas (MA) that will be consulted before implementing any projects:

See also MA 12	(Research Natural Areas)
See also MA 15	(Old Growth Preservation)

In the case of conflict between the standards and guidelines of these management areas, the more restrictive standard and guideline or provision shall apply.

Because there are threatened and endangered species within the river corridor, the Endangered Species Act is also applicable. This Act is to be coordinated with the Wild and Scenic Rivers Act to achieve the objectives of both Acts. In any case, any activity that must take place under the Endangered Species Act will be modified, if needed, to best meet the Wild and Scenic Rivers Act.

B. Specific Standards and Guides

The following are the standards and guidelines for the management of the Joseph Creek Wild and Scenic River. These apply to Federal lands or identify actions that need to take place off of Federal lands to facilitate the management of the river corridor. The intent or objectives of these standards and guidelines 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 DEFINED BY THE WILD AND SCENIC RIVERS ACT, PUBLIC LAW 90-542, OCTOBER 2, 1968 (U.S. LAWS, STATUTES, ETC. 1968), AS AMENDED BY THE OMNIBUS OREGON WILD AND SCENIC RIVERS ACT OF 1988 (PUBLIC LAWS 100-557).

Description - The entire 8.6 mile segment of Joseph Creek from the Forest Service/private land boundary near the Joseph Creek Ranch north to the National Forest boundary was designated as "Wild" by the Omnibus Oregon Wild and Scenic Rivers Act of 1988 and is managed under that classification as 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 scenery, recreation, fish and water quality, wildlife, geology, and cultural resources (historic) will be protected and enhanced. A primitive recreational experience will be maintained along with the natural beauty and biological diversity of the area. Since the river corridor has been classified as a "Wild" River, it will be free of impoundments and continue to be accessible by trail and/or water, and inaccessible by road. The shorelines will be essentially primitive. Signs of human activity, including structures or evidence of resource use, will be kept to a minimum or will be inconspicuous. The opportunity to interact with a natural environment, with challenges and minimal sights and sounds of other people will be available. There will be no use of motorized vehicles. Where a need to regulate use exists, indirect methods will predominate.

Conflict Resolution - All OR values must be protected and enhanced. If conflicts arise between OR values which cannot be resolved within the direction of the Act or management plan, then they shall be resolved according to the following priorities: 1) Fish and Water Quality, 2) Cultural (historic) Resources, 3) Scenic, 4) Wildlife, 5) Recreation, 6) Geology.

MANAGEMENT AREA STANDARDS AND GUIDELINES

Management direction for the river corridor will provide protection in the following ways:

1. **Watershed.** Construction of new water impoundments, diversions, straightening, rip-rapping, and other modifications of Joseph Creek will generally not be allowed. 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) water resources development analysis will be completed for any project affecting the flow, bed, or banks of the river.** The outcome of the analysis will clearly demonstrate a compelling need for the project and consistency with achieving the DFC's, if it is to continue.

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

   a. Log removal for recreation user safety;
   b. Fisheries habitat and watershed enhancement projects;
   c. Bridge and other roadway construction/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;
g. Above activities that are Federally funded-including those on private land.

2. 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 (FSM 2354.04e).

3. The water quality of Joseph Creek is below State standards primarily due to high summer temperatures and sediment. Lower maximum summer water temperatures to state water quality standards of 68 degrees Fahrenheit or less, and lower embededness to less than 15 percent. See "Fish and Water Quality" Desired Future Condition section for additional information.

4. Watershed impacts will be insignificant. No human-caused action may be undertaken which will result in a measurable reduction of existing water quality or that will prevent the meeting of Oregon State water quality standards.

5. Toilet facilities are not provided in the river corridor. 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.

6. **Wildlife. (Outstandingly Remarkable Value)**

Desired Future Condition - The desired future condition for this resource will consist of quality wildlife habitat within the river corridor, and specifically within the riparian areas. Emphasis will be on bighorn sheep, big game winter range, and PETS species. The area will remain ecologically diverse and provide excellent winter browse for big game species. Forested acreage will increase to that of pre-1986 levels to ensure adequate hiding and thermal cover. The variety of grasses, forbs, shrubs, and trees will be more representative of the natural community at the time of Euro-American settlement. On the grasslands, native bunchgrass communities will predominate, browse species such as ocean spray, snowberry, ninebark, and serviceberry will predominate. Riparian habitat will approximate the natural potential of each site and contain dense stands of willow with a fair component of black cottonwood and aspen. Forested areas will contain a major component of large diameter ponderosa pine stands, with a mix of understory Douglas-fir and grand fir. Habitat provided will meet 100 percent of the potential population levels of cavity excavating and cavity nesting species. Beaver populations will increase to their natural levels in the river corridor. Over time, quality habitat will be maintained or increased for all wildlife species with no reduction in PETS wildlife species or habitat population. A healthy Rocky Mountain bighorn sheep population of 80-100 will be maintained in the Joseph Canyon area.

7. Use current Forest-wide standards and guidelines for maintaining and enhancing wildlife habitat and populations (Forest Plan and FSM 2354).

8. Maintain and improve bighorn sheep and big game populations, habitat, and winter range, by prescribe burning, but not to exceed over 10 percent of the river corridor grasslands every two years.

9. Manage both dead and down material and snags at the 100 percent level.

10. Protect all raptor nest sites in use. Protect other nesting sites, important roosting, or special foraging habitats.

11. Wildlife habitat enhancement or restoration projects would be allowed only if they do not detract from the OR values of the river corridor.

12. **Timber Management.** No timber harvest will occur. A few trees may be cut in emergency conditions to ensure public safety, but the trees will be left on site and not removed.

13. The river corridor will not contribute to the Forest's allowable sale quantity.

14. **Range.** Permit domestic livestock grazing to continue if it: is consistent with the management objectives of the river corridor, protects or enhances the OR values, and protects water quality (see Standards and Guidelines for "Fish and Water Quality" for additional information concerning water quality). The desired future condition for this resource will consist of sustained production of both palatable and non-palatale species for grazing by livestock and dependent wildlife. The area will remain ecologically diverse and provide excellent winter browse for big game species. The variety of grasses, forbs, shrubs, and trees will be more representative of the natural community at the time of Euro-American settlement. On the grasslands, native bunchgrass communities will predominate, browse species such as ocean spray, snowberry, ninebark, and serviceberry will predominate. Riparian habitat will improve and approximate the natural potential of each site and contain dense stands of willow with a fair component of black cottonwood and aspen. Recreational/grazing conflicts and livestock presence in the riparian zone, however few, will be reduced. Recreationists, from late fall to spring, will still encounter evidence of cattle on the trails, and the physical presence of livestock, but this will be less than in the past.

15. Forest-wide Forest Plan Standards and Guides for Range Management are acceptable within the river corridor. Do not exceed current grazing intensities and maintain (and or extend) current rotations within the river corridor. Any adverse impacts to OR values, water quality, or free-flow, even though within Forest Plan Standards and Guidelines, will be corrected immediately.

16. Range management structures will be visually compatible with the Forest Service visual classification of Preservation.

17. Utilize the Wallowa-Whitman's Integrated Noxious Weed Management Plan to control and prevent the spread of noxious weeds.

18. Take aggressive action to reduce noxious weeds in the corridor to improve forage and provide natural communities that are more representative of those at the time of Euro-American settlement.

19. **Landownership.** Retain Federal ownership.

20. Consider acquisition from willing sellers of easements upon, or fee title to, the 275 acres of private land within the river corridor. These lands are critical to maintaining the characteristics of the river corridor.

21. Acquire easements upon those lands where private land practices threaten the river's free flow, water quality, or OR values, if all other options have failed to resolve the threat.

22. Nothing in this management plan will preclude the Forest Service from actively pursuing easements when an OR value is about to, or is being, threatened or damaged.

23. Forest Service will minimize private land trespass and assist the public in identifying public lands. This will be accomplished primarily through information signing at trailheads or just before entering private land.

24. Pursue rights-of-way across private land for the Joseph Creek and Swamp Creek Trails.

25. **Minerals and Geology. (Geologic Outstandingly Remarkable Value)**

Desired Future Condition - The desired future condition for geology will be a natural appearing landscape with ecological changes only (except for prescribed fire). The river corridor will remain unchanged, with all major geologic features unchanged by human activity. The public visiting the area will be aware of some of the key geologic features of the area.

26. Formal designation by Congress as a "Wild" river precludes further mineral entry. Thus, the area within 1/4 mile each side of the mean high water mark of Joseph Creek is withdrawn from new mining claims and mineral entry.

27. For the nonwithdrawn portions of the river corridor, recommend withdrawal of mineral claims and mineral entry.

28. Mining claims are highly unlikely in the non-withdrawn portions of the river corridor. will however, a mining claim be filed in the interim, develop an operating plan that would minimize to the greatest extent, any vegetative disturbance or other surface impacts within 100 feet of the mean high water mark of any stream within the river corridor to protect riparian vegetation and OR values, and require a no surface occupancy clause for leasable minerals. Develop visual buffers to screen mining operations from Joseph Creek and the Joseph Creek and Swamp Creek trails.

29. Prohibit recreational dredging within the river corridor (including suction dredging and sluice boxes). Other dredging is subject to the U.S. Mining Laws of 1872 and is thus already prohibited by the "Wild" river classification.

30. **Insects and Diseases.** Control forest pests in a manner compatible with the intent of the Wild and Scenic Rivers Act and management objectives of contiguous National Forest System lands while protecting and enhancing the outstandingly remarkable values (FSM 3400).

31. **Fire.** In order to preserve water quality, fire retardant and heavy equipment will not normally be used in the proximity of the Wild river. Fire suppression activities in or adjacent to the river corridor shall protect the primitive nature of the area when possible.

32. Prescribed fire from planned and unplanned ignitions may be used, consistent with the Desired Future Conditions and the management direction for adjacent management areas. Burn plans would be completed for each action.

33. The minimum acceptable suppression response to wildfires will be "confine" at FIL's 1-2-3, and "contain" for FIL 4 and greater.

34. **Transportation.** There are no roads within the river corridor, and no road construction is permitted. Outside the river corridor, any road construction would have to meet a visual quality objective of foreground Preservation and middleground and background Retention as viewed from the river and/or the Joseph Creek or Swamp Creek trails within the river corridor.

35. **Recreation. (Outstandingly Remarkable Value)**

Desired Future Condition: The river corridor, managed under a Primitive Recreation Opportunity Spectrum, maintains the primitive recreational experience. There is a very high probability of experiencing solitude, freedom, closeness to nature, tranquility, self reliance, challenge, and risk. The area is characterized by an essentially unmodified natural environment. Access is limited. 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. Some primitive directional signing would be allowed to protect OR values and private land. Motorized travel within the area is not permitted. Visitor use will not increase over current levels. Emphasis will be on maintaining the quality of the present recreation experience rather than on adding facilities to accommodate an increase in recreational use.

36. Change the existing Recreational Opportunity Spectrum (ROS) of "Semi-primitive Motorized" to "Primitive" for the river corridor.

37. Use the Region 6 ROS guide for river management in conjunction with the Forest Service ROS direction to maintain the "Primitive" ROS spectrum.

38. Within the river corridor, allow no new recreation facilities or improvements. Bridges may be utilized, only where absolutely necessary, for safety, or to protect OR Values. Trail improvements, maintenance, relocation, minimal directional signing, and signing for awareness of private inholdings, may also be used to protect OR Values.

39. Discourage recreational grazing within 100 feet of the river through educational signing at the trailheads and encourage the use of pellets and grain. Monitor recreational livestock grazing. If monitoring indicates damage to OR values, take action to correct it.

40. Maintain the Joseph Creek (FDT 1714) and Swamp Creek (FDT 1678) Trails as the primary access routes within the river corridor. Improve locations of stream ford crossings and reconstruct or relocate some segments of trails for safety and protection of resource values. Improve trail maintenance over current levels where necessary to protect resource values. Provide minimal signing to keep visitors on designated trail systems.

41. Remove the Table Mountain Trail (FDT 1725) from the system and rehabilitate any eroded areas in accordance with Region 6 Vegetation Management Plan.

42. Discourage use of the steep and eroding Vawter and Wilder trails. Rehabilitate with vegetation any eroded areas in accordance with Region 6 Vegetation Management Plan. Do not identify these non-system trails on Forest Service maps nor add them to the Forest Service system unless the erosion can be stabilized and easements obtained across private land.

43. Pursue acquisition of trail easements across private land for the Joseph Creek and Swamp Creek trails.

44. Develop the Chico Trailhead (outside the river corridor near State Highway 3) as the primary access route into the river corridor via the Chico (FDT 1658), Davis Creek (FDT 1660), and Swamp Creek (FDT 1678) Trails.

45. Manage dispersed campsite impacts so that vegetation loss at any one site does not exceed 0.1 acres.

46. Provide an educational program to inform the public of proper camping techniques, equestrian use, and protection of riparian habitat within the river corridor. This may include the use of bulletin boards, posters, or signs at the Chico Trailhead, and through personal contacts.

47. Provide interpretation and education, through discovery only, within the river corridor.

48. Monitor recreation use and impacts to determine the effectiveness of management direction in protecting OR values and meeting Recreation Desired Future Condition. If adequate protection is not achieved, consider other systems to control use such as a permit system to regulate the type and amount of use.

49. Special-use permits for outfitting and guiding may be issued consistent with protection and enhancement of the river corridor's outstandingly remarkable values.

50. **Landscape Management. (Scenic Outstandingly Remarkable Value)**

Desired Future Condition: The Visual Quality Objective (VQO) within the river corridor is Preservation. The area is characterized as a natural appearing landscape (essentially unmodified environment) with ecological changes only. Management activities that could affect the Preservation VQO are prohibited except for prescribed burning to decrease non-native grasses and to improve bighorn sheep habitat and big game winter range. The variety of grasses, forbs, shrubs, and trees will be more representative of the natural community at the time of Euro-American settlement. No recreation facilities will be developed except for primitive signing, trail reconstruction, minor relocation, and trail maintenance.

51. Maintain the existing VQO of Preservation in the river corridor.

52. Maintain a VQO of foreground preservation and middleground and background Retention outside the river corridor as viewed from the river and/or the Joseph Creek or Swamp Creek trails within the river corridor. A VQO of Preservation, allows ecological changes only. In a VQO of Retention, management activities must not be visually evident.

53. Adopt the "Highway 3 Viewshed Corridor Plan" by Stryker Associates, February 1991, as additional guidelines for managing the visual resource outside the river corridor. If conflicts arise between the Highway 3 Viewshed Corridor Plan and the minimum VQOs, as previously mentioned, the more restrictive guidelines will apply.

54. Visual management will be according to the Forest Plan, National Forest Landscape Management Handbook Vol. 2 Chapter 1, The Visual Management System USDA #462, The Timber Chapter Vol 2. Chapter 5, Recreation Chapter Vol. 2 Chapter 8, and Forest Service Manual 2354 and 2380 (FSM 2354 & 2380). Conflicts between any of these documents will be resolved by deferring to the most restrictive unless stated otherwise.

55. Outside the river corridor locate utility corridors so that they will not be visible from the river and/or the Joseph Creek or Swamp Creek trails within the river corridor.

56. Work with private landowner to help protect and enhance the scenery on the private inholdings in the river corridor and to discourage any additional structures.

57. **Fish and Water Quality. (Outstandingly Remarkable Value)**

Desired Future Condition: Improved water quality and quantity, stable streambanks (>90%), natural levels of woody debris recruitment, and increased woody debris amounts will be present

due to on-site potential and upstream riparian improvement. DFC's for Joseph Creek are 20 pieces of large woody material (LWM) in the large size class and 100 pieces of LWM of all size classes per mile. Maximum summer water temperatures will be at or decreasing toward the state water quality standard of 68 degrees Fahrenheit, and will not exceed 61 degrees Fahrenheit from October to April on Joseph Creek. Embededness (used as a measurement of fine sediment) will be lowered to less than 15 percent. Stream shade/canopy cover will increase to 20 to 30 percent in the downstream reach and increase to 25 to 35 percent in the upstream reach of Joseph Creek due to improved riparian conditions. Pools per mile (important habitat for fish) will be 9 to 13 as the riparian condition of Joseph Creek improves in the future.

58. Except for the water temperature, many constituents of the desired future condition are present in Joseph Creek today. Maintaining these conditions, lowering the water temperature, decreasing sediment, and increasing woody debris will be the major task required to achieve the desired future condition and to allow the river to continue as the valuable resource it currently is.

Inside the river corridor:

59. Utilize current direction for maintaining and improving fisheries habitat, including but not limited to sediment, stream temperature, shading, and large woody debris.

60. Improve water quality to State standards or to the water quality at the time of river designation, or closest estimate (whichever standard is higher).

61. Current direction for habitat management is defined in the Forest Plan and FSM 2354. Conflicts between these documents will be resolved by deferring to the most restrictive unless stated otherwise.

62. Maintain optimum habitat for rainbow trout and steelhead.

63. Leave logs and other woody debris in the stream channel for fisheries habitat.

64. Use an educational strategy (particularly at the trailheads) to protect riparian areas and to discourage dispersed camping within 100 feet of the river. Monitor the results. If education is inadequate issue a CFR closure order to prevent riparian damage and/or camping within 100 feet of the river and enforce it.

65. Continue to support State closure on steelhead fishing in the river corridor in order to ensure protection and enhancement of this important component of the fisheries OR value. This would be in coordination with the Oregon Department of Fish and Wildlife and the Nez Perce Tribe.

66. Work with the private landowners to help protect and enhance fisheries and fisheries habitat on the private inholdings in the river corridor. For specific proposals on private lands within the river corridor the Forest Service would work with the private landowner on a case-by-case basis to ensure the protection of the OR values. If this is unsuccessful, scenic and recreational easement acquisition would be considered on lands critical to maintaining the character of the river corridor's "Wild" classification or the protecting and enhancement of the Fish and Water Quality OR value.

67. Continue to monitor the fisheries resource within the river corridor to identify existing and future impacts as well as possible improvement projects on Federal lands. Document the findings and take action to correct items inconsistent with the Fisheries/Water Quality OR

value. Conduct a Hankin/Reeves stream survey, similar to 1992 survey, every 5 to 10 years to monitor changes and recommend improvement projects.

68. Within the river corridor, require an environmental assessment as the minimum NEPA documentation for any ground disturbing activity that has the potential to adversely affect an OR value.

69. Conduct temperature monitoring within the river corridor at the mouth of Swamp Creek and at the north end of the river corridor to monitor temperature. This would include the annual installation of a 6-month temperature gage which would record daily maximum and minimum stream temperatures.

70. Install a permanent instream monitoring device immediately upstream from the southern end of the wild and scenic river corridor on National Forest or private land (with the owners' permission) to monitor temperature and stream flows in Joseph Creek.

Outside the river corridor, cooperatively work with Federal, State, and local governments, the Nez Perce Tribe, and private landowners to improve fisheries and riparian habitat on private land:

71. Actively pursue riparian rehabilitation upstream from the river corridor on both private and National Forest lands. Work with upstream private landowners to adopt land-uses consistent with improving fisheries habitat, water quality, and maintaining a healthy stream and riparian zone. Projects will include riparian planting, instream structure placement, and fencing. This could be an outgrowth of the State's 1983 Riparian and Instream Habitat Improvement Program and could apply to the one-quarter mile buffer extending upslope from each bank's high water mark, or to an alternate acreage limit on each bank of the stream.

72. Help to organize a cooperative project to conduct stream surveys employing the Hankin/Reeves methodology, on unsurveyed fish bearing and potential fish bearing streams on private lands in the Joseph Creek drainage. Conduct other research on the upper Joseph Creek drainage to gain data to improve fish and water quality. Include research to identify the abundance, distribution, and species of non-game fish.

73. Use Federal or Federal Cost sharing funding to develop partnerships to fund cooperative fish and water quality enhancement projects on Federal, State, and private lands both inside and outside the river corridor.

74. Work with the ODF&W and downstream private landowners to ensure adequate fish passage.

75. Continue Forest Service cooperative projects for restoring stream and riparian zone conditions in the Joseph Watershed.

76. Work with Federal, State, County, and private landowners to monitor, prioritize, and correct sediment source problems.

77. On private land work with the Soil Conservation Service and private landowners to rehabilitate and remove or relocate stock ponds that are causing degradation of water quality (e.g. water temperature, sediment, and pollutants).

78. **Cultural Resources. (Historic Outstandingly Remarkable Value)**

Desired Future Condition: Historic and prehistoric sites are protected until management actions can be determined. These may include data collection, mitigation, preservation, education, or interpretation. Selected sites could be used for public education and interpretation outside the river corridor in coordination and cooperation with the Nez Perce Tribe.

79. Utilize current direction to protect, enhance, and interpret historic sites. Current direction is defined in the Forest Plan, Cultural Resource Protection Plan, Forest Programmatic Memorandum Of Agreement (PMOA), FSM 2354, and in conference and agreement with the Nez Perce Tribe.

80. In addition to historic, prehistoric and other cultural resources would also be protected in accordance with the National Historic Preservation Act an by other Forest, National, and statewide standards and guidelines.

81. Conduct a systematic cultural resource inventory of the river corridor including along the proposed trail construction and reconstruction routes.

82. Incorporate historic and cultural interpretation outside the river corridor at the Chico Trailhead and continue to work with the National Park Service and the Nez Perce Tribe to interpret the area's historical and cultural significance at the Joseph Canyon overlook on Oregon State Highway 3 (outside the river corridor).

83. **Natural Ecosystems**

Desired Future Condition: The variety of grasses, forbs, shrubs, and trees will be more representative of the natural community at the time of Euro-American settlement. Serious noxious weed problems, especially along the Joseph and Swamp Creek Trails, will be corrected. On the grasslands, native bunchgrass communities will predominate, browse species such as ocean spray, snowberry, ninebark, and serviceberry will predominate. Riparian habitat will approximate the natural potential of each site and contain dense stands of willow with a fair component of black cottonwood and aspen. Forested areas will contain a major component of large diameter ponderosa pine stands, with a mix of understory Douglas-fir and grand fir. Distribution and diversity of natural vegetative habitat, PETS species, and natural ecosystems would be maintained.

84. Since fire has a natural role in the management of the river corridor use fire as tool when necessary to protect and enhance OR values. This would include decreasing non-native grasses, making the river corridor more representative to that at the time of Euro-American settlement, and improving bighorn sheep habitat and big game winter range.

85. Field inventory the botanical resource for any proposed project activity during the period of the summer season most likely to locate PETS species, identify non-native vegetation. Monitor effects of any project activity.

86. Rehabilitate disturbed soil in accordance with the Region 6 Vegetation Management Plan.

87. Preserve the ecological corridor and promote biological diversity in the area.

88. Cooperatively work with and encourage private landowners, inside the river corridor, to eradicate noxious weeds in accordance with Wallowa County's Noxious weed Plan.

89. Cooperatively work with and encourage the private landowner, inside the river corridor, to protect Endangered, Threatened, or Sensitive (PETS) species habitat.

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

91. **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.

92. 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.

93. **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). 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:

94. Cooperate with landowner to meet the objectives of the Wild and Scenic River's Act as well as to meet the objectives of the landowner.

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

96. Identify opportunities and incentives that the landowner may employ which would protect and enhance the OR values.

97. Work through Federal, State, and county laws, regulations, or zoning to protect OR values.

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

99. 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.

100. Private land guides were not developed for private lands. The overall objectives and Desired Future Conditions for the river apply to the river corridor as a whole.

III. IMPLEMENTATION

A. Management Actions

The management area standards and guidelines would be carried out by the Forest Service - Wallowa Valley Ranger District, unless otherwise noted.

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

2. The District, 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) Fish and Water Quality, 2) Cultural (historic) Resources, 3) Scenic, 4) Wildlife, 5) Recreation, 6) Geology.

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

4. Inventory river corridor for possible wildlife improvement projects.

5. Annually, inventory and monitor the river corridor for noxious weeds to ensure reduction in populations. Prepare a map of concentrations. Every third year evaluate the inventory to determine programs needed to reduce populations.

6. Revise all Allotment Management Plans (except the newly revised Swamp Creek AMP) to new standards to ensure protection and enhancement of OR values.

7. Issue a Code of Federal Regulations (CFR) closure to prohibit all motorized vehicles within the river corridor.

8. Place directional signing at Chico Trailhead, Chico/Davis Creek Trail junction, Davis Creek/Swamp Creek Trail junction, Swamp Creek/Joseph Creek Trail junction, beginning and end of Joseph Creek Trail, and near cabin near mouth of Swamp Creek.

9. Develop strategy to best provide an educational program to inform the public of the proper camping techniques, equestrian use, and protection of riparian habitat within the river corridor. This may include the use of bulletin boards, posters, or signs at the Chico Trailhead, and through an increased Forest Service presence in the area.

10. Develop an interpretive plan to provide interpretation outside the river corridor at the Chico Trailhead and Joseph Canyon Overlook. At the overlook, which is part of the Nez Perce National Historic Park, work with the National Park Service and State of Oregon Transportation Department to interpret the historic Nez Perce use of the area, probable birthplace of Young Chief Joseph (farther downstream), geology, and National Wild and Scenic River designation. At the Chico trailhead interpret the river corridor's recreational opportunities, access, National Wild and Scenic designation, low-impact camping and equestrian use, protection of riparian areas and cultural resources, and respect of private land.

11. Annually, inventory and rehabilitate dispersed recreation sites within the river corridor.

12. If special-use permits are issued which include the river corridor, such operations will be inspected to insure adequate protection and enhancement of OR Values.

13. 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.

14. Work with the Oregon Department of Fish and Wildlife and the Nez Perce Tribe to monitor fish populations and trends within the river corridor.

15. Incorporate Joseph Creek write-up and recommended actions for restoring spring chinook salmon critical habitat (required under Section 7 of the Endangered Species Act) into this Management Plan.

16 Use Hankin/Reeves survey, both inside and outside the river corridor, 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 Joseph Creek Stream Survey, Soil Conservation Service data, Oregon Department of Fish and Wildlife data, or other sources to achieve this objective. Activities will be measured against this baseline to determine if water quality and the fisheries OR value are being protected and enhanced.

17. Complete one field inventory and annually monitor the botanical resource including PETS species to identify existing as well as possible improvement projects.

18. Develop a botanical rehabilitation/implementation plan to address each individual site or project.

B. Monitoring

1. Forest Level

Monitoring of this plan will be incorporated into the Forest's monitoring process. The standard and guides will be incorporated into the Forest monitoring checklist.

2. District Level

The District, in conjunction with other agencies, will be responsible for evaluating current uses as well as Forest Service project within the river corridor or adjacent to the river corridor for compliance with the Plan's Standards and Guidelines and Desired Future Conditions.

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 a list of threshold limits (key indicators) and management standards for each OR value and some of the other related resource values in the river corridor.

3. Wildlife Monitoring - Monitor wildlife and habitat values described in the Desired Future Condition (DFC) and to ensure protection and enhancement of Wildlife OR Value.

a. Key indicators include: Populations of bighorn sheep, big game, peregrine falcon, bald eagle, and their respective habitat. Also, big game winter range, and habitat for cavity nesting species.

b. Management standards are: No reductions in big game populations, and no net loss of or significant change (5 percent) of their critical habitat types within the river corridor related to management activities. No reduction of PETS species habitat or populations. If standards not met, identify cause of change and correct it.

c. Sampling procedure: Monitor the area for major changes in wildlife and habitat values against the DFC and Wildlife OR Value. Use Global Information System to map habitat type and extent (acres) using latest aerial photos as a baseline and continuing survey every five to 10 years. Baseline data to be constructed in 1995.

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

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

   b. Management standards are: The area will remain ecologically diverse and provide excellent winter browse for big game species. The variety of grasses, forbs, shrubs, and trees will be more representative of the natural community at the time of Euro-American settlement. 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.

   c. Sampling procedure: Annually, monitor range conditions of late-season grasses. Annually, Inventory and monitor the river corridor for noxious weeds and non-native grasses to ensure reduction in populations. Prepare a map of concentrations. Every third year evaluate the inventory to determine programs needed to reduce populations.

5. Recreation Monitoring - Annually, monitor recreation use and impacts to meet values described in the DFC, including the Primitive ROS Spectrum, and to ensure the protection and enhancement of the Recreation OR Value.

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

   b. 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 (up to 6 groups/day), 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.

   c. 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 recreational grazing, note number and size of dispersed campsites, number of fire rings, 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.

6. Landscape Management and Geology - 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 OR Values. This would include a meeting a Preservation VQO with ecological changes only (except for prescribe burning) and ensuring that no mining activities nor recreational dredging would be take place.

   a. Key indicators include: Projects or activities which alter landform, vegetation, water, color or character of the viewshed as seen from the river corridor, Joseph and Swamp Creek Trails, and Joseph Canyon Overlook; and the extent and amount of developments as indicated by buildings, structures, and other physical improvements.

   b. Management standards are: No additional adverse impacts. No damage to geologic resources. No mining activities nor recreational dredging would have occurred. All activities seen from the river, Joseph and Swamp Creek Trails, and Joseph Canyon Overlook would meet a Preservation VQO inside the river corridor (except the prescribe burning activities to improve big horn sheep habitat, big game winter range, and reduce non-native grasses) and would meet a Retention VQO outside the river corridor. If standards not met, identify cause of change on the National Forest and correct it. On private land, work with the landowner to try to mitigate activity, work with county to change zoning, and as a last resort consider acquiring scenic easements.

   c. 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, Joseph Creek and Swamp Creek Trails, and Joseph Canyon Overlook. 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.

7. Fish and Water Quality Monitoring - Annually, monitor fish, fish habitat, water quality, and fish and water quality enhancement projects in accordance with the Wallowa Mountain Zone Monitoring Plan to ensure the protection and enhancement of the Fish and Water Quality OR Value. 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.

   a. 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.

   b. Management standards are: Improved water quality and quantity, stable streambanks (>90%), improved fish habitat and populations of trout and steelhead based upon ODF&W baseline data for populations and 1992 Hankin/Reeves survey for habitat conditions. Twenty pieces of LWM in the large size class and 100 pieces of LWM of all size classes per mile. Maximum summer water temperatures will be at or decreasing toward the state water quality standard of 68 degrees Fahrenheit, and will not exceed 61 degrees Fahrenheit from October to April on Joseph Creek. Embededness (used as a measurement of fine sediment) will be lowered to less than 15 percent. Stream shade/canopy cover will increase to 20

to 30 percent in the downstream reach and increase to 25 to 35 percent in the upstream reach of Joseph Creek due to improved riparian conditions. Pools per mile (important habitat for fish) will be 9 to 13 as the riparian condition of Joseph Creek improves in the future. If standards are not met identify the cause and mitigate or eliminate impact if inside the corridor. Outside the corridor, work with private landowners and State and County agencies to do the same.

c. Sampling procedure: Annually, measure stream temperatures and flow. Conduct a Hankin/Reeves survey at 5 to 10 year intervals both inside and outside 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 and Water Quality OR value is being protected and enhanced. Collect daily maximum/minimum stream temperatures for the expected warmest 6 month period of the year at two additional stream water temperature stations, one at the mouth of Swamp Creek and one at the north end of the Wild and Scenic River corridor. Annually, work with Federal, State, County, and private landowners to monitor and correct sediment source pollution.

8. Cultural (Historic) Resources - Annually, monitor cultural resources against values described in the Cultural (Historic) DFC and to ensure the protection and enhancement of the Cultural (Historic) Resource OR Value. Ensure that historic as well as prehistoric sites were being protected.

a. Key indicators include: Cultural site integrity.

b. 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.

c. 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.

9. Natural Ecosystems - Annually, monitor vegetation, PETS species, and Natural Ecosystems against values described in the Natural Ecosystem DFC.

a. Key indicators include: Distribution and diversity of natural vegetation, condition, trends, populations, and variety of native grasses, the amount and types of non-native grasses, condition of riparian habitat, degree of representation of natural community at the time of Euro-American settlement.

b. Management standards are: The area will remain ecologically diverse and the variety of grasses, forbs, shrubs, and trees will be more representative of the natural community at the time of Euro-American settlement (ie. more sedges, willows, aspen, and black cottonwood in riparian zone; reduction in cheatgrass, forested components increased by 10 percent, and forested components consisting of large diameter ponderosa pine stands). Non-native grass and noxious weed populations will be reduced as determined by baseline inventories. If standards not met, control or mitigate human caused and grazing activities as necessary.

Implement short-term prescriptive activities to restore natural conditions and diversity.

c. Sampling procedure: Annually, monitor the botanical resource including PETS species to identify existing as well as possible improvement projects. Annually, inventory the botanical resource during the period of the summer season most likely to locate PETS species, identify non-native vegetation, and to monitor effects of prescribe burning and other improvement projects. The monitoring of the results of prescribe burning will include effects on: OR values, populations of native and non-native grasses, forested area, bighorn sheep habitat, and big game winter range. Annually, monitor the condition of riparian habitat. Forested component, and the extent of riparian vegetation and grasslands will monitored though Global Information Systems to map vegetation types and extent (acres) using latest aerial photos as a baseline and continuing survey every five years (done in conjunction with wildlife habitat mapping). Baseline data to be constructed in 1995.

C. 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 and begin in Fiscal Year 1995. Each year, the District and Forest will submit a more detailed budget.

1. Recreation Facilities Operation and Maintenance

Include the funds necessary to maintain all *existing* recreation facilities.

$ 400 per year to maintain trailheads and signing

As a separate line 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 will be identified in the Regional capital investment or challenge cost share program.

$13,500 Total - Interpretive program

Develop an interpretive plan to interpret recreational, geologic, and cultural resources in the river corridor $1,500 (1996).

Develop and install two interpretive signs at Joseph Canyon Overlook $6,000 (1997).

Develop and install interpretive sign at Chico Trailhead $3,000 (1997).

Develop and install bulletin board at Chico Trailhead $1,000 (1997).

Develop and install road signs for Chico trailhead and Joseph Canyon Overlook and changeable signs for bulletin board $2,000 (1997).

$ 5,000 Trailhead Improvement - widening and gravel at Chico Trailhead (1996)

$ 500 Inventory and rehabilitate dispersed sites (1995)

Total $19,000 one time cost plus $400 per year.

2. Roads

Include the funds necessary to maintain *existing* single-purpose recreation roads such as access to campgrounds, picnic sites, boat ramps, ect.

$ 200 per year (FDR #220 to Chico Trailhead)

Include as a separate line item, the funds necessary to maintain multi-purpose roads open to the public.

$ 600 per year (maintenance of FDR #220 to south end of corridor near the Joseph Creek Ranch)

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

No roads allowed in river corridor. No roads planned outside the river corridor in conjunction with this plan.

Total $800 per year.

3. Trails

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

$5,500 per year (Swamp 3 miles, Joseph 6 miles, Davis 5 miles, Chico 1 mile)

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.

Reconstruction	Joseph Creek - 1 mile @ $3,000/mile Swamp Creek - 3 miles @ $3,000/mile Davis Creek - 2 miles @ $3,000/mile (1997-1998))
Signing	5 Trail signs @ $100 each (1995)
Rehabilitate and Seed	Wilder - 2 miles @ $6,000/mile Table Mt. - 2 miles @ $6,000/mile Vawter - 2 miles @ $6,000/mile (1998)

Total $54,500 one time cost plus $6,300 per year.

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
i. Joseph Canyon Overlook and Chico Trailhead maintenance

Total $22,500 one time cost

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.

Total $ 750 per year for coop law enforcement agreement with County Sheriff.

6. Fisheries

Federal Cost Share Programs - Include Hankin/Reeves Stream Survey and costs to provide assistance to private landowners and other Federal, State, and local agencies to improve water quality outside the river corridor as identified in the River Management Plan.

Total $75,000 one time cost ($15,000 per year for 5 years, beginning 1997, then $10,000 every 5 years thereafter).

7. Management Plan Revision

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

None identified at this time.

8. 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:

$ 2,500 Mineral withdrawal (1995)
$ 3,000 Fisheries rehabilitation/implementation plan (1995)
$ 1,000 Photo inventory of wildlife habitat and vegetation
(1995-repeat every 5 years)
$ 4,500 Botanical survey and rehabilitation/implementation plan (1996)

$10,000 Cultural survey (1997)

$21,000 Total one time cost

9. Monitoring

Include costs of monitoring program 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	One time cost for equipment $1,600. ($800 each for stream water temperature stations) (1995). Permanent station has already been purchased.
	One time cost for installation of permanent stream monitoring station $1,000.
	Operation, maintenance, and monitoring $5,200 per year ($4,000 permanent station, $1,200 stream water temperature stations). State Water Resources Department will be contracted for permanent station monitoring. Stream water temperature monitoring will be done by the Forest Service (1995).
Wildlife	Monitoring $ 300 per year
Range	Monitoring $ 300 per year
Recreation	Monitoring $ 700 per year
Scenery/Geology	Monitoring $ 300 per year
Fish	Monitoring $ 300 per year
Cultural	Monitoring $ 100 per year
Botany	Monitoring $ 500 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 $5,100 one time cost plus $7,700 monitoring cost per year.

12. Total Costs

Total one time cost	$197,100
Total annual costs	$ 15,950
Additional costs every 5 years	$ 11,000

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 is as follows:

Ensure public safety
Protect OR values
Provide current road access, trailheads, and trail maintenance
Recreation administration
Install trail signing
Monitoring

Coop law enforcement
Trail rehabilitation
Trail reconstruction
Install trailhead signing
Special studies (as scheduled in Management Plan)
Improve Chico Trailhead
Provide an interpretive program
Federal cost share programs